

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



**Agenda for Regular Meeting of the Board of Directors  
February 10, 2022  
Meeting Start Time: 9:00 am**

**DUE TO COVID-19 THE DISTRICT WILL BE HOLDING THE MEETING VIA ZOOM**

**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 Cal/OSHA, the California Department of Public Health, and the Humboldt County Public Health Officer's June 18, 2021 COVID-19 Workplace Rules, and AB 361, the Board members will be participating via Zoom. The Board room at 828 7th street will be **not** be open to the public.

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

<https://us02web.zoom.us/j/86710296323?pwd=MjZldGxRa08wZ0FWOHJrUjNhZnFLQT09>

**Or participate by phone: 1-669-900-9128 Enter meeting ID: 867 1029 6323 Enter password: 484138** If you are participating via phone and would like to comment, please press \*9 to raise your hand.

**How to Submit Public Comment:** Members of the public may provide public comment via email until 5 pm the day before the Board Meeting by sending comments to office@hbmwd.com. Email comments must identify the agenda item in the subject line of the email. Written comments may also be mailed to 828 7th Street, Eureka, CA 95501. Written comments should identify the agenda item number. These comments will be read during the meeting. Comments received after the deadline will be included in the record but not read during the meeting. If participating in the meeting, public comment will also be received during the meeting.

<b>Time Set Items:</b>	<b>8.2</b>	<b>McNamara &amp; Peepe</b>	<b>9:15 am</b>
	<b>8.3</b>	<b>Closed Session – Anticipated Litigation (VDI)</b>	<b>9:30 am</b>
	<b>8.1a</b>	<b>Water Resource Planning – Local Sales</b>	<b>10:00 am</b>
	<b>10.1</b>	<b>Engineering</b>	<b>11:00 am</b>
	<b>8.6</b>	<b>Public Hearing – Ordinance 24</b>	<b>1:15 pm</b>
	<b>8.9</b>	<b>Closed Session – Anticipated Litigation (DTSC)</b>	<b>1:30 pm</b>

**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 the January 13, 2022 Regular Meeting\* - 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 (Articles A – K)\* - discuss

## 7. **CORRESPONDENCE**

7.1 Humboldt LAFCo call for Nominations\* - discuss and possibly approve

7.2 Letter to Trinity LAFCo regarding RLCSD MSR & SOI Update\* – discuss

7.3 Letter to U.S. Fish & Wildlife Service regarding Foothill Yellow-Legged Frog\* - discuss

7.4 Letter to CDFW regarding 2021 Long-term Lake & Streambed Agreement Annual Report\*- discuss

7.5 Letter to NMFS regarding Habitat Conservation Plan Annual Report\* - discuss

7.6 Letter to municipal customers regarding Ordinance 16\* - discuss

7.7 Letter to RLCSD regarding Quagga Prevention Plan\* - discuss

## 8. **CONTINUING BUSINESS**

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

a. Local Sales (Time Set 10:00 am)

i. Nordic Aquafarms – discuss

ii. Trinidad Rancheria Mainline Extension agreement\* - discuss and possibly approve

b. Transport\* - Committee report out, discuss

c. Instream Flow – discuss

8.2 McNamara & Peepe\* - discuss (Time Set 9:15 am)

8.3 **CLOSED SESSION** - Conference with Legal Counsel – Anticipated Litigation: Significant exposure to litigation pursuant to paragraph (2) or (3) of subdivision (d) of Section 54956.9 (VDI) (Time Set 9:30 am)

8.4 Resolution 2022-02 - Extension of AB 361\* - discuss and possibly approve

8.5 NCRP Lidar Acquisition Project\*

a. Agreement\* - discuss and possibly approve

8.6 Ruth Lake Emergency Declaration – discuss

8.7 Cal Poly Humboldt student capstone projects\* - discuss

8.8 Public Hearing of Ordinance 24 – Informal Bidding Procedures Under the CUPCCAA\* (Time Set 1:15 pm)

8.9 **CLOSED SESSION** - Conference with Legal Counsel – Anticipated Litigation: Initiation of litigation pursuant to paragraph (4) of subdivision (d) of Section 54956.9 (DTSC) (Time Set 1:30 pm)

8.10 **CLOSED SESSION** – Public Employee Performance Evaluation for General Manager pursuant to Section 54957(b)(1) (This item will be the last item of the day.)

## 9. **NEW BUSINESS**

9.1 2020 Census & Redistricting\* - discuss

9.2 Safety Program\* - discuss

9.3 Trinity County Local Hazard Mitigation Plan\* – discuss

9.4 Samoa Peninsula Clean CA Local Grant Program\* - discuss

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

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

a. Collector 2 Rehabilitation Project – Status Report

i. Construction Bids\* – Consider and possibly approve

b. 12 kV Switchgear Relocation (\$858,332 District match) – Status Report

i. Change Order #8\* – Consider and possibly approve

ii. Sequoia Construction January Pay Request\* – Discuss

iii. Hazard Mitigation Grant Extension\* – Discuss



- iv. Hazard Mitigation Grant Scope of Work Revision and Budget Increase Request\* – Discuss
- v. Public Safety Power Shutoff Grant Extension\* – Discuss
- c. TRF Generator Project (\$517,819 District match) – Status Report
- d. Status report re: other engineering work in progress

### **10.2 Financial**

- a. January 2022 Financial Statement & Vendor Detail Report\* – discuss and possibly approve
- b. Property & Medical Insurance Analysis\* - discuss and possibly approve
- c. CPI analysis & COLA request\* – discuss and possibly approve

### **10.3 Operations**

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

## **11. MANAGEMENT**

- 11.1 JPIA CWIF Election Notice\* - discuss
- 11.2 ASDSO Dam Emergency Training\* - discuss
- 11.3 JPIA webinar opportunities\* - discuss
- 11.4 AB 1717 Prevailing Wage legislation opposition\* - discuss and possibly approve

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

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

### **12.2 ACWA**

- a. ACWA Spring Conference: May 3 – 6, 2022
  - i. Authorize expenditure for Directors and staff to attend - discuss and possibly approve

### **12.3 ACWA – JPIA**

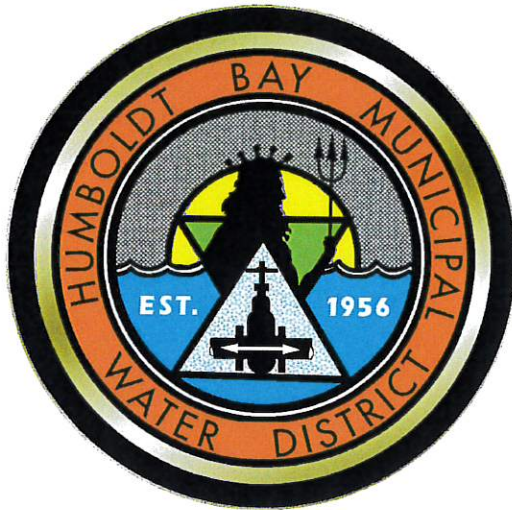
- a. JPIA President's Special Recognition Awards\* - discuss
- b. Liability and Executive Committee meetings\* – report out

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

- a. RCEA News and Updates\* - discuss
- 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 February 4, 2022.)



# HUMBOLDT BAY MUNICIPAL WATER DISTRICT

**Board of Directors Meeting**

**February 2022**



Snow at Ruth Lake

# MINUTES

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



**Minutes for Regular Meeting of the Board of Directors  
January 13, 2022  
Meeting Start Time: 9:00 am**

**DUE TO COVID-19 THE DISTRICT WILL BE HOLDING THE MEETING VIA ZOOM**

**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.*

\*\*\*\*\*

<b>Time Set Items:</b>	<b>8.2</b>	<b>McNamara &amp; Peepe Site</b>	<b>9:15 am</b>
	<b>8.3</b>	<b>Closed Session – Anticipated Litigation (DTSC)</b>	<b>2:00 pm</b>
	<b>8.1a</b>	<b>WRP – Local Sales</b>	<b>10:00 am</b>
	<b>9.4</b>	<b>Closed Session – Anticipated Litigation (VDI)</b>	<b>3:00 pm</b>
	<b>10.1</b>	<b>Engineering</b>	<b>11:00 am</b>

**1. ROLL CALL**

President Woo called the meeting to order at 8:59 am. Director Fuller conducted the roll call. Directors Fuller, Latt, Lindberg, and Woo were present. Director Rupp was not present for the meeting. General Manager John Friedenbach, Superintendent Dale Davidsen, Business Manager Chris Harris, and Board Secretary Fiona Wilson were present. Nathan Stevens of GHD, District Council Ryan Plotz, and Jacque Hostler-Carmesin of the Trinidad Rancheria were present for a portion of the meeting. Members of the public Elaine Weinreb, Jennifer Kalt, and David Hankin were present for a portion of the meeting.

**2. FLAG SALUTE**

President Woo led the flag salute.

**3. ACCEPT AGENDA**

On motion by Director Latt, seconded by Director Lindberg, the Board voted 4-0 by roll call vote to accept the agenda. Director Rupp was not present for the vote.

**4. PUBLIC COMMENT**

There was no public comment.

**5. MINUTES**

**5.1 Minutes of the December 9, 2021 Regular Meeting**

In the last sentence of Section 9.1, the Board requested to change “precincts” to “divisions.” Staff will make the change. On motion by Director Fuller, seconded by Director Latt, the Board voted 4-0 by roll call vote to approve the minutes as amended. Director Rupp was not present for the vote.

**5.2 Minutes of the December 21, 2021 Special Meeting**

On motion by Director Fuller, seconded by Director Latt, the Board voted 4-0 by roll call vote to approve the minutes. Director Rupp was not present for the vote.

## 6. CONSENT AGENDA

### 6.1 Media articles of local/water interest (Articles A – N)

On motion by Director Lindberg, seconded by Director Fuller, the board voted 4-0 to approve the consent agenda. Director Rupp was not present for the vote.

## 7. CORRESPONDENCE

### 7.1 EAP Annual Letter to FERC

The District's EAP requires annual face-to-face meetings with Humboldt and Trinity counties and in-house testing of the EAP phone tree. The District has completed these tasks and notified FERC.

### 7.2 2021 Quagga Inspection Summary

The District received the annual report from Ruth Lake CSD on the District's Quagga prevention plan. Since the August Complex fire in 2020, Ruth Lake CSD has had issues with the access gates. Gates were left open for most of the 2021 season and watercraft may have accessed the lake without inspection. The Board discussed the CSD's decision to leave the gates open rather than locking them. The Board directed staff to draft a letter to the Ruth Lake CSD requesting that the CSD lock malfunctioning gates. Staff will draft a letter to the CSD President for President Woo to sign, expressing the District's concerns, requesting that the gates remain locked when inoperable, and requesting confirmation that the CSD agrees to comply.

### 7.3 Water Meter/Infrastructure Letter to Harbor District

GM Friedenbach sent a follow-up letter to the Harbor District regarding metering of lots that have been subdivided and sold by the Harbor District. GM Friedenbach will meet with Humboldt County Planning & Building, the Harbor District, and North Winds Management, LLC on January 14 to discuss utilities for the proposed development and infrastructure for future development. GM Friedenbach will propose that the Harbor District develop separate water service and install meters for the parcels they sell, so those parcels can receive water from the District.

## 8. CONTINUING BUSINESS

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

#### a. Local Sales (Time Set 10:00 am)

##### i. Nordic Aquafarms

Nordic Aquafarms is moving forward with the EIR and the comment period ends February 8. GM Friedenbach will draft a letter that conveys the District's support for the project and appreciation of brownfield cleanup.

##### ii. Trinidad Rancheria Mainline Extension agreement

The draft agreement has been finalized, approved by Tribal Council, and included in the Board packet. Rancheria CEO Jacque Hostler-Carmesin and District Counsel Ryan Plotz were present for comment on the agenda item.

District Counsel Plotz reviewed the material terms of the agreement with the Board, page by page. He pointed out that the Tribe's land that will be serviced by the extension is not one contiguous property and includes land on the West and East sides of Highway 101. The Tribe is working with their engineers to determine whether a second master meter will need to be installed for the east side. Exhibit 1 will contain agreed upon technical specs once they are ready.

Once the Board approves the agreement, it is conditioned on the Tribe obtaining all regulatory approvals, including County, State Water Resources Control Board, Bureau of Indian Affairs, and LAFCo. The Tribe will need LAFCo's approval for either an out-of-district service agreement, or to annex into the District's service area. The will-serve agreement will be signed once construction is complete, with rates set according to Proposition 218. Rancheria CEO Hostler-Carmesin thanked the District for everyone's cooperation and efforts.



The Board requested two changes to the draft language. The preface of the first sentence of Section 16 describing a “government-to-government relationship” will be removed, and the first sentence of Section 7 will be corrected to say “beyond (downstream from).” The District will work with Tribal legal counsel to make the requested changes before the finalized agreement is brought to the Board for approval in February.

b. Transport

The public comment period for the Sites Reservoir project was extended. There is an article under Consent regarding the project. The Sites is a potential transport option as it is a shorter distance than that which was included in the District’s transport engineering study.

c. Instream Flow

The Committee’s finalized process flowchart was included in the Board packet. Next step is to meet with NMFS to review rate of flow from the hydro plant. The grant is behind schedule with the Wildlife Conservation Board, so the Committee will meet to revise the schedule for the grant and request an extension.

8.2 McNamara & Peepe Site

President Woo recused herself due to a remote potential conflict. In December 2021, DTSC issued an amended scope of work to SHN for their tasks, to include two rounds of groundwater sampling, two rounds of surface water sampling at seven locations, subsurface investigation via two groundwater wells, and sampling of eight soil borings in the area of the cap. The water and soil samples will be analyzed for dioxins, PCP, and TCP. Prima Environmental will conduct a bench-scale study to investigate degradation and evaluate remediation options. The two rounds of groundwater sampling are scheduled for March 13 and October 31, 2022, and both rounds of surface water sampling will be completed by December 31, 2022. Jennifer Kalt of Humboldt Baykeeper provided public comment, expressing disappointment that the timeframe doesn’t address the urgency of the situation. She thanked the Board for being so dogged in pursuing remediation.

8.3 **CLOSED SESSION - Conference with Legal Counsel – Anticipated Litigation: Initiation of litigation pursuant to paragraph (4) of subdivision (d) of Section 54956.9 (DTSC)**

President Woo recused herself due to a remote potential conflict. The Board entered into closed session at 2:00 pm, and returned to open session at 2:35 pm. Staff was directed to send a letter to DTSC regarding the inadequacy of the timeline.

8.4 Resolution 2022-01 - Extension of AB 361

The District is required to reaffirm the circumstances that qualify this act every 30 days. On motion by Director Lindberg, seconded by Director Latt, the Board voted 4-0 by roll call vote to approve the Resolution. Director Rupp was not present for the vote.

8.5 Ruth Lake Emergency Declaration

Most of the salvage logging is done but there are still slash piles to burn. The District’s burn permit is good through 2022. Morris Logging is burning the slash piles, which should be completed by April 1, weather permitting. Erosion control under the USDA grant from October 2020 is unlikely to be completed before the grant expires due to inclement weather. Straw wattles captured some of the contamination, and erosion control currently in place includes the slash and chips that were created by salvage logging. Most of the slash piles are comprised of small log piles. Staff are monitoring grant opportunities for funding to dredge erosion from headwaters and increase reservoir capacity. GM Friedenbach will notify NRCS that the erosion control strategy was not able to be implemented.

9. **NEW BUSINESS**

9.1 Status of Peninsula CSD

No representative was present and this item will be removed from the agenda until further action is possible. Peninsula CSD will need to meet with the Board once they are ready to take over the retail water system as a municipality. The issue that may come to the Board is whether the District should ask for reimbursement for work completed on the distribution grid. Staff will address this with the District's municipal customers and determine if LAFCo will need to be involved.

9.2 Board Officer & Committee Assignments

Officer and committee assignments were discussed and no changes were made. Staff will correct the spelling of Directors' names on the list of committee assignments. Director Latt commended President Woo on her performance. On motion by Director Latt, seconded by Director Lindberg, the Board voted 4-0 by roll call to keep committee assignments as-is. Director Rupp was not present for the vote.

9.3 Ordinance 24 – Informal Bidding Procedures Under the CUPCAA

Business Manager Harris introduced the Ordinance to provide informal bidding procedures under the California Uniform Public Construction Cost Accounting Act (CUPCAA). If no bids are received for a project, the District can enter into a contract. The Ordinance will return to Board in February for a public hearing.

9.4 CLOSED SESSION - Conference with Legal Counsel – Anticipated Litigation: Significant exposure to litigation pursuant to paragraph (2) or (3) of subdivision (d) of Section 54956.9.

Director Latt recused himself due to a conflict of interest. The Board entered into closed session at 3:00 pm, and returned to open session at 3:21 pm with nothing to report.

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

The Board entered into closed session at 3:22 pm, and returned to open session at 4:16 pm with nothing to report.

9.6 CLOSED SESSION – Threat to Public Services or Facilities: Critical Infrastructure discussion pursuant to Gov. Code 54957

The Board entered into closed session at 2:37 pm, and returned to open session at 3:00 pm with nothing to report.

**10. REPORTS (from STAFF)**

**10.1 Engineering**

Nathan Stevens of GHD provided updates on the following items.

a. 12kV Switchgear Relocation

i. Sequoia Construction December Pay Request

Test switches have been installed, tests have been sent to PG&E, and the District is getting ready to start pulling cable.

ii. Change Order #7

The quote for the change order started at \$24,000 and is now \$13,000. A grant deadline extension request has been sent to CalOES and the District is awaiting a response. A grant budget revision request was sent and the District is addressing CalOES's requests for the revision. The District continues to coordinate with PG&E and a pole will be set on February 8, 2022. On motion by Director Latt, seconded by Director Fuller, the Board voted 4-0 to approve the change order. Director Rupp was not present for the vote.

b. Collector 2 Rehabilitation Project

The project is out for bid and proposals are due on January 21, 2022. Proposals



will come to the Board in February.

c. TRF Generator Project

GM Friedenbach received notification from CalOES that the project was forwarded to FEMA for approval which bodes well based on FEMA's approval history. In the meantime, the District is dovetailing this project to the Tesla battery project at the TRF.

d. Status report re: other engineering work in progress

GHD is assisting District staff with Division boundaries.

## **10.2 Financial**

a. December 2021 Financial Statement & Vendor Detail Report

Business Manager Harris provided the December 2021 financial report. There may be an increase in overtime expenses over the next month due to staffing shortages. President Woo reviewed the December bills. On motion by Director Latt, seconded by Director Fuller, the Board voted 4-0 by roll call vote to approve the Financial Report and payment of bills in the amount of \$1,451,135.86. Director Rupp was not present for the vote.

b. CPI analysis and COLA request

Business Manager Harris presented an analysis of CPI impacts on District staff and COLA request. The CPI has increased by approximately 7% over the past year and the COLA request was for 4.7%. GM Friedenbach commended Harris on the research and presentation. Superintendent Davidsen has heard staff discuss the increased cost of living. Director Latt would not approve consideration of the COLA in Director Rupp's absence. He stated that consumer savings are at record highs. Director Fuller requested tabling the item until February. She observed that the job market is more competitive these days and that overtime and risk management costs are likely to increase. She expressed concern about short-staffing and burnout, and wants to explore ways to best support staff.

President Woo discussed extending the temporary essential service pay and expressed concerns about burnout and retention, staff safety, and competing for talent. She expressed the desire to support staff and observed that the pandemic may go on for a while. She was in favor of tabling the item until February. Staff will bring the item back to the Board in February with additional information, including analysis of household savings, housing costs, the cost of extending Covid pay through the end of the fiscal year, and salary increases over the past five years.

## **10.3 Operations**

a. Monthly report on projects and operations

Superintendent Davidsen provided the December operations report. The spillway continues to flow. High turbidity resulted in 40 filter backwashes. Essex staff participated in an 8-hour Hazwoper refresher training. Staff assisted the City of Blue Lake with vandalism to their reservoir. The new Maintenance Mechanic started and is getting oriented. Leaks on Wyatt Ln. and Glendale Dr. were repaired. The hydro plant was offline twice due to storms. Maintenance installed the new meter and manifold for the Town of Samoa. The Board requested clarification on the chart for hydro production at Ruth Lake. Staff will update the header of the chart.

## **11. MANAGEMENT**

11.1 Board bill review schedule

Staff will email the rotation schedule to the directors. Director Rupp will review the January bills.

11.2 Yellow-legged frog status

GM Friedenbach presented the draft letter to the U.S. Fish and Wildlife Service regarding the status of the Foothill Yellow-Legged Frog. Staff will implement Board feedback before sending it.



**11.3 Digital 299 Broadband Project**

The deadline for public comment on the NEPA/CEQA document is February 2, 2022.

**12. DIRECTOR REPORTS & DISCUSSION****12.1 General - comments or reports from Directors**

President Woo was interviewed for the Baduwa't documentary on the Mad River. The filmmakers created a short trailer to use to apply for grant funding to complete the documentary.

**12.2 ACWA**

GM Friedenbach participated in an ACWA CUWA webinar that addressed what other Districts are doing in regards to the drought. The general consensus is that there is no one-size-fits-all strategy for water conservation. Nonetheless, the District would be subject to state conservation orders.

**12.3 ACWA - JPIA****12.4 Organizations on which HBMWD Serves****a. RCEA News and Updates**

President Woo provided an update on the December report. The Harbor District issued an RFP for the Heavy Lift Terminal. RCEA put out a solicitation for Resource Adequacy (RA) and did not receive any solicitations that could meet the RA requirements imposed by the CPUC.

**b. RREDC**

Director Latt reported that RREDC did not meet in December. However, they relocated from the Prosperity Center on E Street to the Healy Building on 2<sup>nd</sup> Street.

**ADJOURNMENT**

The meeting was adjourned at 4:17 pm.

**CONSENT**

# John Robert Winzler Sr.

1930 - 2021

## John Robert Winzler Sr.

A life well lived! John Robert Winzler Sr. passed away on December 25, 2021 at the age of 91, surrounded by his family.

John was preceded in death by his three siblings Beverly Winzler Peterson, Lt. George Winzler Jr. (Bub), and Lura Winzler.

John was born to parents George and Ruby Winzler on May 5, 1930, and lived in Eureka his entire life, never wanting to live anywhere else. He graduated from Eureka High School in 1947. He attended Humboldt State University for 2 years, transferred to UC Berkeley where he graduated, Cum Laude, in 1951 with a B.S. Degree in Civil Engineering and Architecture. John was proficient in many technical disciplines over his lifetime. He was a Registered Civil Engineer, Registered Traffic Engineer, Registered Mechanical Engineer, Licensed Architect, and Licensed Land Surveyor.

After college, John returned to Humboldt County, married his high school sweetheart, Flora Pinochi, and together raised their four children. They were married for 46 years. Flora died in 1997 after a long battle with cancer.

In 1951, John and his father, George Winzler, started an engineering business "Winzler and Winzler". When his good friend, and fellow graduate, Robert (Bob) Kelly returned from the Korean War, Bob joined the firm and the name changed to "Winzler, Winzler & Kelly". Eventually, after the death of his father the firm become "Winzler & Kelly Consulting Engineers". John loved working and spent long hours building a successful business. John served as the President and/ or Principal Engineer of "Winzler and Kelly" for over 40 years, continuing to work into his 80's. He and Bob grew the company into a multi-disciplinary engineering firm with 285 employees that included 10 offices in the Western United States and the Pacific Islands (Guam and Saipan). In 2011 Winzler & Kelly merged with the international company GHD, a company of over 6500 employees. His greatest concern at the sale of the business was that all the W & K employees would be able to keep their jobs. He felt a great responsibility for the welfare of his employees and their families. If he could write this now, we know that our dad would want to say a very heartfelt "THANK YOU" to all the "Winzler and Kelly" employees that helped to build such a successful business. He knew that the employees were the foundation for the success of Winzler and Kelly and he greatly respected and appreciated them.

John loved everything about Humboldt County and supported and served the community in many ways. He was a member of the Rotary Club of Eureka (50+ years),



Ducks Unlimited, and the Native Sons. He has served on the board of directors for St. Joseph Hospital (13 years), the Clarke Historical Museum (51 years), the Ingomar club and the Greater Eureka Chamber of Commerce. John was one of the co-founders of Humboldt Bank and served on their board of directors for 17 years. He was the principal engineer for the Humboldt Bay Municipal Water District and was recognized in 2006 for his 46 years of service to the District, with the dedication of the District's Operation Facilities at Essex as the "The John R. Winzler Operations and Control Center". He was very proud of his long relationship with the Water District. John was also one of the key individuals in bringing modern wastewater facilities to communities in Humboldt and Del Norte Counties: including Redway, Garberville, Miranda, Parts of Eureka and Cutten, Blue Lake, McKinleyville, and Crescent City. He was also involved in updating Woodley Island Marina to provide safe harbor facilities for commercial fishermen and boaters.

Over the years John received many professional honors, awards and acknowledgements including; an appointment to the California Board of Registration for Professional Engineers, by then governor Ronald Regan, and served as its President; an appointment to the National Board of Engineering Examiners, which sets licensing standards throughout the USA; receiving the Engineers of the year, Public Service Award of the California Council of Civil Engineer and Land Surveyor; receiving the Outstanding Civil Engineer in the Private Sector Award of the San Francisco Section of the American Society of Civil Engineers in 2006.

John is survived by his four children, Dr. John Winzler Jr. and wife Janet, James Paul Winzler, Debra Winzler Friedenbach and husband John, and Julie Winzler Siqueira and husband Keith. Grandchildren, Kalie Iorg, Jay Winzler, and Melina Winzler, Gregory Friedenbach, Charles Friedenbach, and

Natalie Friedenbach. Great Grandchildren Madison & Kyle Iorg, Iyla and Kaia Winzler. He is also survived by nephews Jack Peterson, Rick Peterson, Rob Peterson; nieces Susan Arthur and Patricia Moore as well as cousin Marilyn Cesaretti.

John remarried in 2001 and is survived by his second wife, Sandra McKenzie Winzler. They enjoyed 20 years together. He considered himself very fortunate to have such a large extended family and so many close friends. He loved to travel and he did so both for his business and for personal enjoyment. John and Sandy enjoyed some great vacations together.

John also loved the outdoors. In his younger years he enjoyed hunting, fishing, clamming, skiing, golfing, and gardening. He particularly loved spending time at the family cabin in Redway amongst the Redwoods and swimming in the Eel River. In his later years, he enjoyed watching Football (Go Bears!), time with family and friends, and sharing a good cocktail and a lively discussion about politics and world events. He was a great story teller and lived during one of the most interesting times in history. He always said that he had had a great life despite the ups and downs that came with it. He was very appreciative of his many close friends that enriched his life over the years, and he looked forward to their phone calls and visits. He was a firm believer and supporter of a good education for all. Dad was a great patriarch for our family and we will miss him dearly.

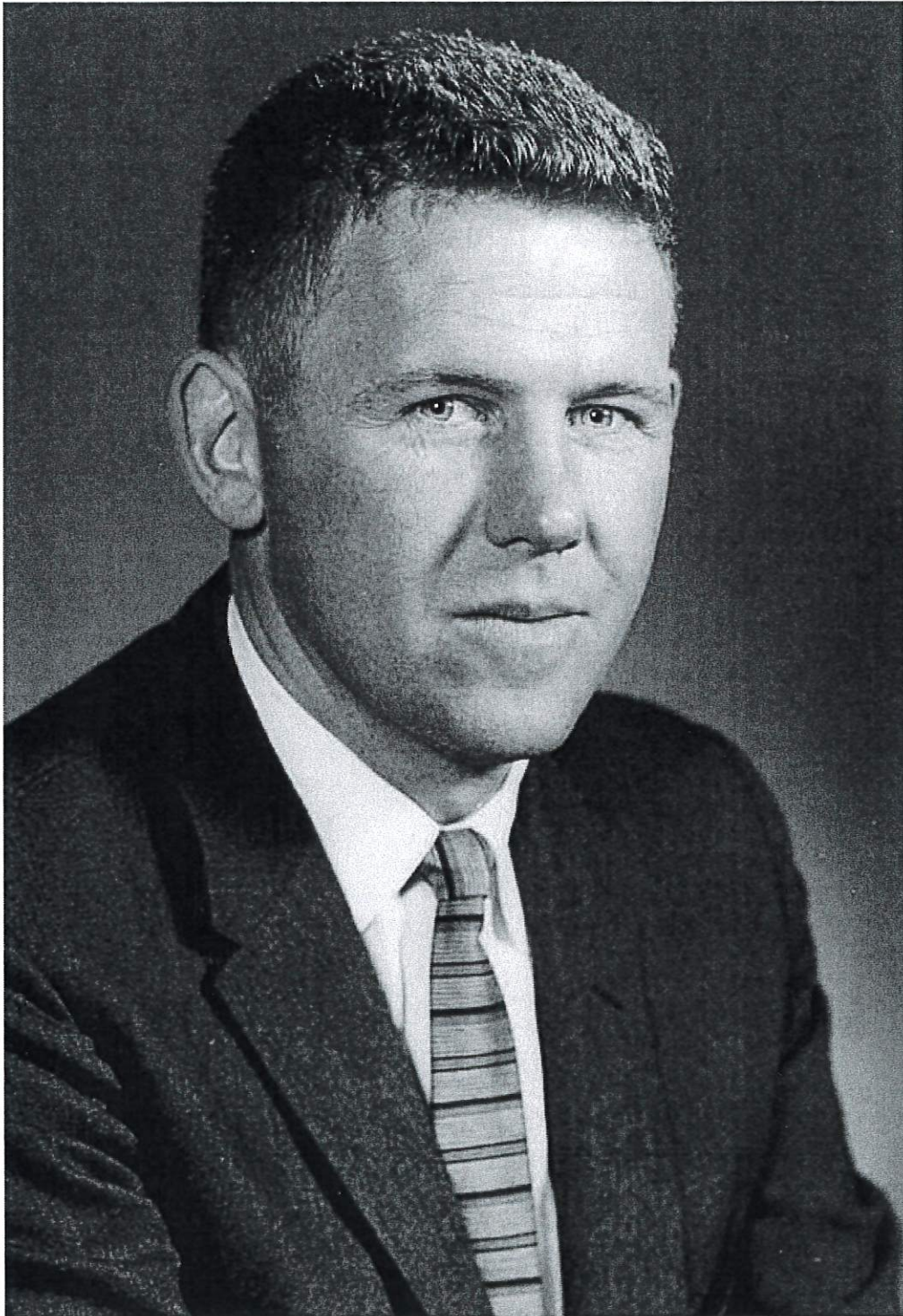
The Winzler family would like to thank all the wonderful people involved in our father's

care, especially Alisa Osburn for her outstanding care and kindness, Dad always enjoyed your company and valued your help tremendously. A special thank you to Lucy Vainuku, Leua Vainuku, and Sam Ily for your gentle, skilled care and all your kindness. He could not have had better caregivers at the end of his life. Thank you, also, to Agape and Hospice for your much needed care and help.

Due to the recent Covid outbreak, a celebration of life will be scheduled at a later date. In lieu of flowers, Dad would be honored if you made a donation to The Clark Museum, Hospice, or your favorite local charity.



### Remembering John Winzler



John Winzler was one of the most accomplished and respected professionals in engineering, completing many outstanding projects in the region and around the world. John attended UC Berkeley, upon graduation he moved back to Humboldt County and opened Winzler and Winzler with his father in the early 1950s.



From long-time friend Rick Slack: *After working with his dad for over a year, John had decided to quit and move to the Bay Area because, as he told his dad, "I gotta go to the Bay Area 'cause I have to support my family, we're making no money." All the major employers in Humboldt—mostly timber and railroads—had their own engineers and surveyors or contracted with firms from the Bay Area. He'd gotten some interviews and was planning on moving early in 1956. But then the 1955 flood happened and wiped out most of the county roads in Humboldt and John got a contract with the county to rebuild the county roads, including Mattole Road. He'd pull out a drawing board, sit and look at it—he hired all these gypo loggers—and he handed it to those guys and they rebuilt the roads. He redid a major bunch of those roads with those loggers. They could rebuild roads like no one's business.*

*So this was what got John to stay here because it got his engineering business off the ground. For most people the 1955 flood was horrible, but for him it was one of the best things that ever happened. If he'd left Humboldt County, it would have affected a lot of people negatively—a lot of people wouldn't have had jobs—and life would have been very different. I guess this would be an accident of nature and/or fate."*

Robert Kelly joined in 1956 and in 1963 the firm incorporated to become Winzler and Kelly. They expanded the business opening offices in San Francisco, Santa Rosa, and Portland, then internationally with offices in Guam, Saipan, Trust Territories of the Pacific Islands, and Okinawa.

Winzler and Kelly had many notable projects, which include Ruth Dam and pipeline, the recovery center on Mad River, primary consultant for CR when they expanded their educational program into Mendocino and Del Norte counties and helping them acquire land for two educational center in Fort Bragg and Crescent City, countless roads, and piling designs for the three pulp mills.

John was always community-oriented, having served on the Clarke Museum's Board of Directors since 1962, Rotary since 1961, Native Sons of the Golden West since 1996, a long-standing member of the Ingomar Club, and a founding member of the Humboldt Bank (eventually acquired by Umpqua Bank). John was always an avid hunter and fisherman, hunting deer in the South Fork Mountains, pheasant hunting near Orville, fishing in Alaska, and an avid blackberry picker with secret locations on the Simpson property and near the airport.

At the Clarke, he served on the finance committee, where he was known for going through budgets and financial statements line by line and saying "Now I know I'm the naysayer..." before providing feedback on various categories. He took his role as a guardian of the Clarke's finances very seriously, which got us to where we are today.

When asked what he appreciated the most about John, a close friend replied, "Thing I appreciated about John the most, he had a saying he loved to throw out, 'Well, as bad as it is, it could always be worse.'"

This region owes John a debt of gratitude for improving this area through his hard work and big heart. John passed away December 25, 2021. His rich life included 59 years of service to the Clarke and incalculable acts of service in Humboldt County. He will be missed by all of us here at the Museum and we send our deepest condolences to his family.

-Article by Ben Brown, originally appearing in the *Native Sons of the Golden West Parlor* #14 newsletter, Oct 2019. Additions made by Katie Buesch and Rick Slack. Special thanks to Tom Hannah for the information appearing in this article.

Also, the Clarke is hosting a fundraiser in John's memory to raise funds for the museum he cared so much about for 59 years. You can donate by sending a check to the Clarke Historical Museum at 240 E Street, Eureka, CA 95501, or by donating through our website or Facebook fundraiser. Be sure to note with your donation that it is a memorial donation so we can send notice to the Winzler family.

We'd like to thank the following individuals who have already donated, including:

Wendy Wahlund and Ben Shepherd

Lisa, John, Kris, and Rick Slack and Eris Wagner

Tom Hannah

Barbara Buesch

Lin Glen

Alyson Hunter

Lynn Sturgis

Melissa Stallings Schuler

*"The mission of the Clarke Historical Museum is to celebrate the rich and varied history of Northwestern California by preserving, sharing, and interpreting that history in ways that increase knowledge, enrich the spirit, engage the mind, and stimulate the imagination."*

Clarke Historical Museum  
240 E Street  
Eureka, CA 95501  
(707) 443-1947

If you haven't already, please follow us on Instagram, Facebook, and Twitter.  
Did someone forward this email to you? Sign up here for your own copy on our website!



Economics  
Feb. 2022

# Where Does Your Water Come From?

Elaine Weinreb

Where does your drinking water come from? If you live in Eureka, Arcata, McKinleyville, or Blue Lake, it comes from the sand beds underneath the Mad River, courtesy of the Humboldt Bay Municipal Water District (HBMWD). This agency, originally formed in 1956 to bring a steady water supply to the pulp mills, pumps, purifies, and distributes drinking water to more than 88,000 households.

The HBMWD has multiple functions. In addition to wholesaling water to four cities and a number of smaller communities, it also oversees the health of the 70-mile long Mad River; runs a power producing dam at Ruth Lake in Trinity County; supervises the recreational use of the lake (along with the Ruth Lake Community Services District); and operates two small but attractive parks along the riverbank near Blue Lake. It has two separate systems of pumps and pipelines – one for untreated water going to industrial facilities, and the other for treated water going to communities. The untreated water is drawn from the surface waters of the river; the treated water is first pumped up from the sand and gravel beds, then filtered, chlorinated, and piped to large storage tanks in the cities it sells to. Each city then distributes the water to its customers through its own lines, and collects monthly bills from the residents.

The district therefore interacts with government on multiple levels. If a grower wants to start an operation that will draw water from a tributary of the Mad, the County Planning Department lets the HBMWD know and gives it blocking power if members think the operation could harm the watershed. State Fish and Wildlife oversees the Habitat Conservation Plan that the HBMWD created years ago. HBMWD negotiates with the Harbor District to provide untreated water to new industries such as the Nordic Aquafarm, and to provide treated water to new housing developments proposed on the peninsula. State and federal agencies that supervise dam safety inspect the facility, and sometimes demand changes and upgrades to promote safety.

The State Water Resources Control Board also oversees the HBMWD. And of course, the district must interact with the municipal governments of the cities that purchase its water, as well as multiple departments of both Humboldt and Trinity Counties.

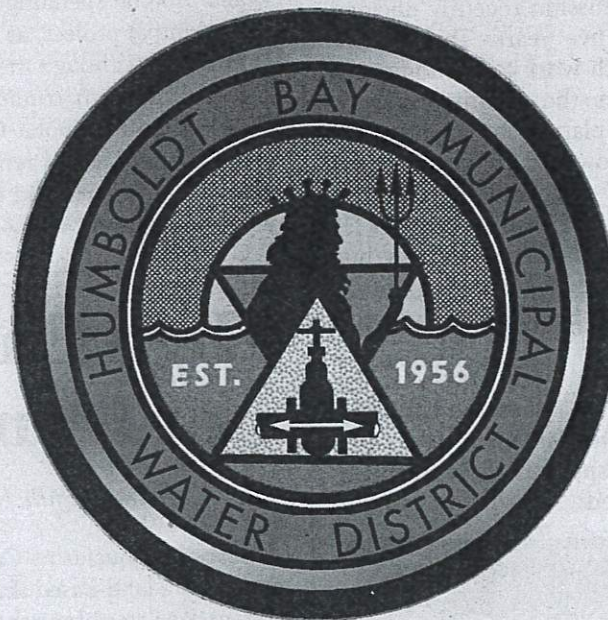
To do all this, the HBMWD has an elected five-person Board of Directors, as well as a staff of employees. The directors, in the opinion of this writer, are well-informed about both watershed science and the political nuances of the communities that they serve, and tend to stay in their positions sometimes for decades. Directors are chosen according to the district they represent, in a process somewhat analogous to the Board of Supervisors. GHD, a local engineering firm, serves as the district's engineer (as it does for many other local agencies).

The chief problem facing the district at this point is that with the loss of the pulp mills about twenty years ago, it may run afoul of the state's "use it or lose it" water mandate. The first priority is to keep water sales local, but it has in the past considered selling water out of the area. This has never worked out because the costs of long distance transportation are so high.

The wells and water treatment facilities are located along the

riverbank between Arcata and Blue Lake: the District Office is in Eureka at 828 Seventh Street. Directors are Neal Latt, Sheri Woo, David Lindberg, Bruce Rupp, and Michelle Fuller. The General Manager is John Friedenbach. A more ethereal figure is King Neptune, the God of Water, who is displayed prominently on the district's logo, representing the "prudent administration" of the district. Actually, the logo contains quite a lot of mythical symbolism which is interesting if you're into that kind of thing.

Board meetings are usually held on the second Thursday morning of the month. They are lengthy and often take up the whole day. Because of Covid, they are virtual at the present time. Links and agendas are on the HBMWB website at [www.hbmwd.com](http://www.hbmwd.com). The monthly board packet contains an interesting compilation of water-related articles from various publications, and is almost a magazine in itself. Check it out sometime.





By Steven Koppes and Lauren Wood Jan 13, 2022 From *This Week @ UC San Diego*

## Atmospheric River Storm Observations over Pacific Ocean to Expand This Winter

Filling data gaps will improve precipitation forecasts for western states

“Hurricane Hunter” aircraft are mobilizing for an expanded 13-week period that began Jan. 5 to glean critical data for improving forecasts of atmospheric river storms over the Pacific Ocean. Such storms provide up to half of the U.S. West Coast’s annual precipitation and a majority of the flooding.

The flights are part of the Atmospheric River Reconnaissance (AR Recon) program led by UC San Diego’s Center for Western Weather and Water Extremes (CW3E) at Scripps Institution of Oceanography with support from the U.S. Army Corps of Engineers and California Department of Water Resources. The program works in coordination with NOAA’s Office of Marine and Aviation Operations and the U.S. Air Force Reserve 53rd Weather Reconnaissance Squadron “Hurricane Hunters” to execute data-collecting missions within these storms.



*Maj. Sonia Walker with the 53rd Weather Reconnaissance Squadron coordinates a dropsonde deployment during a flight Jan. 31, 2021. Photo credit: U.S. Air Force/Kristen Pittman.*

This winter, two Air Force Reserve WC-130J Super Hercules aircraft will be on standby to fly out of Mather Air Force Base near Sacramento, Calif., when atmospheric rivers approach the West Coast. NOAA will station its Gulfstream IV-SP jet in Hawaii during this year's operations. Dropsonde instruments will be deployed from these aircraft over specialized transects over atmospheric rivers, transmitting critical data on the vertical profile of water vapor, wind, and temperature carried in fast-moving, low-altitude airstreams that form the atmospheric river.

An average atmospheric river carries 25 times the water equivalent of the Mississippi River in the form of vapor instead of liquid. These storms can cover a swath about 500 miles wide while extending thousands of miles in length. They pack winds ranging from more than 50 miles an hour to hurricane force.

"Science has discovered that the leading source of error in predicting when and where an atmospheric river will strike the U.S. West Coast and how much precipitation it will create is the position and structure of the atmospheric river itself offshore, prior to landfall," said Scripps research meteorologist and CW3E Director F. Martin Ralph. "Obtaining accurate environmental measurements in and near the atmospheric river offshore using these aircraft and drifting ocean buoys has a significant impact on forecast accuracy. AR Recon not only fills in many data gaps over the Pacific Ocean for prediction, it supports improved scientific understanding that over time improves forecasts as well. These improvements are vital for water managers and public safety."

Ralph leads AR Recon 2022, working closely with Vijay Tallapragada, who heads modeling efforts for the National Weather Service's Global Forecast System (GFS); and Jim Doyle, who leads the Naval Research Laboratory's Coupled Ocean/Atmosphere Mesoscale Prediction System.

Atmospheric rivers have helped break more than 40 percent of California's droughts throughout recorded history. They also generate many of California's most extreme precipitation events, driving 90 percent of California's heaviest rains in bursts lasting one to three days. They are also responsible for as much as \$1 billion a year in flood damages in western states.





*A weather buoy parachutes to the Pacific Ocean after being released by the Air Force Reserve's 53rd Weather Reconnaissance Squadron Hurricane Hunters Dec. 15, 2021. Photo credit: U.S. Air Force 403rd Wing.*

“California experiences the greatest variability in precipitation in the country, with atmospheric river storms serving as the main driver,” said U.S. Rep. Ken Calvert (CA-42). “The AR Recon effort helps leverage our military and civilian assets to better manage that gap between drought and flooding events. Improved forecasts enhance clarity of timing, location, and severity of storms and provide great value across a range of applications from national defense to water management.”

Although meteorologists can see atmospheric rivers forming as much as eight days in advance, landfall forecasts can be hundreds of miles off target. AR Recon data improves forecasts of their intensity, allowing forecasters to more precisely determine potential benefits or hazards of atmospheric rivers. Situationally, they can refill reservoirs or bring flooding and debris flows. Real-time data will also be incorporated into AR scale rankings, which can serve as a predictive indicator of the storm’s damage or benefit.

“AR Recon has been a key monitoring element of the State's Atmospheric River Research Program and is a great example of collaborative engagements that lead to improvements in precipitation prediction, providing multiple benefits to water managers seeking to understand climate change-caused weather extremes,” said Michael Anderson, state climatologist with the California Department of Water Resources.

As California alternates between extremes of drought and flood, accurate forecasts are increasingly vital to water managers. A collaborative program called Forecast-Informed Reservoir Operations (FIRO) uses modern forecasting methods to give reservoir



operators better decision-making tools to optimize water resources. FIRO is developing the capability for these advanced forecasts to help water managers decide whether to retain water if no additional storms are forecast or release it to mitigate the risk of flooding.

“Research on atmospheric rivers from the Atmospheric River Reconnaissance program has helped us better predict, mitigate and optimize these weather events in California,” said U.S. Sen. Dianne Feinstein (D-CA). “Applying this data through Forecast-Informed Reservoir Operations means better flood protection and improved water storage to help lessen the effects of drought.”

“Water managers within the U.S. Army Corps of Engineers have long maintained that they can do a better job of making water management decisions if weather forecasts were better – i.e. more accurate at longer lead times,” said Cary Talbot, chief of the Flood and Storm Protection Division at the U.S. Army Engineer Research and Development Center. “The AR Recon program, combined with the increased flexibility afforded by the FIRO program, is making better water management a reality in California and across the West because the forecasts are improving in both accuracy and lead time.”

AR Recon observations began in 2016. This year the mission window will expand to 13 weeks, three weeks longer than last year. In addition to using dropsondes, the Air Force Reserves and ships of opportunity deployed 50 additional drifting buoys in key locations throughout the northeast Pacific this season, joining 48 buoys active from previous seasons. These buoys provide vital sea-level pressure, water temperature and wave measurements from a region lacking data needed for numerical weather predictions and climate studies. The buoy deployments were completed in partnership with the Scripps-based, NOAA-funded Global Drifter Program (GDP), the California Department of Water Resources, and the U.S. Army Corps of Engineers.

This year, Air Force Reserve aircraft will also be equipped with what are known as airborne radio occultation capabilities. Proven on NOAA’s Gulfstream IV-SP platform in previous seasons, the airborne radio occultation technique uses GPS signals to detect variations in atmospheric properties and provide critical moisture and temperature profiles in the larger environment surrounding the aircraft, complementing the dropsondes.

Neither satellites nor other conventional observation methods can detect conditions captured from buoys and dropsondes. In offshore areas from the ground to a height of several miles, AR Recon dropsonde data account for most temperature and humidity observations and almost half of the wind observations. These data plug a serious gap in the standard network of weather observations impacting the U.S. mainland.

Weather officers and navigators of the U.S. Air Force Reserves will embed at Scripps Oceanography for flight planning this season, assisted by a team from NOAA’s Environmental Modeling Center and flight directors from NOAA’s Aircraft Operations Center. About 50 people aid flight planning throughout the season, including approximately 20 from Scripps Oceanography and up to 15 from the Air Force Reserves.

The AR Recon Program has grown from a demonstration phase in 2016 to an operational requirement in 2019 and is now included in the federal National Winter Season Operational Plan (NWSOP). It has expanded from flying three storm Intense Observation Periods (IOPs) in 2016 to 30 such periods in 2021, with more than 117 aircraft missions flown and data from more than 3,000 dropsondes assimilated in real-time operations.

Leading global weather models at NOAA and the National Weather Service, the U.S. Navy, and European agencies and others incorporate AR Recon data into their forecasts. In the northeast Pacific, AR Recon observations have improved precipitation forecasts over the western United States. They also provide a more accurate analysis of upstream atmospheric conditions before potential high-impact weather events develop over the central and eastern parts of the country.

“Real-time assimilation of AR Recon observations have made a significant impact on NOAA’s operational GFS, particularly for the precipitation forecasts along the west coast of the United States, with forecast improvements exceeding 20-30 percent in areas where heavy precipitation occurs due to landfalling atmospheric rivers,” said Vijay Tallapragada, Chief of Modeling and Data Assimilation Branch at NOAA’s Environmental Modeling Center.

The Research and Operations partnership established through the AR Recon Program has enabled scientists from NOAA working closely with CW3E and the Navy in developing advanced sampling strategies for mission planning and targeted collection of observations critical for improving the analysis and forecasts. The AR Recon observations also have notably improved key aspects of NOAA’s GFS. Wind forecasts alone have improved by 17 percent after including AR Recon data. The Navy has found that AR Recon data improves forecasts as much as all the data collected from balloon-borne radiosondes in North America.

The recent report from NOAA’s Science Advisory Board on Priorities for Weather Research explicitly recommended the implementation of a multi-phase program to improve atmospheric river forecasting to better anticipate and mitigate extreme precipitation swings and their cascading impacts. In 2022, the AR Recon Program will include, for the first time, real-time data collection and feedback that can instantly impact experiments being carried out with NOAA’s GFS. Making this possible are the computational resources provided by San Diego Supercomputer Center’s “COMET” to facilitate documenting the forecast improvements and support mission planning.



## The devastating mudslides that follow forest fires

Regions that never used to burn are now suffering from forest fires — and that raises the risks of dangerous mudslides that are hard to forecast.

[Jane Palmer](#)

12 January 2022

*Nature* **601**, 184-186 (2022)



Intense rain triggered mudslides in Glenwood Canyon, Colorado, during June and July last year — one year after a fire scorched the area. Credit: AP/Shutterstock

---

The summer of 2021 brought ideal fire weather to southern British Columbia in Canada. A dome of hot, high-pressure air settled over the area, sending temperatures soaring into record territory after months of drought.

In early July, an average of 40 fires sprang up each day in the province — in what would become one of the region’s worst wildfire seasons ever recorded. Flames scorched the steep, tree-covered slopes above the valleys that are home to the Trans-Canada Highway and national railway lines, as well as oil and gas pipelines. The blaze raised concern about another imminent threat: landslides from the destabilized hills.

In mid-November, a massive storm known as an atmospheric river dumped a month’s worth of rain on the region in just two days. When the downpour hit the burnt, scarred slopes, it set off giant surges of mud and debris that swept across the highway and railway lines. “They severed

several key transportation corridors in western Canada, which then meant critical supply-chain interruptions,” says Matthias Jakob, a geoscientist at BGC Engineering in Vancouver, Canada, who worked on assessing the potential for landslides in the region.

Although they might not be as deadly as hurricanes or heatwaves, landslides such as this can cost hundreds of millions of dollars in economic damage, Jakob says. And more are expected this winter as atmospheric rivers pummel the northwest of the United States and British Columbia, following a year of intense and widespread fires.

This one-two punch of fire and flood, is just a taste of what’s to come there, and in many other regions. Climate change is increasing the frequency and intensity of fires around the world, and it is also leading to more extreme bouts of precipitation<sup>1</sup>. When rain hits recently burnt hillsides it can trigger a particularly deadly type of landslide called a debris flow — a water-laden mass of soil, rocks and other matter that can surge downslope with devastating force.

In regions prone to these types of hazard, scientists have developed models that can feed into warning systems and save lives. But wildfires are now claiming hill slopes that have rarely been burnt before. This is happening around the world, from the boreal forests of Alaska and Canada to the mountains of Austria, where fires are burning more frequently and more intensely than ever before.

“There will be an increased likelihood of both fire and post-fire debris flows in areas where they are currently only a theoretical possibility,” says Bruce Malamud, a geophysicist at King’s College London.

The central region of British Columbia has always had wildfires but now the province is even seeing blazes in coastal areas. The models used to forecast inland debris flows simply wouldn’t work for these regions, where the soils and vegetation differ, Jakob says. It’s a similar scenario in the United States, where fires in the past few years have scorched areas of northern California, Oregon and Washington that rarely burn.

Evidence suggests that the debris-flow behaviour is going to be different in these wetter, more vegetated regions than in arid southwestern states, where fires and landslides are more common, says Jason Kean, a hydrologist at the United States Geological Survey (USGS) National Landslide Hazards Program in Golden, Colorado.

“While it’s kind of clear what’s happening in the drier areas, the picture gets murkier as we move north,” Kean says. “So right now, we are scrambling to collect data to figure out how well our current model works and how to make a better one.”

## **Surging slopes**

When rainfall hits an unburnt slope, it gets caught on trees or shrubs and then slowly trickles to the ground, where it can filter into the soil. But fires make it harder for hillsides to soak up water. When flames burn away vegetation, that allows rain to hit the surface with its full force. And



fires burn off the waxy compounds that coat leaves and needles, some of which then evaporate and condense on cooler soil particles just below the surface. That can form a water-repellent layer that stops the soil from absorbing water<sup>2</sup>.

“That takes the soil from acting like a sponge that just soaks up the rain, to acting like a giant plastic sheet that water runs off,” says Gary Sheridan, a soil scientist at the University of Melbourne, Australia.



A fire burns hillsides in Glenwood Canyon in August 2020. Credit: Helen H. Richardson/MediaNews Group/The Denver Post via Getty

Rain runs off this water-repellent surface until it reaches a crack and then can soak into the soil. But if the rain is falling at an intense rate, only some of it seeps into crevices and the rest forms rivulets that flow downhill. These streams pick up soil and rocks, which gain speed, and surge downhill creating a debris flow.

“It can be a small amount of rainfall, but it needs to be intense,” says Stefan Doerr, a wildfire scientist at Swansea University, UK. “Particularly soon after a fire, because the stuff is just sitting there, ready to be moved.”

When an extreme storm, known as a bomb cyclone, blasted California and the Pacific Northwest in October 2021, it broke single-day rainfall records for several regions that didn’t burn and caused flash flooding, but didn’t set off any significant mudslides in the burnt areas. “It is not

about the storm total rainfall, but the intensity of the rain,” says Nina Oakley, a research meteorologist at the Scripps Institute of Oceanography in San Diego, California, who studies the connection between extreme rainfall events and landslides. “That’s why you really need 15-minute rainfall information to forecast post-fire debris flows.”

Mudslides and similar types of slope failure can cause tremendous damage. In the United States, rough estimates put the direct economic costs of landslides in the range of several billion dollars each year, says Jonathan Godt, the coordinator of the Landslide Hazards Program at the USGS. But the indirect costs, which include losses in commerce and related factors, are probably several times that estimate, Godt says.

In January 2021, Congress passed the National Landslide Preparedness Act, which authorized US\$37 million annually from 2021 to 2024 for federal agencies to broaden their efforts to reduce the hazards from landslides. One goal of the bill is to expand existing early-warning systems for post-wildfire burnt landscapes in the United States.

After a fire, teams of US federal and academic soil scientists, hydrologists, biologists and landslide experts typically flock to the area immediately, even before the flames are completely out, to assess the damage. US Forest Service researchers evaluate the severity of the burn on vegetation from the ground and from the skies, by comparing satellite imagery from before and after a fire. They pass on the information to USGS landslide researchers, who feed the data into their models and create hazard maps, designed to indicate the potential for debris flows across the burnt region.

The models take into account the size and steepness of the affected area, how severely the fire scorched it and the nature of the soil, as well as a multitude of other variables. With all of that information, the models indicate how probable debris flows will be depending on the intensity of rainfall. It’s a statistical association based on data from previous post-fire mudslides in the southwest of the United States.

Although relatively simple, the models have proved effective at informing early-warning systems in that part of the United States, where the slopes share similar vegetation and soils. After a fire tore through Glenwood Canyon, Colorado, in August 2020, scientists were quick to assess the damage and feed the data into a model, which helped emergency-response managers to assess the risks of debris flows when rainstorms approached (see ‘Unstable slopes’). In mid-2021, that warning system prompted authorities to close Interstate 70 — a highway that runs through the canyon — a number of times. Several debris flows surged across the major road. No lives were lost, but it will cost more than \$100 million to repair the damage to the highway.



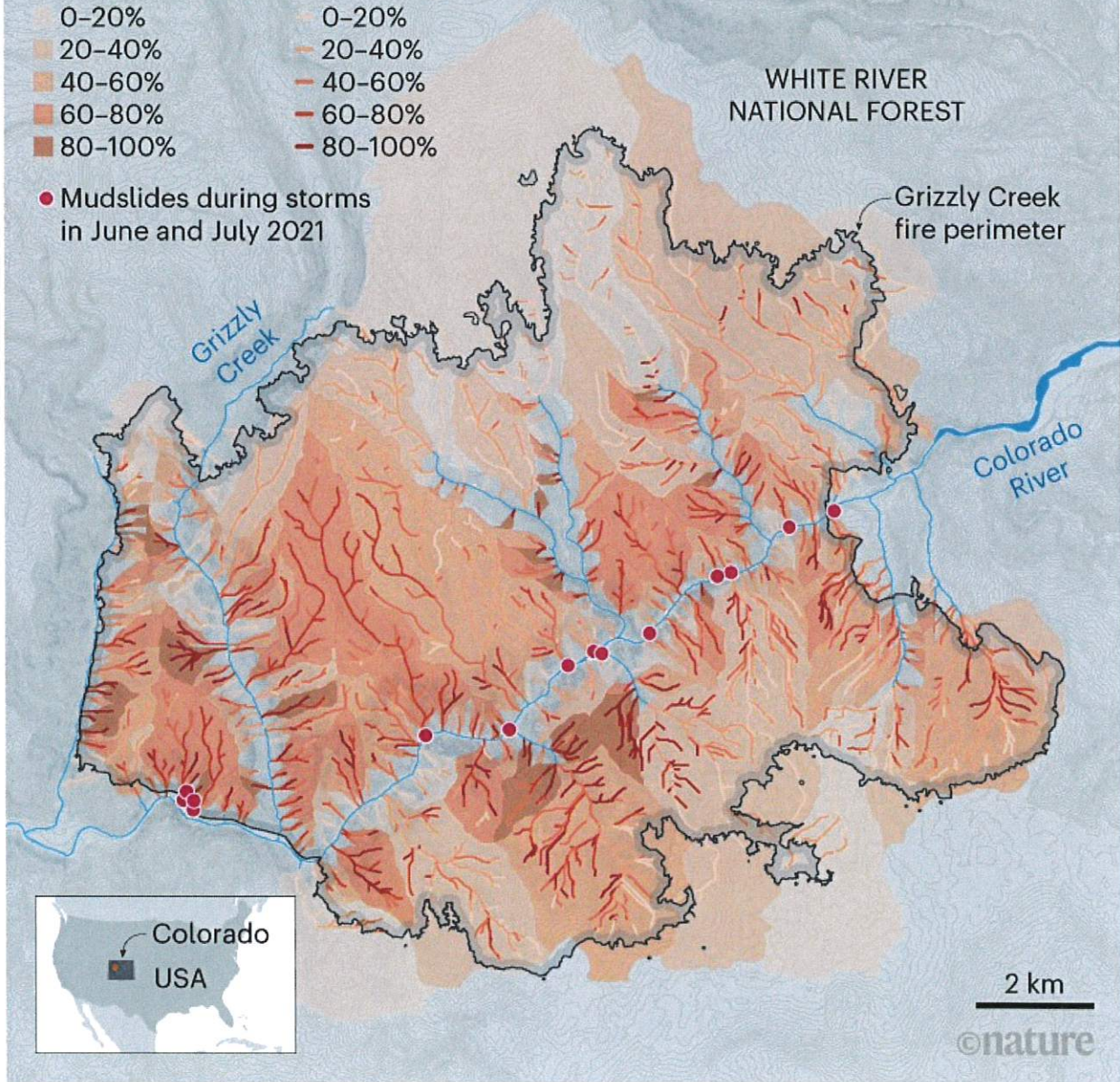
# UNSTABLE SLOPES

After the Grizzly Creek fire burnt hillsides in Glenwood Canyon, Colorado, in 2020, researchers at the United States Geological Survey used a model to estimate the likelihood of debris flows during rainstorms. The map shows risk estimates for drainage basins and streams, based on a storm with a maximum rainfall intensity of 24 millimetres per hour for a 15-minute interval. Storms in July 2021 significantly exceeded that threshold.

**Basin probability      Stream segment probability**

- |         |         |
|---------|---------|
| 0-20%   | 0-20%   |
| 20-40%  | 20-40%  |
| 40-60%  | 40-60%  |
| 60-80%  | 60-80%  |
| 80-100% | 80-100% |

● Mudslides during storms in June and July 2021



Source: USGS

When the local authorities in Oregon ask the USGS scientists to make hazard maps after fires in the state, however, the model output has limited value because the environment is so different from conditions in the arid southwest. “You can’t take the probability numbers at face value because the model doesn’t apply to that area,” Kean says.



## Delayed disasters

That became clear after a fire tore across hillsides in Oregon's Columbia River Gorge in September 2017. In the steep, forested slopes, fir trees typically tower over a dense, lush undergrowth of ferns and bushes. The fire that year incinerated the vegetation in a 20,000 hectare area. But despite some intense storms in the following three years, there were no catastrophes. Then, in January 2021, heavy rains triggered a deadly mudslide. The torrent of mud swept away a car driving through the gorge, killing its driver.

The delayed catastrophe didn't surprise geologist Joshua Roering, at the University of Oregon in Eugene, who has been studying landslides in the Pacific Northwest for nearly two decades. Roering's group has been investigating how the Pacific Northwest soils can behave differently from those in drier locations, after a fire.

So far, his group has found that after flames scorch vegetation, a water-repellent layer coats the soil, but it is fragmented and not as continuous as the coatings formed farther south. So water can soak into the ground during extreme rainfall in the Pacific Northwest, even after a fire. The fact that several significant storms haven't triggered debris flows in the region, suggests that the hydrologic system behaves differently from those observed in southern California, Roering says.

That doesn't mean the post-fire danger disappears, Roering cautions. Instead, the risks of debris flows are delayed, a pattern researchers have seen after timber harvesting on slopes. When a tree is cut, its roots decay over several years. And as their hold on the soil loosens, the chances grow for a slope to slide when rain hits<sup>3</sup>. "You cut down a tree, or you burn a tree," Roering says. "It doesn't matter how you kill a tree, those root systems in the upper metre of the soil are losing about 90% of their strength after three, four or five years."

If this theory bears out, scientists and emergency managers will need to prepare for storms several years after wildfires in the heavily wooded Pacific Northwest, Roering says. "If that's the case, then we're sort of sitting on this ticking time bomb in terms of badly burned areas, with steep slopes, perched above major travel corridors and freeways," he says.

Researchers don't expect the same kind of delay for the central region of British Columbia, which is more arid and has different soils from coastal parts of the Pacific Northwest. "We really need to create our own model for British Columbia, ideally one for the coast and one for the drier interior," Jakob says. "But for that we need much more data."

In Australia, researchers are also grappling with changing patterns of fires and debris flows. Wildfires are common in southeastern Australia, where Sheridan works, but now they're starting to spring up in the wet, alpine areas of Tasmania, which have rarely seen flames before. Rather than create a whole new landslide model, Sheridan's group is attempting to refine it, one fire at a time, and to test its effectiveness with each debris flow. But it's a tricky and drawn-out process, Sheridan says.

After a fire, there's such a diverse range of outcomes, from almost no change to the landscape to catastrophic debris flows and landslides, and everything in between, Sheridan says. Landslide researchers around the world are discussing a common set of factors that can be fed into a universal forecasting model, but such a model is still a long way off, because the landscape, climate and soil behaviour varies in each location, he says. "There's such a high variability in risk from place to place, and we still don't know why," Sheridan says.

Debris-flow models can only go so far. They help to save lives, but it's more difficult to keep buildings or transport networks safe. In British Columbia, there simply isn't the money to protect roads, railway lines or pipelines from every single slope that could yield a debris flow, Jakob says. "Early-warning systems can prevent harm to people, but infrastructures will still be damaged or obliterated."

Moving forwards, it will be even more important to use models to identify roads or pipelines at risk, so that authorities can then prioritize where to shore up defences, Jakob says. Homeowners, too, need to know the risks to their property, and lives.

"With the dramatic and rapid change in climate, many people may not know that they are at risk from post-fire landslides," Jakob says. Still, such efforts are not without controversy. Politicians and developers have been known to oppose efforts to create landslide hazard maps because they see them as hindering growth and income.

Only time, more storms and more data will help researchers learn how to better forecast when or where landslides might strike after fires. In anticipation of the winter storm season in the western United States, researchers have installed instruments on some of the slopes that burnt last year in California blazes, including the giant Caldor fire and the Dixie fire — the largest individual blaze in state history.

The combined network of instruments will tell scientists the intensity of rainfall that does, or doesn't, trigger debris flows; how much water seeps into the ground; how much runs off; and other crucial variables that will help to improve current models or build region-specific ones, Kean says.

The biggest challenge to building a clearer picture is the lack of resources in relation to the scale of the wildfire devastation, Kean says. The Dixie fire alone burnt nearly 400,000 hectares and the scientists have a restricted number of instruments, which limits their ability to build up knowledge regarding debris flow behaviour in new regions. "We don't have a big-data problem. We have a little-data problem," Kean says.

The lack of resources and information about landslides is universal for researchers across the world and it hinders the community's ability to advance its understanding. "You've got a tiny little bit of data," says Sheridan, "and it's like you're trying to read the tea leaves and work out what's going on."



## Out of the Woods: Could biomass technology help reduce megafires and build a wood-products market in California?

From *Comstock's Magazine* JAN 10, 2022 By Eric Johnson

Every summer and fall for the past decade, California's wildfires have been getting larger and more destructive. Eight of the 10 largest forest fires in California history have occurred in the last five years. The California Department of Forestry and Fire Protection reports that in 2021, wildfires burned more than 3 million acres and destroyed 3,629 homes. These included the Dixie Fire, the second largest in state history, which consumed just shy of 1 million acres, more than 1,500 square miles.

Scientists blame two things for the rise of the megafire. First, global climate change, which fuels wildfires, drought and insect infestation, has dried out forests everywhere, killed more than 100 million trees in the Sierra Nevada and given birth to weather systems that feed infernos. Second, is the overabundance of forest fuels resulting from the mismanagement of wildland. Policies enforcing the practice of extinguishing every wildfire removed nature's system of managing the buildup of fuels, both standing dead trees and accumulated biomass on the forest floor. One solution to this problem is forest thinning — the harvest of unmarketable trees and other woody biomass. Wildland managers are also increasing the use of prescribed burns, which seek to bring back a practice that indigenous people throughout the West employed for millennia to prevent fuel from accumulating.

The California Wildfire & Forest Resilience Task Force is part of a \$1 billion effort to fundamentally change the ways forests throughout the state are managed. It involves all of the land management agencies managing California's forest — state, federal and tribal — as well as representatives of private forestland owners, including logging companies and individuals. Its mission is to establish "healthy and resilient forests that can withstand and adapt to wildfire, drought and a changing climate."

One of the primary ways the task force is working to achieve that goal is through forest thinning. Its published plan includes a directive to use this harvest to help "build a sustainable wood-products market in California." Because this wood has no value as lumber, there have been hopes, in the three years since the task force convened, that it might be used as a source for biofuel. In recent years, several companies in Northern California have developed technologies that can do just that — turn wood waste into fuel.

West Biofuels' Woodland Development Center is at work turning wood chips into syngas (synthetic gas), which can be converted into liquid fuels or energy. West Biofuels also uses biomass to make ethanol and methane.

Working with the California Energy Commission, UC Davis, the Sacramento Metropolitan Utilities District and other partners, West Biofuels is developing technology specifically designed to turn biomass residue from sustainable forest management practices into renewable electricity. The company is also building a modular system that can be deployed directly to the sites where forest fuel reduction projects are taking place.

The biggest player in the global wood-waste biofuel business is Aemetis, based in Riverbank in Stanislaus County. It signed a \$1 billion deal to provide sustainable aviation fuel to Delta Air Lines in October 2021 and a \$1.1 billion deal with American Airlines in December. The company uses woody biomass to manufacture fuel that cuts the carbon impact of air travel, which is responsible for putting more than 800 million metric tons of CO<sub>2</sub> into the atmosphere every year. Its biomass technology has the potential to provide the sustainable wood-products market California needs to turn forest fuels into a viable clean energy industry.

### **An emerging industry**

When Aemetis Chairman and CEO Eric McAfee was 14 years old, his grandmother gave him and his brother 400 acres of land east of Fresno, and the boys started a company. In their teenage years, McAfee recalls, he and his brother Mark grew McAfee Farms to 2,200 acres of agricultural land producing row crops. They built a dairy farm and eventually put in 520 acres of almond orchards.

While helping run the farm, McAfee attended Merced College and Fresno State. He went on to receive post-graduate certificates from Stanford and Harvard universities. Over the next couple of decades, according to his Bloomberg profile, McAfee funded more than 20 companies, including four public companies. McAfee, who has a home in Lincoln, has served for 27 years on the board of directors of the California Manufacturers & Technology Association in Sacramento.

With Aemetis, McAfee is building a plant that he says will manufacture more than 25 million gallons of jet fuel annually by drawing hydrogen from waste wood derived from spent almond trees.

Almond trees produce nuts for 18 to 20 years and are then cut down, bulldozed into piles and burned, McAfee says. This results in a massive release of carbon pollution into the Central Valley airshed. McAfee says he decided those trees presented a unique opportunity to reduce the flow of carbon dioxide into the atmosphere.

“I grew up as a farmer and I understand something about trees,” he says. “Trees are made of molecules. Trees pull CO<sub>2</sub> — carbon dioxide — from the air, and they pull H<sub>2</sub>O — water — from the ground. And they put the hydrogen and carbon and oxygen together into various molecules, and that’s what makes a tree.” He says his company takes those molecules apart, uses the hydrogen to make energy, and puts the carbon underground in its carbon dioxide injection well.

The patented process Aemetis will employ to extract the hydrogen from the wood, which was funded by the California Energy Commission and the U.S. Department of Energy, is revolutionary.

Colin Murphy, a biofuels expert and deputy director of the UC Davis Policy Institute for Energy, Environment, and the Economy, says West Biofuels’ and Aemetis’ technology solves a difficult problem. The three main molecules that make up wood — cellulose, hemicellulose and lignin — do not want to give up their structural integrity and are excellent at defending it, to the point that the only things that can eat wood are termites.



He points out that wood — even soft wood — is pretty tough stuff. “Trees survived and evolved over billions of years because they didn’t want animals to be able to eat them and break down the molecules that they made themselves out of,” he says.

Yet Murphy describes Aemetis’ work as a significant breakthrough in the biofuels industry. “This represents not only a real big improvement over petroleum,” he says, “but a big improvement over most of the projects that are on the market making renewable diesel or renewable jet fuel.”

### **Farm to fuel**

McAfee has made a lot of money for himself and his investors while helping to solve global climate change, which is taking center stage as one of the biggest problems in the world. An important component of his success has been his ability to access federal, state, and private-sector programs and funds targeting global warming.

McAfee reports his company has received a total of \$57 million in grants and tax incentives. In March 2021, seven months before inking the Delta Air Lines deal, Aemetis received a sales tax exclusion worth more than \$1 million from the California Alternative Energy and Advanced Transportation Financing Authority to help pay for the expansion of the company’s cluster of dairy biogas production facilities. The company had previously received a sales tax exclusion worth more than \$725,000.

In addition to orchard wood, Aemetis plans to utilize forest waste wood at its new plant, but that piece of the project is on hold, at least for now, McAfee says. Even with the state covering the expensive and energy-intensive work of harvesting wood for its fire-control treatments, it’s still a haul to get the biomass out of the forest, down mountain roads and to the company’s facility.

As of this moment, and it could change, it does not pencil out for Aemetis to apply its technology to forest waste wood. Aemetis could make a profit turning orchard wood into a key biofuel ingredient because California’s cap-and-trade program, launched in 2013, provides a funding source: the California Air Resources Board’s Low Carbon Fuel Standard credits program. Energy producers that exceed the state’s carbon emission limits could purchase credits from Aemetis — a company with emissions below state limits — to offset their pollution.

McAfee reports that 65 percent of Aemetis’ revenue comes from LCFS credits. So why does this system that works in an orchard not work in a forest?

The waste wood from the almond trees Aemetis will process can be easily measured, and the amount of carbon pollution being offset can be easily calculated. Not so with forest waste.

At UC Davis, Murphy was part of a work group sponsored by California to figure out how to use fire-control residue for bioenergy and biofuel production. That effort stalled.

“Part of the problem,” he says, “is that the models for fire risk are not precise enough, and not calibrated and validated across a wide variety of terrains and ecosystems. As a result, CARB doesn’t yet feel confident about attaching a financial incentive” to utilizing wood harvested in forest resilience efforts.



Tim Robards, division chief of Cal Fire's Climate and Energy Program, manages the Forest Health Grants program and agrees the unavailability of LCFS credits for forest biomass is a serious problem. His agency's grant program has a half-billion dollars under management, some of which is meant to fund its Wood Products and Bioenergy program.

Robards is a forester with a Ph.D. from UC Berkeley in statistics. "I count trees in sophisticated ways," he says with a laugh. He describes wildfire science at the moment as "squishy" when it comes to carbon-emissions savings. "You have to predict the probability of fire returning to an area," he says, "and predict the fire intensity. Basically it's a modeling exercise, but it involves landscape-level fire models dealing with different treatments and different local conditions and different weather scenarios."

Robards says he also wishes the LCFS program somehow included property administered by the federal government, which manages more than half of the forest land in the state. And he recommends that the program establish woody biomass from Northern California as a priority.

Meanwhile, as California stretches its energy and climate change policies in new directions, the rest of the world is developing similar solutions. Murphy is excited about the expansion of policies much like the LCFS. And, he points out, there's important work being done at the federal level. Meanwhile, he says, the technology continues to evolve, largely as a response to these policies.

"Nobody has cracked the code yet," he says, "but there are some ambitious policies in place and some innovative technology is on the way. There isn't anything that's going to save us anytime soon, but we can hope to get there."

# Five wildfire recovery strategies for the Sierra Nevada

Jan 12, 2022 | SIERRA NEVADA UPDATES



Following several years of uncharacteristically large and severe wildfires, the Sierra Nevada region is in uncharted territory. In 2021 alone, approximately 1.5 million acres burned. Over half of those acres experienced high-severity fire, which kills at least 75% of vegetation. These fires have left behind an altered landscape that now includes vast expanses of dead trees. The change threatens our water supply, wildlife habitat, carbon stores, Native American sacred sites and biocultural values, and recreation opportunities.

Several Sierra Nevada communities are hurting deeply, with homes destroyed, livelihoods disrupted, and traditional ways of life further threatened. And some of California's most precious natural resources—including crucial water sources like the Feather River watershed and beloved symbols like the giant sequoia—have been harmed.

We are not powerless in the face of these challenges. With action, we can help restore the resilience of our landscapes and protect the myriad values they offer, while also investing in community recovery and a restoration-based economy. Without action, however, dead trees may serve as fuel for the next fire.

While the task may feel daunting, recovery does not require novel actions and new strategies. Instead, recommitting to existing, proven strategies can increase the resilience of our living forests, reduce the risk of reburning in areas that already experienced fire, and support the communities and industries that shape our region's character.

Informed by our strong relationships to community partners, Sierra Nevada Conservancy has identified five strategies that respond to the region's recovery needs while also building resilience for the future.

## **1. Landscape-scale forest restoration**

After initial hazard-mitigation activities, protecting existing areas of live forest in, and adjacent to, burn areas should be a top priority. Land managers can safeguard these areas by capitalizing



on the zones that experienced good fire, or fire that benefitted the landscape. In these places, which are now interspersed among the swaths of mostly dead trees, wildfire did the work of restoration by removing excess fuels and returning forests to a healthier, more resilient condition. To make the most of this silver lining, land managers can use prescribed fire to cost-effectively maintain areas of live forest. Strategic fuels reductions in high-severity burn areas will also be necessary to reduce the risk of reburning and to protect our remaining live forests from future high-severity fire.



Strategic fuels reduction in high-severity burn areas can reduce the risk of reburning and prepare adjacent healthy forests to benefit from prescribed fire.



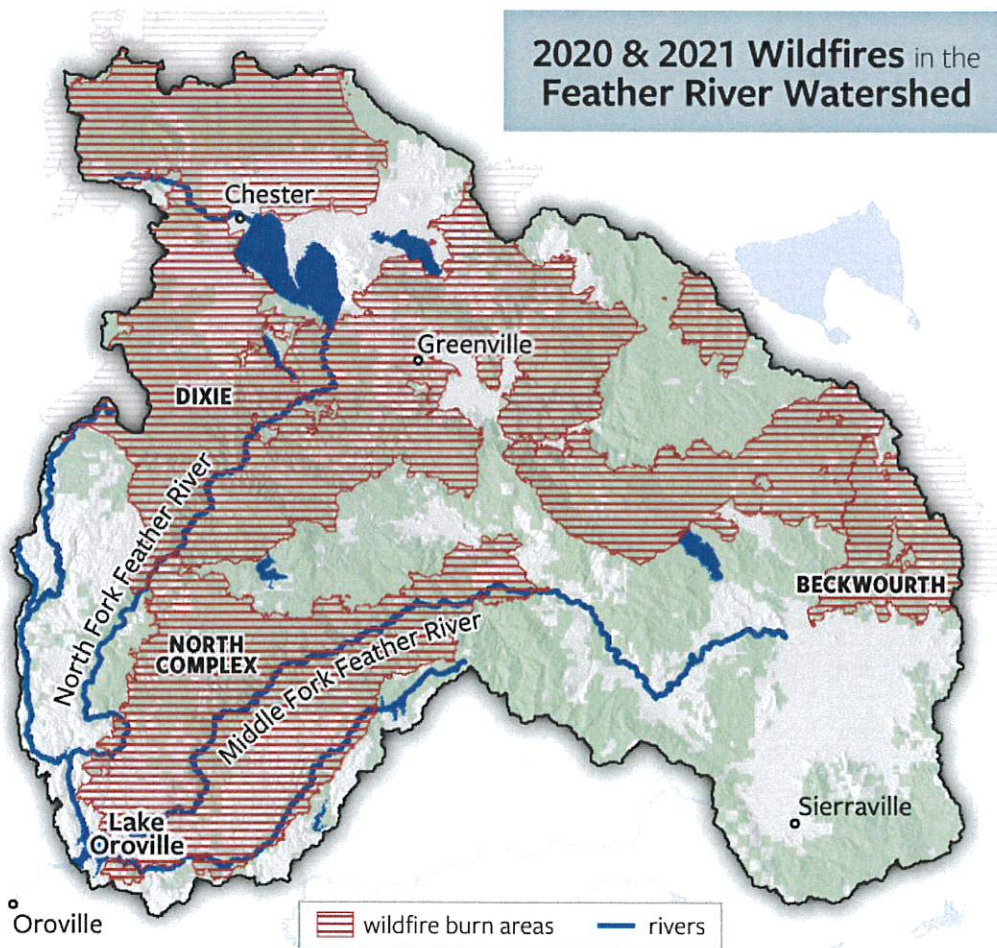
Prescribed fire can be used to cost-effectively maintain areas that experienced ecologically-beneficial “good fire” and to outwardly expand the benefits of good fire on the landscape.



At the same time, continued investment in landscape-level restoration treatments in unburned forests can build resilience to future fires. Pre-fire restoration is much more cost-effective than paying for fire suppression, post-fire hazard mitigation, and restoration of severely burned areas. Because key partners, such as the U.S. Forest Service, have limited resources to simultaneously engage in post-fire recovery and pre-fire restoration, we can use tools such as the Shared Stewardship Agreement and the Good Neighbor Authority to ensure we don't have to choose between these two vital actions to protect our forests.

## 2. Water supply protection

In 2020 and 2021 alone, approximately 55% of the Feather River watershed burned. Around 28% of the watershed experienced high-severity fire, meaning that at least 75% of above-ground vegetation was killed by fire. This vital water source now faces the risk of increased runoff and erosion, which can impact water quality, hydropower infrastructure, and reservoir capacity. The absence of vegetation can also expose the snowpack to direct sunlight and shift melt times to earlier in the spring. This shift creates challenges for communities, farmers, and ecosystems that rely on water stored in snowpack and reservoirs through the dry summer and early fall.



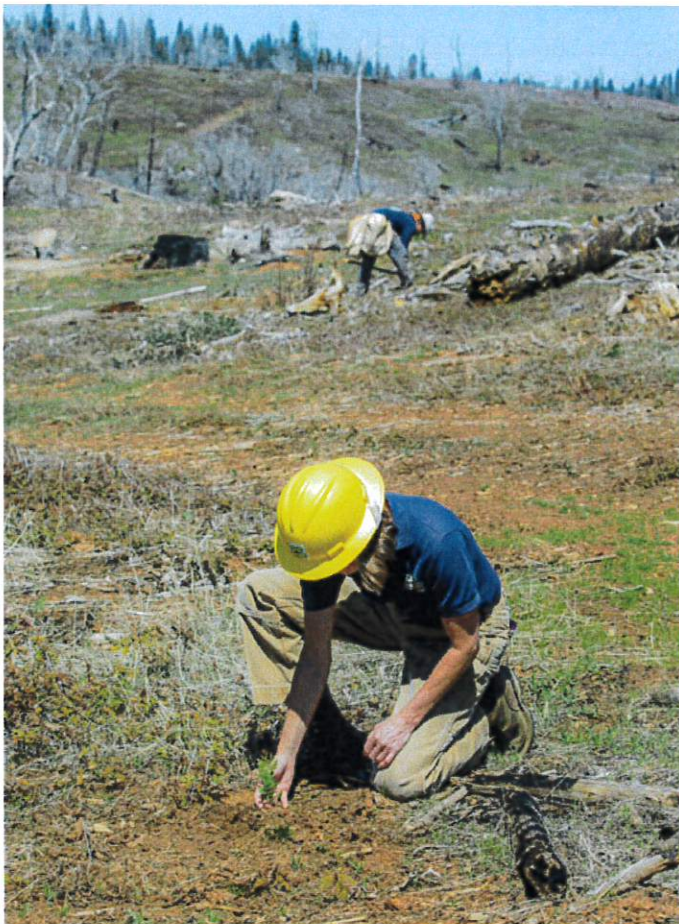
Recent large high-severity burn areas threaten the integrity of the Feather River watershed, and as a result, the state's water supply. However, targeted watershed restoration actions can help mitigate the negative impacts of fire.



To protect the integrity of the Feather River and other source watersheds—which are recognized as critical components of the state’s water infrastructure in Water Code section 108.5—we can use science-based strategies to restore watershed productivity and resiliency. Actions, such as ecological thinning and prescribed fire to maximize snowpack retention, meadow and stream channel restoration, and voluntary private land conservation and management, could enhance the resilience of our water supply to fire and climate change. These same actions often simultaneously promote other forest values, such as habitat and stable carbon storage.

### 3. Strategic reforestation

In large high-severity burn patches, natural forest regeneration is less likely because there are few or no live trees nearby to provide seeds, seed banks in the soil are often damaged, and the trees that do sprout struggle to compete with fast-growing brush. Without our help, many severely burned forests may be replaced by chaparral for decades, if not generations. However, historical approaches to paying for replanting on federal lands—through the sale of burned timber, also known as a salvage sale—may not be sufficient. With a limited number of sawmills and a glut of burned trees, the supply of salvage logs now far exceeds demand, which severely curtails standard reforestation funding sources.



Strategic reforestation—carried out in targeted areas and using diverse, native species and climate-resilient seedling varieties—can help ensure that forests grow back in locations that are especially important for carbon sequestration, water supply, recreation, habitat, and Native American practices.



With a dedicated funding stream, we can give these forests a fighting chance to grow back and once again provide the services and values we depend on. Strategic, climate-smart replanting strategies—carried out in targeted areas and using diverse, native species and climate-resilience seedling varieties—can help ensure that forests grow back in locations that are especially important for carbon sequestration, water supply, recreation, habitat, and Native American practices. Funding for site preparation and ongoing post-planting management, including the early application of prescribed and cultural fire, also help trees successfully reestablish. Many of these techniques have already been successfully tested in the Sierra Nevada, including following the [Camp](#) and [King](#) fires.

Reforestation at scale will require a robust system of seed collection, seedling nurseries, and planting. A reforestation strategy developed by the Reforestation Working Group of the Governor’s Wildfire and Forest Resilience Task Force will lay out a path forward to ensure that the Sierra Nevada retains live, healthy forests into the future.

#### 4. Rapid expansion of wood-utilization infrastructure

While not all burned trees can or should be harvested, post-fire salvage can be an appropriate strategy in certain areas to remove hazards and to allow for strategic reforestation. These trees can be used to make lumber, other value-added wood products, or fuel to produce clean, renewable energy—but only for a short time before the wood decomposes.



Without an expansion of wood utilization infrastructure, many salvaged logs may decompose in log decks, while dead trees still in the forest can only be pile burned. Both outcomes release significant amounts of carbon. *Photography: Camille Swezy.*

Typically, private industrial timber companies process a mixture of logs harvested from land they own and from nearby national forests. However, the current supply of standing dead trees exceeds what existing processing capacity can handle, so timber companies are focused on harvesting and processing trees on their own lands. As a result, independent logging companies have nowhere to sell logs they would normally harvest from national forests, which creates



obstacles for salvage logging and cuts off revenue that historically funded reforestation on public land.

Burned trees can be harvested as sawlogs for only about 18 months after a fire. After five years, the wood falls apart and cannot be removed for any useful purpose. Without processing facilities, piles of dead, burned trees will sit and decompose, be pile burned, or serve as fuel for a future fire—releasing significant amounts of carbon.

A rapid expansion of wood-utilization infrastructure can help process dead trees and offset the long-term costs of forest restoration. Facilities can be developed at the scale and in the location that best supports both current recovery needs and ecological forest restoration. Funding for technical assistance, feasibility studies, preliminary designs, and equipment and property purchase can help communities and businesses leverage existing state programs, such as the Climate Catalyst Fund. The state can also help coordinate among federal and private partners to secure permanent financing and long-term stewardship contracts that create stability for potential investors in wood utilization infrastructure.

## **5. Support for community-led initiatives**

Many Sierra Nevada communities have been rocked by recent wildfires, and some have experienced heartbreaking devastation. While state and federal disaster-relief programs often provide immediate support, other needs are more specific or take longer to reveal themselves. In these circumstances, the best strategy is often to listen to community members, who in many cases have a history of organizing themselves to collectively identify the best path forward. High-impact investments in community-led initiatives can significantly increase the welfare of fire-impacted communities.



High-impact investments in community-led initiatives can significantly increase the welfare of fire-impacted communities. Purchased by the Sierra Institute with help from a Sierra Nevada Conservancy grant and run by local operator J&C Enterprises, the new sawmill at the Crescent Mills site brings opportunity and hope to Indian Valley following the Dixie Fire. *Photography: Camille Swezy.*

The Sierra Nevada Conservancy recently employed this approach to support Indian Valley after its harrowing summer surrounded by the Dixie Fire. With nearly every hillside burned, residents displaced, and ranching and logging livelihoods disrupted, the community needed a way to process hazard trees, to create new opportunity, and—according to Jonathan Kusel, Executive Director of the Taylorsville-based Sierra Institute—to build hope. In response to the Sierra Institute’s request, SNC was able to modify a recent grant to enable the community-based organization to buy a small sawmill. This modest, but timely, investment is expected to aid recovery in Indian Valley and has the potential to [“change the dynamics of Dixie Fire restoration and forest management across Plumas County.”](#)

Other communities may have different priorities. Many tribes and Indigenous communities in the Sierra Nevada have suffered losses of culturally important sites and species, including pinyon pine and giant sequoia. Recovery investments can support their efforts to protect and restore fire-impacted sacred sites and biocultural values. Other communities hope to engage in post-fire planning, create a fire resilience buffer around the town, or increase their capacity to undertake recovery activities on top of their existing work.

### **The first step toward recovery**

While full recovery for Sierra Nevada landscapes and communities will take time, the first step is clear. A rapid response, including dedicated funds for these strategic actions, can help protect all the Sierra Nevada region offers—stunning forested landscapes, precious water, natural habitat, sacred sites, abundant recreation, and more. At the same time, it is more important than ever to restore resilience to the green forests that we still have. Our forests and communities are counting on us to make meaningful and durable investments.

*For a deep dive into post-fire recovery in the Sierra Nevada, join SNC’s annual Watershed Improvement Program Summit on March 2, 2022. Community leaders and resource managers from across the region will share their perspectives on the importance of recovery in the Sierra, recovery work already underway, and what is needed to ensure success.*



Times Standard, 1/26/2022

## Humboldt County supervisors to resume in-person meetings March 1

The Humboldt County Board of Supervisors unanimously voted Tuesday to return to in-person meetings in board chambers in March. (Times-Standard file)

By [ISABELLA VANDERHEIDEN](#) | [ivanderheiden@times-standard.com](mailto:ivanderheiden@times-standard.com) | Times-Standard January 25, 2022 at 2:16 p.m.

After nearly two years of meeting remotely due to COVID-related restrictions, the Humboldt County Board of Supervisors will return to its chambers for in-person meetings – with a hybrid option for remote viewers – beginning March 1.

Previous attempts to return to in-person meetings have been thwarted, either by surging cases of COVID-19 or technical complications. The board [planned to return to its chambers back in August 2021](#) but a spike in local hospitalizations and deaths fueled by the delta-variant forced the board to reconsider.

Second District Supervisor Michelle Bushnell [asked the board to return to the topic in October](#) and supervisors ultimately agreed to resume in-person meetings at the beginning of the new year or as soon as county staff had implemented the necessary equipment to accommodate hybrid-style meetings.

During Tuesday's meeting, Clerk of the Board Kathy Hayes said 95% of the necessary sound and video equipment has already been installed..

"The final component to having everything in place and ready to go back in-person meetings – with a hybrid option – is for us to conduct a simple series of mock meetings involving board members so we have the opportunity to train them on how to vote on their electronic devices (because) those votes speak directly into the vote count system," she said. "...The public will be able to view the timer that (4th District Supervisor and Board Chair Virginia Bass) currently operates, it is built into the 'Vote Cast' system."

New TV monitors have also been installed in place of the old Smartboards and an additional camera has been installed to facilitate better optics during meetings, as noted in the staff report.

"We're excited about the project. We believe that it's going to bring our board chambers into the 21st century, so to speak, and the use of 'Vote Cast' is going to make it easier for the public to see how board members vote directly on items that are on the board's agenda," Hayes added. "... It's going to be much easier for members of

the public – even if they are present in the chambers – to view voting in real-time, as it happens in the board chambers.”

Hayes recommended the board resume in-person meetings at the first of March, after completing “Vote Cast” training in February.

Bass noted that the new process will “provide more transparency” because the board will vote at the same time as opposed to a roll call vote. “There’s no more switching and figuring out where you’re going to be. You decide, you vote, and we find out at the same time.”

First District Supervisor Rex Bohn thanked county staff for their work and said it’s “going to be a great thing to get back in there and be where we have to be.”

“I think that’s what the people want to see and giving them the option,” he said. “And especially electronically, I can’t say enough for how much staff has cleaned that up and made it accessible for the public, both our physically disabled public and our open public as a whole and especially for those who that will come in remote.”

Bushnell echoed Bohn’s sentiment and emphasized the importance of having a virtual option for community members who live in the far reaches of the county. “I think it’s super important and allows accessibility to people that are two to two and a half hours away without having to drive that for three minutes of public comment,” she said.

Third District Supervisor Mike Wilson also thanked staff for their hard work but expressed caution.

“We voted to be in the chambers a few times already and things just happen,” he said. “We’re just having to be adaptive and appreciative of everybody and patient, but crossing fingers and hoping that this one is going to be the one.”

Bushnell made a motion to approve the staff’s recommendation which was seconded by Bohn. The motion passed in a unanimous 5-0 vote.

*Isabella Vanderheiden can be reached at 707-441-0504.*



January 12, 2022

# McK CSD approves \$25M infrastructure upgrade

## Jack Durham

MAD RIVER UNION

McKINLEYVILLE – The McKinleyville Community Services District will spend more than \$25 million over the next two years to upgrade sewer and water lines and build a new water storage tank.

The massive infrastructure upgrade is being paid for with \$17.2 million in CalOES grant funding and \$8.3 million in financing, which was approved at the end of the year and reviewed by the MCSD Board of Directors at its Jan. 5 meeting.

The financing is in the form of Certificates of Participation, which will be paid for with sewer and water funds over a period of 30 years. The interest rate came in at 2.93 percent, which was lower than the district expected.

According to MCSD Manager Patrick Kaspari, the financing will have no effect on sewer and water rates because the projects were already factored into the last rate study which was used to determine sewer and water charges.

### Central sewer lines

The district plans to replace the sewer and water lines on Central Avenue between Sutter and Hiller roads. The district will have the project designed this year, with construction slated for the summer of 2023.

“Both the water and sewer lines in this section are asbestos cement (AC) dating from the early 1970s. The sewer lines in particular are degrading and in urgent need of replacement,” states Kaspari in a written report

to the board. “Since we are replacing the sewer lines in this section, it would likely be most efficient and economical to replace the AC waterlines as well.”

The project has an estimated cost of \$4 million.

### Water tank

The district is in negotiations with the American Hospital Management Corp. to purchase 6.5 acres of undeveloped land off Cochran Road in the Hewitt Ranch area of McKinleyville. The district wants to build a 4.5-million-gallon water tank on the property to provide additional storage for the town’s water system.

The district has completed the initial design for the tank and the environmental studies. If all goes as planned, construction would begin in 2023.

The project is estimated to cost \$10.3 million.

### Sewer undercrossing

The district has completed the initial design and is working on an environmental study to replace three sewer lines that go under U.S. Highway 101.

The lines carry sewage from the middle of McKinleyville to the Wastewater Treatment Plant at Hiller Park on the west side of town.

The existing pipes are getting old and district officials are concerned about the potential that the pipes could fail and leak. The upgraded pipes would also increase capacity.

The district hopes to finish the design this year and begin construction in 2023. The project has an estimated cost of \$5.6 million.

## Russian River flows at risk: New studies show potential path forward for Potter Valley project

January 10, 2022, 11:29AM Sonoma County Gazette Mother of All Groups

A group of studies released last month paint a clearer picture of how Sonoma and Mendocino counties can meet future water needs while reducing environmental impacts in the face of a decision by PG&E to cease operation of an aging hydroelectric power project.

The Potter Valley Project (PVP) is located approximately 15 miles north of the City of Ukiah on the Eel River. The Project's facilities include two dams, a diversion tunnel and a hydroelectric plant located in Potter Valley in the headwaters of the Russian River. The 100-year-old project produces little electricity by modern standards and is a net money loser, but Sonoma and Mendocino County water users have grown accustomed to the water diverted by the Project which flows from the Eel River into the Russian River watershed where it is stored in Lake Mendocino – ultimately flowing down the Russian River where it benefits agricultural interests and residents.

This arrangement was put in jeopardy when PG&E announced in 2019 that it would not seek to renew its federal license to operate the Project, which expires in April 2022. In recent weeks, PG&E also notified the public that the Project's powerhouse had suffered a transformer failure, which eliminated its ability to generate electricity and reduced water diversions into the Russian River. Given PG&E's goal to dispense with the Project, it is unlikely the powerhouse will be repaired or that the Project will ever function as it once did.

In response to PG&E's decision to divest from the Project, a diverse group of stakeholders called the Two-Basin Partnership was formed to develop a plan to take over and modify the Project in a way that reflects regional needs and priorities in both basins. Among these priorities are fisheries recovery in the Eel River – one of the few major rivers left in California that has the potential to support abundant, self-sustaining wild populations of salmon and steelhead – and water supply reliability for Russian River water users. The Partnership's proposed plan included the removal of Scott Dam, restoration of the drained Lake Pillsbury footprint and modifications or the replacement of Cape Horn Dam to maintain a diversion.

However, the Partnership has recently acknowledged that their efforts to raise sufficient funds to acquire the Project will likely fail. If no party is able to take over the Potter Valley Project from PG&E, the utility will be required to submit a plan to federal regulators to decommission the Project once the license expires. PG&E will remain responsible for the impacts of the Project and the cost of decommissioning until federal regulators determine the decommissioning process is complete.

Though it is unknown what PG&E's decommissioning plan will entail, it would likely mean an end to the water diversion from the Eel to the Russian because PG&E's legal right to divert water is currently tied to the Public Utilities Commission (PUC) license for hydropower generation. The Partnership and other stakeholders, including Congressman Jared Huffman, are still seeking ways to meet water needs in both basins. Two studies recently prepared for the Partnership evaluate a so-called "run of the river" plan that



would remove both Scott Dam and Cape Horn Dam while maintaining winter-time water diversions into Lake Mendocino when Eel River flows are abundant, a proven strategy to limit water use impacts on the environment. Congressman Huffman has suggested that a group of stakeholders working with PG&E during the decommissioning process to take over their water rights and the diversion tunnel might be an easier path to solving this regional problem.

The studies showed that dam removal costs are projected to be lower than originally anticipated and that multiple options for continued diversion appear to be financially and technically feasible. While a path forward remains unclear, these studies are good news for stakeholders in both the Eel and Russian River basins. They show there are practical solutions to reducing impacts to Eel River fisheries and ecosystems while maintaining water diversions into the Russian River, something stakeholders in both basins have so far agreed on.

PG&E's license to operate the Potter Valley Project expires in April of 2022. For more information until then: <http://pottervalleyproject.org/>

**ENVIRONMENT**

# PG&E to bring Potter Valley Project back online

## Two-basin plan unravels after FERC decision

**By Isabella Vanderheiden***ivanderheiden@times-standard.com*

In a shocking turn of events, Pacific Gas and Electric Co. announced Wednesday that it will move forward with bringing the Potter Valley Project — a water diversion system in the Eel River basin — back to fully operational status. The Potter Valley powerhouse has been offline since July 2021 when PG&E discovered a blown transformer during a routine inspection.

“PG&E has completed its evaluation of whether to replace the transformer and concluded it is beneficial to PG&E’s electric generation customers to proceed with the work necessary to return the powerhouse to full operational status,” PG&E wrote in a Feb. 1 letter to stakeholders. “... PG&E does not have a schedule for returning the powerhouse to service. Our experience with this kind of work indicates the repairs could be completed in the next couple of years, but we will not know un-

**PG&E » PAGE 3**



# PG&E

FROM PAGE 1

til the detailed engineering is completed later this year.”

The decision to bring the powerhouse back online came just days after members of a group of Northern California agencies, known as the Two-Basin Partnership, abandoned their quest to take over the Potter Valley Project license.

PG&E has been looking to rid itself of the Potter Valley Project and the costs associated with it for years. In January 2019, PG&E submitted a letter to the Federal Energy Regulatory Commission, or FERC, providing notice that PG&E would not submit an application to relicense the project which is set to expire in April 2022.

The Two-Basin Partnership — California Trout, Humboldt County, the Mendocino County Inland Water & Power Commission, the Round Valley Indian Tribes and Sonoma County Water Agency — filed a proposal to acquire the project in May 2020 with the intent to remove the Scott Dam and restore fish passage to hundreds of miles of historical habitat.

The coalition requested an application extension in September 2021 to provide additional time to work out a water plan and to develop strategies for dam removal and restoration of the Eel and Russian river basins but the extension was denied.

“We indicated that it was highly improbable that we would submit a license application by April 14, 2022. Subsequently, we have not established a regional entity or accomplished the other tasks required to complete a final license application. As a result, the (parties) will not file a final license application for the project as you required,” according to the Jan. 31 letter from Two-Basin partners. “...The (parties) look forward to working with (PG&E) to facilitate a collaborative and efficient path in further proceedings.”

When the license expires in April, FERC will issue



NATHAN DEHART — UKIAH DAILY JOURNAL FILE

Pacific Gas and Electric Co. announced plans Wednesday to repair a broken transformer at the Potter Valley powerhouse to begin generating power at the Power Valley Project which has been offline since July 2021.

PG&E an annual license and PG&E will continue to own and operate the Potter Valley Project under the existing license conditions until FERC either authorizes transfer of the project to a new licensee “consistent with the current relicensing effort underway by the (notice of intent) parties” or issues a final license surrender and decommissioning order, according to PG&E spokesperson Paul Moreno.

“As the parties indicated in their letter, they are not planning to file in April, so the project is likely to be decommissioned,” Moreno said. “... This withdrawal from the relicensing process is irrevocable, meaning PG&E could not reverse its decision even if it wanted to do so. More importantly, the factors for PG&E’s decision not to pursue the new license haven’t changed. This project is simply too costly to operate and provides no benefits for PG&E’s electric generation customers.”

Restoring the powerhouse does not make the Potter Valley Project more economically viable, Moreno added. “If we can generate power, we can off-

set some of the costs of operation. This is because we incur costs to operate the project even if not generating power, so the ability to generate power provides a cost offset.”

Rep. Jared Huffman (D-San Rafael), who facilitated initial discussions to create a “two-basin solution” for the project and established the Potter Valley Project Ad Hoc Committee in 2018, said he was surprised by PG&E’s announcement but acknowledged that the company will need to generate power while FERC moves toward decommissioning.

“In a sense, it’s surprising because PG&E is in the process of trying to surrender the entire project and this is an expensive fix that a corporation normally wouldn’t undertake if they thought they were about to abandon a project,” Huffman told the Times-Standard. “On the other hand, any FERC proceeding, including a decommissioning, almost always takes several years. ... If they’re going to be sitting on this project for years to come, why not let the ratepayers buy you a new transformer and try to make some power?”

Alicia Hamann, executive director of Friends of the Eel River, called the move “inexplicable” and criticized PG&E’s move to “make the public pay to replace infrastructure.”

“We can only guess that the politics of water, power, and money are behind this decision,” she said. “PG&E will likely seek recovery of this cost from the California Public Utilities Commission, meaning that ratepayers will actually be the ones to pay for this completely unnecessary infrastructure. And once the powerhouse is capable of generating electricity again, diversions to Potter Valley can return to previous levels, so ratepayers across the state will essentially subsidize continued diversions benefiting 150 water customers.”

Moreno said replacement of the transformer will allow PG&E to generate power “and actually save ratepayers money in the long term.”

“It is likely that the project will face decommissioning, but that’s so many years down the line that we can replace the transformer and recoup its cost prior to surrender (of the license) or decommission-

ing,” he added. “... This will benefit water users throughout Sonoma and Mendocino counties.”

Craig Tucker, a natural resources policy consultant speaking on behalf of Humboldt County, underscored that the fight for a two-basin solution is not over.

“The Two-Basin Partnership isn’t dead, but I would say the effort to relicense the Potter Valley Project is essentially dead,” he said. “We’re focused on fixing the Eel River, we’re focused on removing Scott Dam, and if Russian River interests have some proposals for maintaining out-of-basin diversion in a way that is consistent with fish restoration on the Eel, we will be willing to discuss that.”

Huffman maintained that the Two-Basin Solution “is the only way forward” for both Eel and Russian River basins. “Inevitably, I think the process will come back around to that.”

More information can be found at [www.twobasinsolution.org](http://www.twobasinsolution.org).

*Isabella Vanderheiden can be reached at 707-441-0504.*



# **CORRESPONDENCE**





**H.B.M.W.D. JAN 31 2022**

Date: January 28, 2022  
 To: Board of Directors of Independent Special Districts  
 From: Colette Santsche, LAFCo Executive Officer  
**Subject: Call for Nominations for District Members to serve on LAFCo**

The term of office for one regular and one alternate special district member on LAFCo expires on June 30, 2022. All terms are four years and end on June 30. There are no term limits.

**Current Special District Terms**

Designation	Current Member	Term of Office (ends on June 30)
Regular Member	Debra Lake, Fruitland Ridge Fire Protection District	2020 - 2024
Regular Member	Troy Nicolini, Peninsula Community Services District	2018 - 2022
Alternate Member	David Couch, McKinleyville Community Services District	2018 - 2022

The basic process for selecting special district members to LAFCo is set forth in Government Code Section 56332, which provides for a meeting to be convened among representatives from each of the 48 independent special districts in Humboldt County, unless the Executive Officer determines that a meeting is not feasible. Based on Government Code Section 56332, it has been determined that a meeting of this "Independent Special District Selection Committee" for the purpose of selecting a special district member is not feasible due to the likelihood that a quorum would not be achieved. As such, both the nominating process and the election itself will be conducted by mail.

Your district is encouraged to participate in this election process. A schedule is enclosed together with a list of the 48 independent special districts in Humboldt County that are eligible to participate. If your district wishes to nominate a Board member to be a candidate for the LAFCo district member and/or alternate member, the nomination procedures are as follows:

1. Each district may nominate two people – one for the Regular Member seat and one for the Alternate Member seat. Nominees must be board members, not staff.
2. All nominations must be accompanied with a completed nomination form approved by a majority of your Board (enclosed).
3. A candidate information form (enclosed) or a letter of interest and qualifications may be submitted with the nomination. This is voluntary and will be kept on file at the LAFCo offices to be made available upon request. It will not be distributed with the ballots.
4. All nomination materials must be returned to Humboldt LAFCo, 1125 16<sup>th</sup> Street, Suite 202, Arcata, CA 95521, or emailed to the Executive Officer (colettem@humboldtlafo.org).
5. Upon receipt of nominations, LAFCo will prepare and send a ballot to each district. The ballot will state the return date and how successful candidates will be notified.

**The deadline for submitting nominations is Friday, April 8, 2022.** Any nomination that is submitted after the deadline will not be considered.



**ALTERNATE MEMBER**  
**Special District Member Nomination Form 2022**

Name of District: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

The Board hereby nominates \_\_\_\_\_ to fill the term beginning on June 30, 2022 and expiring June 30, 2026 as an Alternate Member of the Humboldt Local Agency Formation Commission representing independent special districts of Humboldt County.

Board action taken on the \_\_\_\_\_ day of \_\_\_\_\_, 2022, by the following vote:

AYES: \_\_\_\_\_

NOSE: \_\_\_\_\_

ABSTAIN: \_\_\_\_\_

ABSENT: \_\_\_\_\_

District Representative:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name





**REGULAR MEMBER**  
**Special District Member Nomination Form 2022**

Name of District: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

The Board hereby nominates \_\_\_\_\_ to fill the term beginning on June 30, 2022 and expiring June 30, 2026 as a Regular Member of the Humboldt Local Agency Formation Commission representing independent special districts of Humboldt County.

Board action taken on the \_\_\_\_\_ day of \_\_\_\_\_, 2022, by the following vote:

AYES: \_\_\_\_\_

NOSE: \_\_\_\_\_

ABSTAIN: \_\_\_\_\_

ABSENT: \_\_\_\_\_

District Representative:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name



### Special District Member Candidate Information Sheet 2022

Providing this form or a letter of interest and qualifications is voluntary. It will be kept on file at the LAFCo offices and made available on request. It will not be distributed with the ballots.

Candidate Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_

District: \_\_\_\_\_

Title: \_\_\_\_\_

Length of service with District:

Present Occupation:

Personal and Professional Background:

Summarize your interest in serving on LAFCo:

Summarize your qualifications for serving on LAFCo:

List local government and/or civic organization involvement:





## 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

January 31, 2022

Trinity LAFCo

1125 16<sup>th</sup> Street, Suite 202

Arcata CA 95521

Re: Agenda Item 5.A: Ruth Lake CSD MSR & SOI Update  
Public Hearing Comments

Dear Commissioners,

I am writing on behalf of the Humboldt Bay Municipal Water District (HBMWD or District) to provide public comments regarding the above referenced item on your February 1, 2022 agenda. On Friday January 28<sup>th</sup>, our District received notification of your consideration of this item. Given the significant relationship between RLCSD (implementing recreational activities at Ruth Lake) and HBMWD (owner of Ruth Lake) and given that a MSR has not been completed for RLCSD since 1985, we respectfully request that you continue your adoption of the MRS / SOI resolution 2022-02 to your next meeting. This would allow for further information gathering by LAFCo staff regarding the interrelationship of our two districts.

The following are the initial review comments concerning the draft MSR for agenda item 5.A. The comments are referenced to the corresponding section numbers in the draft MSR.

### 1.2 Community Service District and Principal Act Overview.

A key agreement which contains some essential governing requirements is the Master Lease Agreement between Trinity County and HBMWD. The Master Lease was subsequently assigned to RLCSD by Trinity County; however, Trinity County remains ultimately responsible for compliance with the terms of the Master Lease. Although the Master Lease is referenced in the MSR, further review and inclusion of key provisions may be important to include in the MSR.

### 1.3 Municipal Service Review Determinations

Section 1.3 states: "State Guidelines and Commission policies encourage stakeholder cooperation in the municipal service review process." Other than a brief phone conversation with LAFCo staff on January 28<sup>th</sup>, HBMWD was not engaged in detailed discussions regarding the relationships and legal responsibilities between RLCSD and HBMWD. Furthermore, it is unclear if the Ruth Lake Lease Lot Holder's Association was included in the stakeholder engagement process for the MSR.

## 1.5 Review Methods

Section 1.5 does not reference the Master Lease agreement, assignment of the Master Lease agreement by Trinity County to RLCSD. The MSR does not mention the HBMWD / RLCSD Quagga prevention plan.

The California Fish and Wildlife Code Section 2302 requires that: “ (a) Any person, or federal, state, or local agency, district, or authority that owns or manages a reservoir, as defined in Section 6004.5 of the Water Code, where recreational, boating, or fishing activities are permitted, except a privately owned reservoir that is not open to the public, shall do both of the following: (1) Assess the vulnerability of the reservoir for the introduction of nonnative dreissenid mussels species. (2) Develop and implement a program designed to prevent the introduction of nonnative dreissenid mussel species.” HBMWD and RLCSD have jointly adopted [latest update April 2019] the Humboldt Bay Municipal Water District and Ruth Lake Community Services District Prevention Plan for Quagga and Zebra Mussels at Ruth Lake. Under the Assessment of Vulnerability section of that plan, the one assessment of Ruth Lake that was conducted concluded that: “ ... one could conclude that Ruth Lake poses a “Low” chemical threat based on the readings for these two parameters.” [pH and calcium] The report goes on to say: “Although categorized as “low risk” in the above table, that does not equate to no risk. Ruth Reservoir is the District’s [HBMWD] impound for the domestic and industrial water diversions that take place at Essex, some 75 miles downstream. The water quality parameters downstream of Ruth Lake have not been analyzed for calcium carbonate deposits. If Quagga or Zebra mussel veligers are introduced into Ruth Lake and are swept downstream, there may exist a higher degree of potential risk for growth and settlement in the watershed which could potential affect the District’s diversion infrastructure.”

The current language in the MSR seems to discount the importance of the dramatic negative effect that the introduction of Quagga or Zebra mussels could have on continued recreation at Ruth Lake.

## 2. Agency Overview Table 1

**Board Meetings** – location is the Mad River Community Hall. Since this location is different than the RLCSD office address in the report, the street address of 591 Van Duzen Road, may be helpful for the readers of the MSR.

**Areas Served** – RLCSD does not exercise direct control of residences along Highway 36. A better description here might be “... along Lower Mad River Road and in the vicinity of Ruth Lake in southern Trinity County.”

### 2.1 Formation

There is a good reference to the Master Lease here; however, it may be prudent to mention that Trinity County remains responsible for performance of the terms and conditions of the Master Lease.

### 2.2 Boundary and Sphere

There is reference in this section to areas within Humboldt County. However, the reference for footnote 3, Trinity County Resolution No. 34-66, in section 2.2 Boundary and Sphere states that: “The original boundary was set to match the Mad River Joint School District and Hetten Valley School District, now known as Southern Trinity Join Unified School District, excluding any lands lying outside Trinity County.” If this language was contained in the Trinity County Resolution No. 34-66, then no land outside of Trinity County (I.E. Humboldt County) should be included in the jurisdictional boundaries of RLCSD. If this is true, then references to RLCSD jurisdiction extending into Humboldt County should be eliminated from the MSR and SOI.



### 2.3 August Complex Fire

Although HBMWD appreciates the inclusion of our CAL FIRE Forest Health Grant in the MSR narrative, the information included is not accurate and should be corrected.

### 3.3 Transparency and Accountability

References are made to SB 929, Government Code §81000, AB 1234, and AB 1661, but there are no evaluation assessments contained in the MSR.

### 4.1 Services Provided

**Camping and Day Use** The second sentence includes a reference to hunting activities in the surrounding mountains. Although this is one small segment of campground users, the predominant use of the campgrounds is for recreational use on Ruth Lake. The MRS language may need to be more inclusive in this section.

**Sub-Leases** All references to the Master Lease in this section on page 11 should be Capitalized. Although the Master Lease is available for extension in May of 2023, no correspondence has been received nor has any approval been authorized. Therefore, the language in the MRS should be revised in this regard.

**Ruth Lake Marina** See prior references to the discussion regarding the HBMWD and RLCSD Quagga and Zebra Mussel Prevention Plan.

**Water** There are inaccurate statements contained in this section regarding withdrawing water from Ruth Lake that should be corrected.

## 7. Municipal Service Review Determinations

Does the setting of a Sphere Of Influence smaller than the RLCSD's jurisdictional boundary negatively impact or limit its ability to seek funding for fire protection and ambulance service via tax assessments on the real property contained within their jurisdictional boundary but outside the proposed SIO? If so, this issue may need to be explored further and fully understood prior to recommending a smaller SIO.

Our District would appreciate the opportunity to work with Trinity LAFCo staff to further discuss the issues and items we have raised concerning the draft MSR and SIO. Therefore, we respectfully request that you consider deferring your adoption of the MSR and SIO.

Thank you for considering our public comments.

Respectfully,



John Friedenbach  
General Manager

Cc: Collette Santsche, LAFCo  
Caitlin Canale, RLCSD

## TRINITY LOCAL AGENCY FORMATION COMMISSION

February 1, 2022 at 4:00 p.m.

Trinity County Library Meeting Room  
351 Main Street, Weaverville**AGENDA**

Due to current case increases of Covid-19, this meeting will be conducted by virtual attendance only in accordance with Government Code Section 54953(e) et seq. (AB 361).

Join Zoom Meeting:

<https://us02web.zoom.us/j/87026637302?pwd=L0xyRmozTWdicU1HZVJhNk9PSFprUT09>

Meeting ID: 870 2663 7302

Passcode: 061563

Call in: 1 (669) 900-6833

**1. CALL TO ORDER/ROLL CALL**

- A. Roll Call
- B. New County Member Appointments

**2. PRESENTATIONS/ANNOUNCEMENTS**

None

**3. CONSENT CALENDAR**

- A. Approval of Minutes from the December 7, 2021 Commission Meeting
- B. Authorizing Teleconferencing of Meetings in accordance with AB 361

**4. PUBLIC COMMENT OPPORTUNITY**

This portion of the meeting provides an opportunity for members of the public to address the Commission on matters not on the agenda, provided that the subject matter is within the jurisdiction of the Commission. No action may be taken on off-agenda items unless authorized by law. All statements that require a response will be referred to staff for reply in writing.

**5. PUBLIC HEARINGS**

- A. Ruth Lake CSD MSR/SOI Update (Potential Action)

**6. NEW BUSINESS**

None

**7. OLD BUSINESS**

- A. Review Mid-Year Financial Report for Fiscal Year 2021-22 (Potential Action)

**8. EXECUTIVE OFFICER'S REPORT/CORRESPONDENCE**

- A. Correspondence with California Special Districts Association (CSDA) regarding expanding "health and safety" qualifying events into future Brown Act remote meeting legislation
- B. Expiring Commissioner Terms Update
- C. Submittal of Form 700



**9. COMMISSIONER'S COMMENTS****10. ADJOURNMENT**

*The next LAFCo meeting is scheduled for April 19, 2021, at 4:00 p.m. at the Trinity County Library Meeting Room in Weaverville with a remote teleconference option.*

---

*The Commission may take action upon any item listed on the agenda. Unless otherwise noted, items may be taken up at any time during the meeting.*

*All persons are invited to provide public testimony and submit written comments to the Commission. All written materials received by staff before 12:00 p.m. on the day of the meeting will be distributed to the Commission. If you wish to submit written material at the meeting, please supply 10 copies.*

**Accessibility**

The location of this meeting is wheelchair accessible. If other accommodations are required to assist a person with a disability to participate in the meeting, please contact the Executive Officer or Commission Clerk at least 24 hours before the meeting.

**Disclosure & Disqualification Requirements**

Any person or group of persons acting in concert who directly or indirectly contribute \$1,000 or more in support of or in opposition to a change of organization or reorganization that has been submitted to Trinity LAFCo must comply with the disclosure requirements of the Political Reform Act of 1974 applicable to local initiative measures to be submitted to the electorate. These requirements contain provisions for making disclosures of contributions and expenditures at specified intervals; they may be reviewed at Government Code §§56700.1 and 81000 *et seq.* Additional information about the requirements pertaining to local initiative measures to be presented to the electorate can be obtained by calling the Fair Political Practices Commission at (916) 322-5660.

A LAFCo Commissioner must disqualify herself or himself from voting on an application involving an "entitlement for use" (such as an annexation or sphere amendment) if, within the last twelve months, the Commissioner has received \$250 or more in campaign contributions from the applicant, any financially interested person who actively supports or opposes the application, or an agent (such as an attorney, engineer, or planning consultant) representing the applicant or an interested party. The law (Government Code Section 84308) also requires any applicant or other participant in a LAFCo proceeding to disclose the contribution amount and name of the recipient Commissioner on the official record of the proceeding.

**Late-Distributed Materials.** Any material submitted to the Commission after this agenda is posted will be made available for public inspection as soon as possible on the LAFCo website [trinitylafco.org](http://trinitylafco.org).

**Contact LAFCo Staff.** For additional information please contact LAFCo staff at [colette@trinitylafco.org](mailto:colette@trinitylafco.org) or [kathy@trinitylafco.org](mailto:kathy@trinitylafco.org).

**TRINITY LAFCO**

www.trinitylafco.org  
1125 – 16<sup>th</sup> Street, Suite 200  
Arcata, California 95521

**AGENDA ITEM 5.A.**

**MEETING:** February 1, 2022  
**TO:** Trinity LAFCo Commissioners  
**FROM:** Colette Santsche, Executive Officer & Kathy Bull, Administrator/Clerk  
**SUBJECT:** Ruth Lake CSD MSR & SOI Update – Public Hearing

**BACKGROUND**

In accordance with the CKH Act, LAFCos are required to prepare municipal service reviews (MSRs) prior to or in conjunction with its mandate to review and update each local agency's sphere of influence (SOI) every five years or as needed. The legislative intent of the MSR is to inform the Commission as to the availability, capacity, and efficiency of local governmental services prior to making sphere of influence determinations. Municipal service reviews may also lead LAFCos to take other actions under their authority, such as forming, consolidating, or dissolving one or more local agencies in addition to any related sphere changes.

**DISCUSSION**

This MSR evaluates services provided by the Ruth Lake Community Services District (CSD). This report incorporates technical information collected and analyzed by LAFCo staff, including information compiled as part of the 2006 MSR. Staff worked closely with Ruth Lake CSD staff to obtain services information for the District. The last MSR/SOI was prepared in 1985.

No change is proposed to the current sphere of influence for Ruth Lake CSD, which generally corresponds to the lease lots and roads along Ruth Lake. All revisions to the MSR since the workshop draft review in December is provided in redline-strikeout. Staff respectfully seeks Commission input with regards to service review content as provided in the MSR

**RECOMMENDATION**

This item has been agendized for consideration as part of a public hearing. Staff recommends the Commission hold the public hearing, invite testimony, and approve the Ruth Lake CSD MSR/SOI Update (Attachment 1). A draft resolution for the Commission's review and consideration is enclosed (Attachment 2).

Attachments:  
Ruth Lake CSD MSR & SOI Update  
Resolution 2022-02

Colette Santsche, Executive Officer/e-mail: [colette@trinitylafco.org](mailto:colette@trinitylafco.org)  
Kathy Bull, Clerk Administrator/e-mail: [kathy@trinitylafco.org](mailto:kathy@trinitylafco.org)





Ruth Lake  
Community Services District  
Municipal Service Review &  
Sphere of Influence Update

Draft  
February 2022

Trinity County  
Local Agency Formation Commission

## TABLE OF CONTENTS

<b>1. INTRODUCTION .....</b>	<b>1</b>
1.1 TRINITY LAFCO .....	1
1.2 COMMUNITY SERVICE DISTRICT AND PRINCIPAL ACT OVERVIEW.....	1
1.3 MUNICIPAL SERVICE REVIEW DETERMINATIONS .....	2
1.4 SPHERE OF INFLUENCE DETERMINATIONS .....	2
1.5 REVIEW METHODS .....	3
1.6 CALIFORNIA ENVIRONMENTAL QUALITY ACT .....	3
<b>2. AGENCY OVERVIEW .....</b>	<b>4</b>
2.1 FORMATION .....	4
2.2 BOUNDARY AND SPHERE.....	5
2.3 AUGUST COMPLEX FIRE .....	5
<b>3. GOVERNMENT STRUCTURE.....</b>	<b>8</b>
3.1 GOVERNING BODY.....	8
3.2 MANAGEMENT & STAFFING .....	8
3.3 TRANSPARENCY AND ACCOUNTABILITY .....	8
<b>4. SERVICES &amp; INFRASTRUCTURE .....</b>	<b>10</b>
4.1 SERVICES PROVIDED.....	10
4.2 OTHER SERVICE PROVIDERS.....	15
<b>5. FINANCING .....</b>	<b>17</b>
5.1 REVENUES AND EXPENSES.....	17
5.2 AUDIT INFORMATION .....	18
<b>6. GROWTH AND POPULATION .....</b>	<b>20</b>
6.1 LAND USE .....	20
6.2 EXISTING POPULATION AND PROJECTED GROWTH .....	20
6.3 DISADVANTAGED UNINCORPORATED COMMUNITIES.....	22
<b>7. MUNICIPAL SERVICE REVIEW DETERMINATIONS.....</b>	<b>23</b>
<b>8. SPHERE OF INFLUENCE DETERMINATIONS .....</b>	<b>25</b>

### LIST OF FIGURES AND TABLES

Figure 1: Ruth Lake CSD Boundary and SOI .....	7
Figure 2: Ruth Lake Camping and Day Use Facilities .....	11
Figure 3: HBMWD Property Boundaries around Ruth Lake .....	11
Figure 4: Ruth Lake CSD FY2021-22 Revenues by Category.....	17
Figure 5: Ruth Lake CSD Land Use Map.....	21
Table 1: Ruth Lake CSD Board of Directors.....	8
Table 2: Ruth Lake CSD Budget Summary .....	18
Table 3: Ruth Lake CSD Audit Summary .....	19
Table 4: Ruth Lake CSD Net Position Summary .....	19



# 1. INTRODUCTION

---

This Municipal Service Review (MSR) and Sphere of Influence (SOI) Update was prepared as part of a mandated review of the municipal services of all government entities in the county by the Trinity Local Agency Formation Commission (LAFCo). This report focuses on the Ruth Lake Community Services District (CSD). The purpose of this study is to assess existing and future public service conditions and to evaluate organizational options for accommodating growth and ensuring critical services are provided efficiently. This MSR presents discussion, analysis, and recommendations regarding services provided by Ruth Lake CSD.

## 1.1 Trinity LAFCo

Local Agency Formation Commissions (LAFCos) are quasi-legislative, independent local agencies that were established by State legislation in 1963 to oversee the logical and orderly formation and development of local government agencies including cities and special districts. There is one LAFCo for each county in California.

LAFCo is responsible for implementing the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (California Government Code Section 56000 et. seq.) in order to promote orderly growth, prevent urban sprawl, preserve agricultural and open space lands, and oversee efficient provision of municipal services.

LAFCo has the authority to establish and reorganize cities and special districts, change their boundaries and authorized services, allow the extension of public services, perform municipal service reviews, and establish spheres of influence. Some of LAFCo's duties include regulating boundary changes through annexations or detachments and forming, consolidating, or dissolving local agencies.

Trinity LAFCo has a public Commission with seven regular Commissioners and three alternate Commissioners. The Commission is composed of three members of the Trinity County Board of Supervisors, two Special District Representatives, and two Public Members-At-Large. The Commission also includes one alternate member for each represented category.

## 1.2 Community Service District and Principal Act Overview

Community Service Districts are independent special districts governed under CSD law (Government Code § 61000 – 61250). A CSD can be authorized to provide a wide variety of services to unincorporated areas including domestic water, wastewater, garbage collection, security, fire protection, public recreation, street lighting, and many others. CSDs are governed by a board of directors, all of whom are elected at large.

Ruth Lake CSD provides recreation services, including campground maintenance and boat launching. As part of these recreation facilities and services, the District oversees small water systems, coordinates ~~garbage pickup-solid waste disposal~~, and maintains onsite ~~septic systems and~~

outhouses at the marina and campground locations wastewater treatment systems. In 1991, a special election was held to activate fire protection services to support services provided by Southern Trinity Volunteer Fire Company. As such, the District's current activated powers are parks and recreation, water, wastewater, ~~and~~ solid waste disposal, and fire protection. All other remaining services, facilities, functions or powers enumerated in the District's principal act but not identified in the formation resolution or later activated are considered "latent," meaning that they are authorized by the principal act under which the District was formed but are not being exercised. Activation of these latent powers and services requires LAFCo authorization in accordance with Government Code §56824.10 et seq.

### 1.3 Municipal Service Review Determinations

Government Code §56430 requires LAFCo to conduct a review of municipal services provided in the county by region, sub-region or other designated geographic area, as appropriate, for the service or services to be reviewed, and prepare a written statement of determinations with respect to each of the following topics:

1. Growth and population projections for the affected area;
2. The location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence;
3. Present and planned capacity of public facilities, adequacy of public services, and infrastructure needs or deficiencies (including needs or deficiencies related to sewers, municipal and industrial water, and structural fire protection in any disadvantaged, unincorporated communities within or contiguous to the sphere of influence);
4. Financial ability of agencies to provide services;
5. Status of, and opportunities for, shared facilities;
6. Accountability for community service needs, including governmental structure and operational efficiencies; and
7. Any other matter affecting or related to effective or efficient service delivery, as required by Commission policy.

State Guidelines and Commission policies encourage stakeholder cooperation in the municipal service review process. It also provides a basis to evaluate, and make changes to Spheres of Influence, if appropriate.

### 1.4 Sphere of Influence Determinations

A Sphere of Influence (SOI) is a LAFCo-approved plan that designates an agency's probable physical boundary and service area. Spheres are planning tools used to provide guidance for individual boundary change proposals and are intended to encourage efficient provision of organized community services, discourage urban sprawl and premature conversion of agricultural and open space lands, and prevent overlapping jurisdictions and duplication of services.



LAFCo is required to establish SOIs for all local agencies and enact policies to promote the logical and orderly development of areas within the SOIs. Furthermore, LAFCo must update those SOIs every five years or as needed. For a SOI update, LAFCo is required to conduct an MSR and adopt related determinations. It must also make the following SOI determinations:

1. The present and planned land uses in the area, including agricultural and open-space lands;
2. The present and probable need for public facilities and services in the area;
3. The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide;
4. The existence of any social or economic communities of interest in the area if the Commission determines that they are relevant to the agency; and
5. The present and probable need for public facilities and services related to sewers, municipal or industrial water, or structural fire protection of any disadvantaged unincorporated communities within the existing sphere of influence (effective July 1, 2012).

## 1.5 Review Methods

The following information was considered in the development of this service review:

- o Agency-specific data: responses to LAFCo Requests for Information
- o Demographic data: U.S. Census Bureau; Department of Finance; CA Water Resources Board
- o Finances: budgets, audits, rates and fees; and
- o Other Reports: State Water Resources Control Board, Division of Drinking Water.

Information gathered was analyzed and applied to make the required determinations. All information gathered for this report is filed by LAFCo for future reference.

## 1.6 California Environmental Quality Act

The California Environmental Quality Act (CEQA) is contained in Public Resources Code § 21000 et seq. Public agencies are required to evaluate the potential environmental effects of their actions. MSRs are statutorily exempt from CEQA pursuant to §15262 (feasibility or planning studies) and categorically exempt pursuant to CEQA Guidelines §15306 (information collection). CEQA requirements are applicable to SOI Updates. The CEQA lead agency for SOI Updates is most often LAFCo, unless an agency has initiated an SOI expansion or update.

## 2. AGENCY OVERVIEW

Table 1: Ruth Lake CSD Agency Profile	
<b>Formation</b>	
Agency Name	Ruth Lake Community Services District
Formation Date	June 25, 1966
Principal Act	Government Code §61000 et. seq
<b>Contact</b>	
Main Contact	Caitlin Canale, District Manager
E-mail	ruthlakecsd@yahoo.com
District Office Address	12200 Mad River Road, Mad River, CA 95552
Mailing Address	PO Box 6, Mad River, CA 95552
Alternate Contact	Cindy Lofthouse, Office Manager
Phone	(707) 574-6332
Website	www.ruthlakecsd.org
<b>Governance</b>	
Governing Body	5 Member Board of Directors
Board Meetings	2 <sup>nd</sup> Tuesday of every month at 4PM in the Community Hall
Staffing	District Manager; Office Manager; Seasonal Support Staff
<b>Services</b>	
Services Provided	Parks and recreation ( <u>marina and campgrounds</u> ); water ( <u>marina and campground water systems</u> ); wastewater ( <u>marina and campground septic systems and outhouses</u> ); solid waste disposal ( <u>garbage pickup and solid waste fees collection</u> ); and fire protection ( <u>fiscal support to Southern Trinity Volunteer Fire Department</u> ).
Areas Served	Unincorporated communities of Ruth Lake and adjacent rural residential areas along Highway 36 in southern Trinity County.

### 2.1 Formation

The Ruth Lake CSD was created under Government Code 61000 et seq. in 1966 (Board of Supervisors Resolution 34-66). According to the formation documents, the district was formed for the purpose of providing water, wastewater, solid waste disposal, recreation, and mosquito



abatement services to area residents<sup>1</sup>. This included administering certain lands for recreational subleases and managing boat launching, camping, and other recreational facilities based on a Master Lease Agreement between the Humboldt Bay Municipal Water District, the primary owner of land that surrounds Ruth Lake, and Trinity County. Upon formation, Trinity County assigned the lease to Ruth Lake CSD on behalf of Humboldt Bay Municipal Water District which is the primary landowner of the lake and surrounding areas.

To date, mosquito abatement services have not been exercised by the District and are therefore considered a latent power. In 1991, a special election was held to activate fire protection services to support services provided by Southern Trinity Volunteer Fire Company<sup>2</sup>. In 2015 there was an effort to activate ambulance services for the District to support services provided by the Southern Trinity Area Rescue (STAR). However, the application was not completed or approved by LAFCo so this also remains a latent power for the District.

## 2.2 Boundary and Sphere

The District is located along Highway 36 and Mad River Road in Trinity County, within the Mad River watershed (Figure 1). The Ruth Lake CSD covers approximately 336,000 acres (525 square miles) in both Trinity and Humboldt counties. The original boundary was set to match the Mad River Joint School District and Hetten Valley School District, now known as Southern Trinity Joint Unified School District, excluding any lands lying outside Trinity County<sup>3</sup>.

In 1985, a reduced Sphere of Influence (SOI) was adopted for the District that is substantially smaller than the jurisdictional boundary<sup>4</sup>. It is likely the reduced SOI was set to include only those areas directly managed by the District. The current SOI is approximately 25,600 acres (40 square miles) and includes the area around Ruth Lake and extends northwest into Humboldt County.

## 2.3 August Complex Fire

In 2020 the August Complex Fire was started by a series of lightning strikes in wilderness areas around the Mendocino National Forest<sup>5</sup>. Due to drier than normal precipitation patterns and higher than normal temperatures coupled with the remoteness of the locations Due to the region's rugged topography and dense fuel loads combined with high fire risk during dry summer months, the fires eventually grew together and burned a substantial amount of forested lands into what was coined a "gigafire" – a term for a blaze that burns at least a million acres of land and a level above the "megafire," which burns more than 100,000 acres. By the time the fire was contained in November, it had burned over 1 million acres across five counties. There are indications that the level of risk could continue to grow in the face of climate change, increasing

<sup>1</sup> Trinity County, Board of Supervisors, Resolution No. 34-66 Relating to the Formation of Ruth Lake Community Services District. June 20, 1966.

<sup>2</sup> Fire Protection Election, Measure A, September 3, 1991.

<sup>3</sup> Trinity County Board of Supervisors, Resolution 34-66: Item 4. June 20, 1966.

<sup>4</sup> Trinity LAFCo, Resolution 85-09. May 7, 1985.

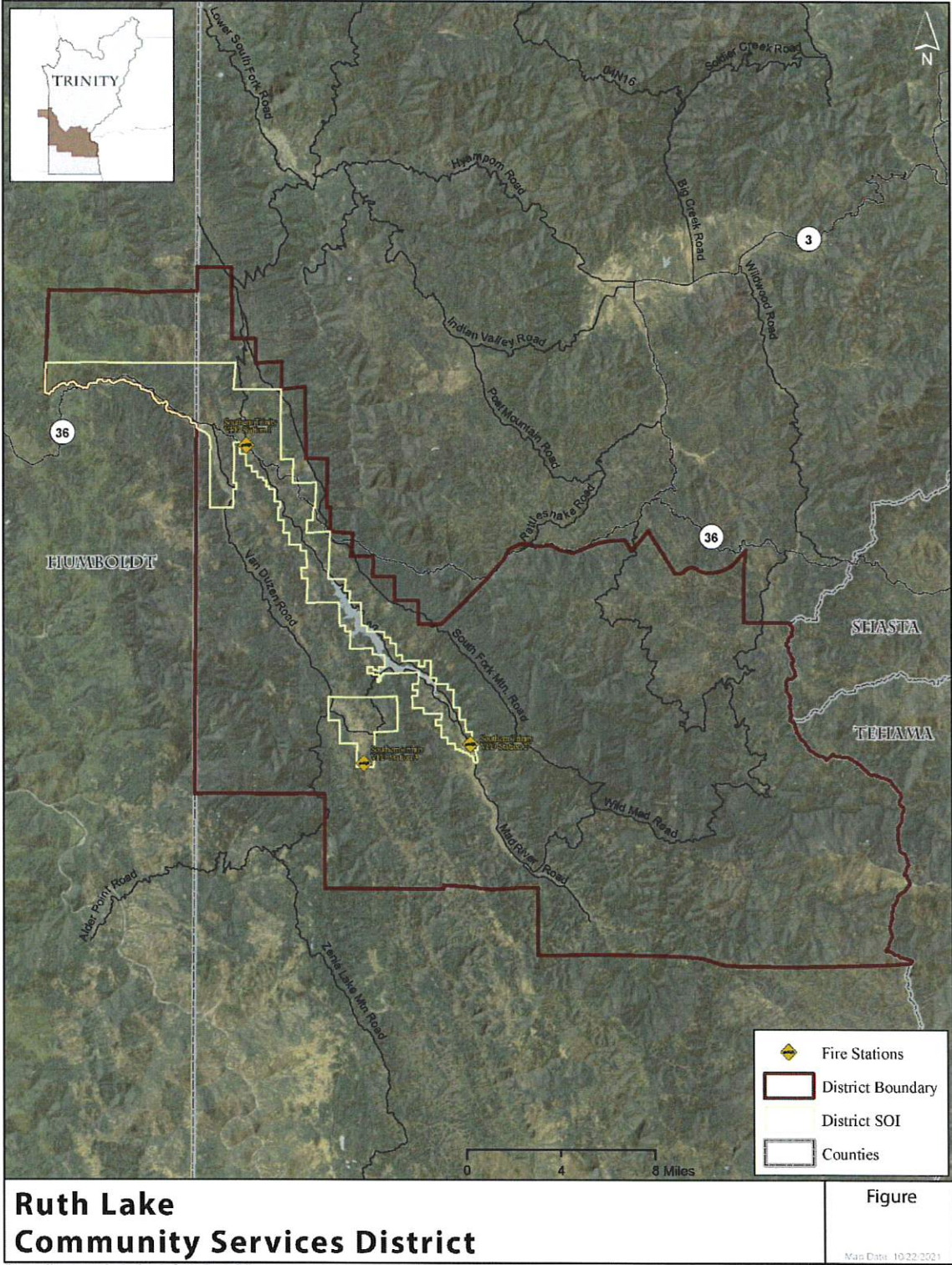
<sup>5</sup> InciWeb, August Complex Fire. Perimeter Map 8-22-2020.

fuel loads, the spread of forest diseases such as sudden oak death, and continued residential and commercial development in the wildland urban interface (WUI).

The northern border of the fire reached Ruth Lake and burned large areas of forested lands on the northern and southern edge of the lake. In addition to loss of forested lands, many structures around the lake were also lost and there was damage to the District's campground and dock facilities. The ~~District~~Ruth Lake CSD, Humboldt Bay Municipal Water District, the County, and the United States Forest Service have since been working on disaster recovery in the area. Through a CAL FIRE Forest Health Grant, the Humboldt Bay Municipal Water District also partnered with the Watershed Training Center in Hayfork to implement a reforestation project for areas devastated by the August Complex fires at Ruth Lake and the Mad River Watershed. The project is geared toward large forested area health, including reforestation and fuel reduction. A minimum of 800 impacted acres will qualify. In addition, all lease lot holder requests for rebuilding after the fire disaster must be approved by Ruth Lake CSD and the Humboldt Bay Municipal Water District.



Figure 1: Ruth Lake CSD Boundary and SOI



### 3. GOVERNMENT STRUCTURE

---

#### 3.1 Governing Body

Ruth Lake CSD is governed by a five-member Board of Directors, elected at large by District residents to serve staggered four-year terms (Table 2). The Board meets on the 2<sup>nd</sup> Tuesday of every month at 4PM in the Community Hall. Meeting dates and agendas are posted at least 72 hours prior to meetings at the District Office and are available on the District’s website. Board members receive a \$50 stipend for attending board meetings.

Table 1: Ruth Lake CSD Board of Directors

Board Member	Title	Term Expiration
Ed Johnson	Director	December 2022
Brian Nicholson	Vice Chair	December 2024
Debra Sellman	Director	December 2024
Jordan Emery	Board Chair	December 2024
Susan Gordon	Director	December 2022

#### 3.2 Management & Staffing

The District maintains a small staff that manages operations for the District including the marina and campgrounds. There is a General Manager and Office Manager that oversee the day-to-day operations of the District and manages sublease holder agreements around the lake. Additional staff includes a Marina Manager, Campground Store Manager, several seasonal camp hosts, a part-time year round maintenance person, and other part-time positions to assist recreational activities.

#### 3.3 Transparency and Accountability

The District maintains a website at [www.ruthlakecsd.org](http://www.ruthlakecsd.org), which is a helpful communication tool to enhance government transparency and accountability. The website provides service-related information, archived meeting agendas and minutes, and audited financial statements but does not currently include adopted annual budgets or board policy information.

SB 929 (McGuire) was signed into law on September 14, 2018 requiring all independent special districts to have and maintain a website by January 1, 2020, meeting all the special district transparency requirements of State law including the availability of agendas, policies, and financial information. It is recommended the District reassess their website to make sure they are in compliance with SB 929.



The Political Reform Act requires all state and local government agencies to adopt and promulgate a Conflict of Interest Code pursuant to Government Code §81000 et seq. The Political Reform Act also requires persons who hold office to disclose their investments, interests in real property, and incomes by filing a Statement of Economic Interests (Fair Political Practices Commission Form 700) each year pursuant to Government Code §87203.

According to AB 1234, if a local agency provides compensation or reimbursement of expenses to local government officials, then all local officials are required to receive two hours of training on public service ethics laws and principles at least once every two years and establish a written policy on reimbursements pursuant to Government Code §53235. In addition, AB 1661 went into effect in 2016 and addresses local government sexual harassment prevention training and education.

## 4. SERVICES & INFRASTRUCTURE

---

### 4.1 Services Provided

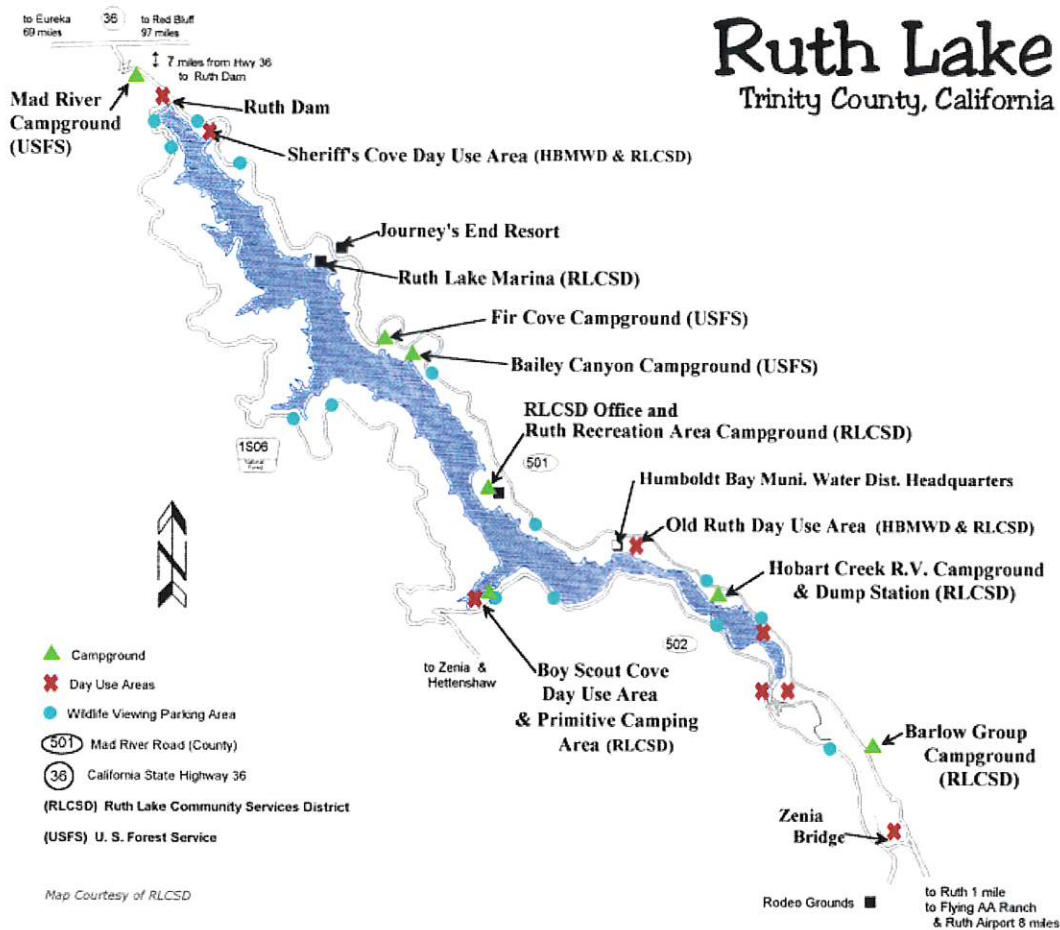
Ruth Lake CSD primarily provides recreation services to the Ruth Lake area. This includes management of campgrounds, subleases for recreational areas, and managing the Ruth Lake Marina.

#### Camping and Day Use

The District maintains and operates eight (8) day use areas and four (4) campgrounds around the lake as shown in Figure 2 below. Facilities range from primitive sites without water or restrooms ~~to RV sites with full hookups for extended stays, flush toilets,~~ to campground facilities with toilets and showers. Campgrounds are typically open from late spring to late fall to accommodate hunting activities in the surrounding mountains. Campground reservations can be made for the operational season by calling the ~~District office~~ Ruth Rec Campground Store/office and typically become available beginning in ~~January~~ March of the same year.



Figure 2: Ruth Lake Camping and Day Use Facilities



Almost all camping and day use facilities provide direct access to the lake and can be reached by vehicle. Other amenities, such as a small convenience store and kayak and boat rentals are also available seasonally based on staffing levels.

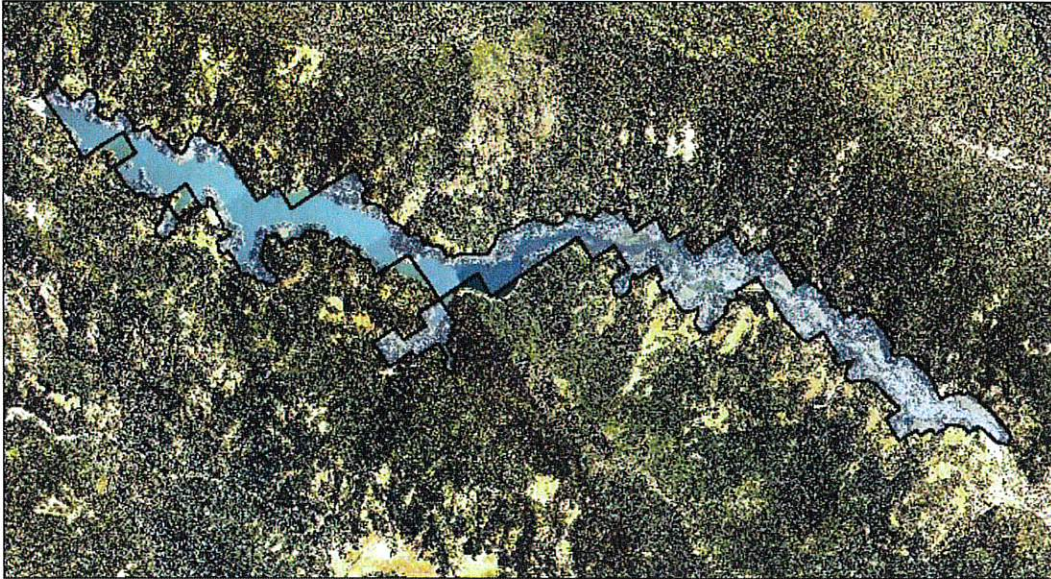
### Sub-Leases

The District leases the land surrounding Ruth Lake from the Humboldt Bay Municipal Water District based on a Master Lease Agreement between HBMWD and Trinity County. Trinity County has assigned the lease to Ruth Lake CSD. The original 39 year master lease agreement was executed in June 1964 and allowed for six ten-year extensions for a total of 99 years. The master lease is due to be extended in May 2023 for another ten years. The lease allows the district to maintain and operate boat launching facilities (the marina) and other recreational facilities including the camping and day-use areas. The master lease also allows the District to sublease parcels of land for recreational purposes to private individuals. Use of sublease parcels for residential purposes is prohibited by the master lease agreement and District policy.

There are a total of 172 subleases which are managed according to District policy. Most lots are accessible by vehicle, but some are only accessible by boat. Subleases must adhere to rules

regulating the use of private docks, onsite wastewater treatment systems (septic systems)<sup>6</sup>, utilities, insurance requirements, and other regulations as set forth by the District. Any proposed development or change to sublease properties must first be approved by the District to ensure conformance with set policies. Subleases may also be transferred from one party to another with District approval<sup>7</sup>.

Figure 3: HBMWD Property Boundaries around Ruth Lake



### Ruth Lake Marina

The Ruth Lake Marina is located on the northern shore of the lake along Lower Mad River Road. It is typically open from April through October and includes wet storage slips, boat ramp, public dock, bait and tackle store, fueling station, restrooms, picnic tables, and beach access<sup>8</sup>. There are a total of 55 slips that can be rented out seasonally for private use.

To help prevent the spread of aquatic invasive species such as zebra and quagga mussels, every watercraft that enters Ruth Lake must be inspected before launching. Once inspected, the vessel receives a sticker indicating it has been inspected for the current year. When trailered boats are removed from the lake, they are inspected and banded. Should the boat be launched again, the band indicates the last body of water it was in and that it was inspected for invasive species upon removal<sup>9</sup>. According to district staff, past studies have shown the chance of quagga and zebra mussels surviving in Ruth Lake are very low due to the lake's pH level.

<sup>6</sup> Policy 6220 states that lease holders must have an approved system in place before the property can be used. It also states that the County will only consider a permit after initial approval has been received from HBMWD and RLCSD.

<sup>7</sup> District policies related to subleases can be found on the District's website at <https://www.ruthlakecsd.org/leaseholder-downloads-documents/>.

<sup>8</sup> Ruth Lake CSD, General Marina Information.

<sup>9</sup> Ruth Lake CSD, Stickers, Bands, Key Cards – Guidelines for Launching Watercrafts at Ruth Lake. Updated January 28, 2020.



## Water

The District maintains several wells that supply water to the marina and several of the campgrounds. Water that is untreated is posted as non-potable. The marina and Ruth Recreation Area campground provide potable water to users and there is no additional fee for water use. The recreation area campground and marina systems are considered transient public water systems by the State Water Resources Control Board while the other systems are not considered public.

The Ruth Lake Marina is served by two wells located in the marina parking lot and accessed by maintenance covers. Well water is pumped through a three stage filter process and then chlorinated before being stored in a 2,500 gallon tank. The combined pumping capacity of the two wells is approximately 40 gallons per minute (gpm) with a maximum production of 57,600 gallons per day. However, Well No. 01 is only used as a backup source in the event Well No.02 is offline. The maximum demand during 2020 was 38,113 gallons in a single month with a peak single day demand of 2,459 gallons at a maximum of 1.7gpm. Based on average production of one well (20gpm), there is more than adequate supply to meet current demand at the marina<sup>10</sup>.

The Ruth Lake Rec Area (Campground) is served by two wells. One is located in the treatment building and serves as the primary water supply. The second is a lake well that terminates below the highwater water level of Ruth Lake. It reportedly consists of 300 feet of well casing that is buried at a minimum depth of 25 feet beneath the lake bed and is therefore directly influenced by lake water. Well water is pumped through a filtration system and chlorinated before storage in two 5,000 gallon water tanks. The treatment system can currently only be used for the primary well and is not permitted for the lake well. In the event the lake well will be utilized, the District must either obtain a new permit for the treatment system or issue a boil water notice to users<sup>11</sup>.

The actual pumping capacity of the primary well is unknown. However, it is estimated to pump at approximately 18gpm. The well serves the campground's 85 sites by way of approximately 13 faucets (hose bibs) and two restrooms. It also provides water to the Ruth Lake CSD office and the camp host. During 2021 the approximate water demand for the system was 558,000 gallons. The District has indicated that during peak summer months the primary well is unable to meet peak demand due to a severe drop in the well water level. In the event this occurs, the campground would activate the lake well to meet demand<sup>12</sup>. Based on the potential for inadequate potable water supply during peak summer months, the District is encouraged to work with the SWRCB to obtain a new permit for the lake well so that it can be used without a boil water notice when necessary.

Both the marina and campground water systems require a licensed water operator. Currently, there are no District staff with the necessary classification to operate either system. The District utilizes an outside contractor to maintain the systems and conducted required inspections and water sampling.

<sup>10</sup> State Water Resources Control Board, Division of Drinking Water, 2021 Annual Inspection – Ruth Lake Marina – PWS No. 5305003 Mad River – Trinity County. January 2022.

<sup>11</sup> State Water Resources Control Board, Division of Drinking Water, 2021 Annual Inspection – Ruth Lake Recreation Area – PWS. No. 5305004 – Mad River Trinity County. December 30, 2021.

<sup>12</sup> SWRCB, 2021 Annual Inspection – Recreation Area. December 30, 2021.



Separate from the District's water systems, the sublease holders located around the lake obtain water through various avenues. Several of the sublease-lots are able to obtain water directly from Ruth Lake reservoir<sup>13</sup>. As part of the recreational sublease agreement, a sublease holder may withdraw up to 240 gallons per day. In order to obtain a lake water use permit from Ruth Lake CSD, an application must be submitted showing the proposed delivery and storage system, terms and conditions of the permit, technical specifications, proposed filtration and disinfection system, and an application of approval of water system from Trinity County. The right to withdraw water from the lake may be terminated by HBMWD and/or Ruth Lake at any time for any reason including a sublease holders' unwillingness to comply with the conditions of their permit<sup>14</sup>. As part of this process, Ruth Lake CSD also acts as an agent through which sublease holders obtain documented riparian water rights from the State<sup>15</sup>. Other lots obtain water by way of springs, wells, or bottled water as needed. The District also assists subleases with obtaining riparian water rights for their summer homes.

Many seasonal dwellings were lost in the August Complex fire. Trinity County Environmental Health, which is the permitting agency for wells and onsite wastewater (septic) systems in the area, has sent out a potable water information form to sublease holders that lost their summer homes. The intent is to find out where they were previously obtaining their water from and how they intend to obtain water in the future<sup>16</sup>.

### Wastewater

Wastewater is typically disposed of with individual onsite wastewater treatment systems (septic systems)in onsite wastewater treatment systems. The District is responsible for maintenance and regular pumping of campground and marina facilities. However, sublease owners are responsible for operation and maintenance of their individual system.

According to Ruth Lake CSD policy, no sublease site can be used until an approved wastewater system is in place. Additionally, a permit must be obtained from Trinity County Environmental Health<sup>17</sup>. Based on prior issues found in the area, the County is now requiring extra steps to ensure systems are fully functioning before a permit is issued. This is in an effort to ensure there is no lake contamination from inadequate or failing wastewater systems<sup>18</sup>.

Based on Ruth Lake CSD's approval authority and potential issues from inadequate and/or unpermitted wastewater systems around the lake, there appears to be a need for further oversight of these systems. An onsite wastewater treatment system inspection program would ensure that all sublease holders have adequate access to disposal facilities on their lot and would also limit the

<sup>13</sup> State Water Resources Control Board, Electronic Water rights Information Management System, Initial Statement of Water Diversion and Use for Lease #96A and Lease #5. Accessed November 23, 2021 from [https://www.waterboards.ca.gov/waterrights/water\\_issues/programs/ewrims/](https://www.waterboards.ca.gov/waterrights/water_issues/programs/ewrims/).

<sup>14</sup> Ruth Lake CSD, Policy Handbook §8100.20.

<sup>15</sup> State Water Resources Control Board, Electronic Water rights Information Management System, Initial Statement of Water Diversion and Use for Lease #96A and Lease #5. Accessed November 23, 2021 from [https://www.waterboards.ca.gov/waterrights/water\\_issues/programs/ewrims/](https://www.waterboards.ca.gov/waterrights/water_issues/programs/ewrims/).

<sup>16</sup> Trinity County Department of Environmental Health, Personal Communication (email). January 27, 2022.

<sup>17</sup> Ruth Lake CSD, Policy Handbook §6220.10 – 6220.22.

<sup>18</sup> Trinity County Department of Environmental Health, Personal Communication (email). January 27, 2022.



potential for lake contamination. Regular inspection of these systems and early prevention measures can help ensure Ruth Lake is protected from costly and dangerous fecal coliform contamination issues. The District is strongly encouraged to investigate the potential to develop and implement such a program. These are typically permitted through the County to ensure compliance with current regulations.

### Garbage Disposal

Since Ruth Lake is a recreation area, visitors often bring in a large amount of goods in some sort of disposable packaging. This can include food, beverages, camping gear, fishing gear, disposal disposable plates and utensils, and any number of other items. This creates a large amount of garbage that must be secured to help protect wildlife, the surrounding environment, and visitors.

The District rents obtains several large dumpsters from Trinity County Solid Waste for use at the campgrounds and the marina. There is one dumpster that is specifically for lease holders and requires a key obtained from the District. However, based on the amount of use, there is not enough space to accommodate the waste that is generated around the lake. The District frequently has to transport garbage to the transfer station in Ruth on Sundays and Tuesdays during the peak summer season<sup>19</sup>.

Trinity County Solid Waste has limited capacity to provide additional solid waste services to the area. As such, the District may want to implement a public information campaign on ways to reduce waste while recreating. This could include bringing plates and utensils that can be washed and reused, prepping food and beverages at home in reusable containers, using rental facilities for boats and rafts rather than purchasing low quality items that may break easily, and other waste reducing tips.

## 4.2 Other Service Providers

Trinity County provides general governmental services including social services, emergency services, planning, county roads, parks, and other services to areas within the County. Law Enforcement is provided by the Trinity County Sheriff's Office. The California Department of Transportation (Caltrans) is responsible for the condition of Highway 36 that provides access to Ruth Lake CSD via Lower Mad River Road.

### *o Fire Protection, EMS/Rescue, and Ambulance Services*

Fire protection and emergency response services for the Ruth Lake area are provided by the Southern Trinity Volunteer Fire Department (STVFD) and Southern Trinity Area Rescue (STAR) which serve the eastern Humboldt/ southern Trinity areas. STVFD is staffed entirely by volunteers and maintains a station in Mad River approximately seven miles from the Ruth Lake dam, and a second station in Ruth approximately four miles the southeaster extent of Ruth Lake. The Mad River Station is owned by the STVFD and the Ruth Station is a lease lot with no charge. STAR also

<sup>19</sup> Ruth Lake CSD, Personal Communication – District Manager. November 10, 2021.

operates out of Mad River and Ruth with a total of two ambulances that are staffed by EMT-1 and Paramedic level emergency personnel.

Both agencies have limited funding opportunities due to typical land use in the area which is largely federally owned USFS lands utilized for recreation. As such, funding generally comes from community donations. Ruth Lake CSD typically provides an annual donation to both STVFD and STAR as long as budget allows. In the past two fiscal years, this has been very limited due to impacts from Covid-19 and the August Complex Fire.

In an effort to provide continued support to these important fire and emergency service providers, the District may want to consider a more formal agreement, which may include the activation of latent services for fire, rescue and EMS/ambulance services. The STVFD may also benefit from forming a fire protection district that is supported by revenue from a combination of taxes, fees, grants, and fundraising. Being within a fire district has certain landowner benefits including obtaining/maintaining fire insurance and the ability to subdivide parcels. In addition, fire districts are eligible to apply for certain grant funding only available to local governmental agencies. It is recommended that a stakeholder group be established with members from the affected agencies, the County, and the Humboldt Bay Municipal Water District to explore options for providing long term and financially sustainable emergency services to the area.



## 5. FINANCING

### 5.1 Revenues and Expenses

Ruth Lake CSD’s primary revenue sources are user fees from the campground and marina facilities which accounts for approximately 75 percent of the District’s total income. Additional revenue comes from lease fees, solid waste fees from the leaseholders that is passed onto the County disposal, grants, and other sources as indicated in the District’s annual budget. District expenses include payroll, donations to STVFD and STAR, utilities, solid waste fees and numerous others. Payroll is the largest category and accounts for approximately 58 percent of total expenses. Anticipated revenues for FY 2020-21 decreased by almost \$60,000 due to campground closures caused by Covid-19. Table 2 below provides an overview of adopted budgets for the last three fiscal years.

Based on the provided budgets, the District is able to plan for a surplus of income every year. This surplus, if achieved, can help build up reserves that can be used to fund major capital improvement projects. However, actual revenues and expenses can vary greatly based on the number of visitors to the area each year.

Figure 4: Ruth Lake CSD FY2021-22 Revenues by Category

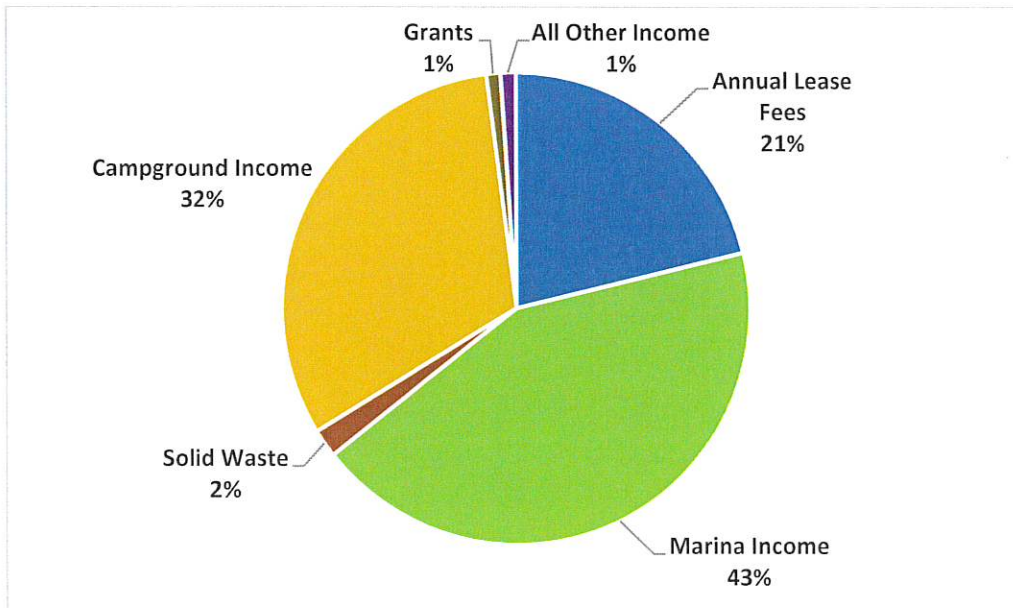


Table 2: Ruth Lake CSD Budget Summary

	<b>FY 2019-20</b>	<b>FY 2020-21</b>	<b>FY 2021-22</b>
<b>Revenues</b>			
Annual Lease Fees	\$162,050	\$176,850	\$176,850
Marina Income	\$350,000	\$310,000	\$360,000
Solid Waste	\$16,200	\$16,200	\$16,200
Campground Income	\$270,000	\$230,000	\$265,000
Grants	\$0	\$8,000	\$8,000
All Other Income	\$10,515	\$8,140	\$8,640
<b>Total Revenues</b>	<b>\$808,765</b>	<b>\$749,190</b>	<b>\$834,690</b>
<b>Expenses</b>			
Cost of Goods Sold	\$113,800	\$95,000	\$125,000
Bankcard Merchant Fees	\$14,000	\$7,000	\$15,000
STVFD	\$10,000	\$3,000	\$15,000
STAR	\$10,000	\$3,000	\$15,000
Operating Supplies	\$10,000	\$30,000	\$30,000
Payroll Expenses	\$450,000	\$375,000	\$375,000
Professional Fees	\$15,000	\$40,000	\$40,000
Utilities	\$60,000	\$20,000	\$20,000
Solid Waste	\$0	\$40,000	\$40,000
All Other Expenditures	\$102,800	\$97,150	\$92,200
<b>Total Expenses</b>	<b>\$785,600</b>	<b>\$718,150</b>	<b>\$767,200</b>
<i>Net Income/ (Loss)</i>	<i>\$23,165</i>	<i>\$31,040</i>	<i>\$67,490</i>

## 5.2 Audit Information

The District conducts audits on an annual basis through a certified public account. Table 3 below provides a summary of the last three years' worth of audits. For the last three years, operating revenue has exceeded operating expenses. However, the surplus has continually been less than the annual depreciation of major capital assets, predominantly for the marina and district campgrounds, which has led to an overall decrease in the District's net position. As can be seen in Table 4, while liabilities remain low, the net position continues to decrease over time.



Table 3: Ruth Lake CSD Audit Summary<sup>20</sup>

	<b>FY2017-18</b>	<b>FY2018-19</b>	<b>FY2019-20</b>
<b>Operating Revenue</b>			
Campground	\$284,465	\$272,884	\$227,312
Marina	\$363,260	\$349,411	\$286,250
Lease	\$156,225	\$166,833	\$178,442
Grants	\$915	\$43,425	\$7,827
Solid Waste	\$17,100	\$16,100	\$16,100
Taxes	\$6,185	\$6,257	\$5,893
Water fees (lease)	\$3,170	\$2,520	\$2,640
Assignment fees	\$1,100	\$800	\$0
Miscellaneous	\$3,496	\$10,164	\$2,277
Cost of Goods Sold	(\$110,035)	(\$111,190)	(\$97,272)
<i>Total Operating Revenue</i>	<i>\$725,881</i>	<i>\$757,204</i>	<i>\$629,869</i>
<b>Operating Expenses</b>			
Bank Card Fees	\$16,008	\$14,514	\$14,412
Fire Protection	\$15,000	\$15,000	\$10,000
Donations	\$15,000	\$15,000	\$10,000
Payroll	\$350,396	\$400,540	\$301,945
Professional Fees	\$33,896	\$46,138	\$38,607
Utilities	\$57,453	\$28,753	\$21,774
Other	\$130,429	\$184,489	\$185,907
<i>Total Operating Expenses</i>	<i>\$618,182</i>	<i>\$704,434</i>	<i>\$582,645</i>
Depreciation	(\$118,745)	(\$129,911)	(\$138,067)
Net Non-Operating Income	\$128	\$131	\$279
<i>Change in Net Position</i>	<i>(\$10,918)</i>	<i>(\$77,010)</i>	<i>(\$90,564)</i>

Table 4: Ruth Lake CSD Net Position Summary

	<b>FY2017-18</b>	<b>FY2018-19</b>	<b>FY2019-20</b>
Assets	\$2,003,702	\$1,930,043	\$1,834,834
Liabilities	\$2,367	\$5,718	\$1,072
<b>Net Position</b>	<b>\$2,001,335</b>	<b>\$1,924,325</b>	<b>\$1,833,762</b>

<sup>20</sup> Audits for the three fiscal years shown were conducted by Aycock and Edgmon Certified Public Accountants from Ferndale, CA.

## 6. GROWTH AND POPULATION

---

### 6.1 Land Use

The Trinity County General Plan (2003) and Zoning Code guides land use decisions within Trinity County. The area served by Ruth Lake CSD is largely Resource, Rural Residential Low Density, and Agricultural. (Figure 4). Ruth Lake Marina and several campgrounds are located along the northeast side of Ruth Lake reservoir, impounded by R.W. Matthews Dam owned by HBMWD. A portion of the District to the west extends into Humboldt County on the northern side of Highway 36. Land use in this area is established by the Humboldt County General Plan and is primarily Residential Agriculture, Agricultural Grazing, and Public Lands with some Timberland and an Airport Overlay around the Dinsmore airstrip.

HBMWD owns much of the property surrounding the lake as well as the R.W. Matthews Dam that creates the Ruth Lake reservoir on the Mad River and the Gosselin Hydro-Electric Power House associated with the dam<sup>21</sup>. The forested areas surrounding the lake are predominantly owned by the United States Forest Service with some private land holdings.

### 6.2 Existing Population and Projected Growth

According to the US Census Bureau Decennial Census data, the total population in Trinity County was 13,786 in 2010 and 16,112 in 2020. This suggests an annual growth rate of approximately 1.57%. However, the Trinity County Housing Element reports limited to no growth over the last 10 years and anticipates a small decline in population over the next decade<sup>22</sup>. At this time it is unknown how the Covid-19 pandemic and recent wildfire activity will affect overall population in the County. For the purposes of this MSR, a zero growth rate will be assumed for the District area as it is primarily a recreational area with limited year round residents.

Within the District boundary is the Ruth Census Designated Place (CDP) which has a 2020 population estimate of 254 and Mad River CDP which has a 2020 estimate of 361. The District boundary is much larger than these two CDPs and likely has a population greater than the total of both (615). However, these two areas likely contain the bulk of the population in the area as much of the District is comprised of sparsely inhabited forested lands. It is not anticipated that the population of the District will grow substantially ~~in~~ the next five to seven years.

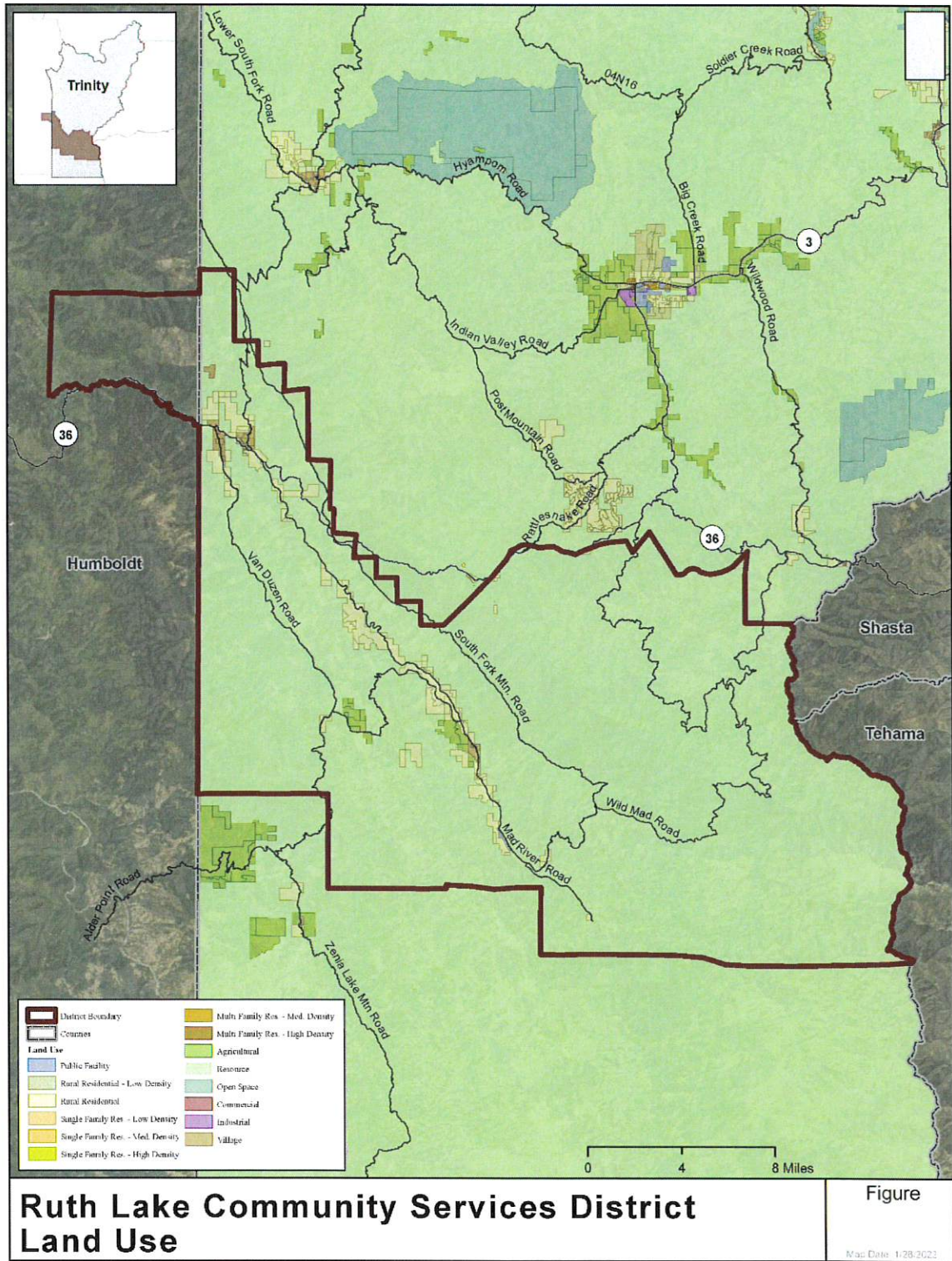
---

<sup>21</sup> Trinity County Hazard Mitigation Plan 2015

<sup>22</sup> Trinity County, 2019-2024 Housing Element Update, Chapter Two: Housing Needs. April 1, 2020.



Figure 5: Ruth Lake CSD Land Use Map



### 6.3 Disadvantaged Unincorporated Communities

LAFCo is required to evaluate water service, sewer service, and structural fire protection within disadvantaged unincorporated communities as part of service reviews, including the location and characteristics of any such communities. A disadvantaged unincorporated community (DUC) is defined as any area with 12 or more registered voters where the annual median household income (MHI) is less than 80 percent of the statewide annual MHI (pursuant to Government Code Section 56033.5 and Water Code Section 79505.5). Within a DUC, three basic services are evaluated: water, sewage, and fire protection. Currently, Ruth Lake CSD does not provide residential services as their primary purpose is the provision of recreational amenities on and around Ruth Lake.

Even though the CSD is not responsible for residential services, the presence of DUCs in the area should still be discussed. According to the 2015-2019 American Community Survey 5-year estimates, the MHI is \$30,208 for the Ruth CDP, and \$25,400 for Mad River CDP which is 40% and 34%, respectively, of the state average of \$75,235. This qualifies the communities as disadvantaged. It is likely that the surrounding areas can also be considered disadvantaged.



## 7. MUNICIPAL SERVICE REVIEW DETERMINATIONS

---

This section addresses the requirements of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (California Government Code Section 56430). As part of the municipal service review process, LAFCo makes the following written determinations.

### 1) Growth and population projections

Ruth Lake CSD was created to provide recreation services, including boat launching and campground maintenance to the community of Ruth and surrounding areas along the Mad River and Ruth Lake. As such, there is a limited year-round population in the area. Based on 2020 census data the area has an estimated population of approximately 700 and it is unlikely the area will see much growth in the next five to ten years.

### 2) The location and characteristics of any disadvantaged unincorporated communities within or contiguous to the Sphere of Influence

The communities of Ruth and Mad River have MHIs that are 40 and 34 percent of the State MHI, respectively. This qualifies them as DUCs and indicates that much of the surrounding area can also be considered disadvantaged.

### 3) Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies

Some of the District's infrastructure was damaged during the 2020 August Complex Fire. This includes water distribution system for campgrounds around the lake. The District is continuing to work towards full repair of all systems and facilities. Based on pre-fire activities, there is adequate capacity to meet most service needs apart from solid waste disposal. However, there does appear to be a need for additional oversight of onsite wastewater systems. The District is encouraged to investigate the potential to develop and implement a regular inspection program. There also appears to be a need for additional potable water supply to support campground activities. The District is encouraged to work with the SWRCB to obtain a permit for their lake well at this location.

### 4) Financial ability of agencies to provide services

Based on financial audits for fiscal years 2017-18 to 2019-20, the District is able to maintain operating revenues that exceed operating expenditures. However, this surplus is not enough to cover depreciation of assets leading to a decrease in the District's overall net position.

### 5) Status of, and opportunities for, shared facilities

There may be an opportunity for the District to aid in the provision of fire and emergency response services. The District is encouraged to continue to work with other service providers including STVFD and STAR on a plan for long term provision and financial mechanisms to support fire and emergency response services in the area.

6) Accountability for community service needs, including governmental structure and operational efficiencies

The District is overseen by a five-member Board of Directors that is elected to staggered four-year terms. Agendas are posted at the District office and on their website at least 72 hours in advance of meetings. Additional information about the District, including policies regulating recreational leases, is also available on the District's website.

7) Any other matter related to effective or efficient service delivery, as required by commission policy

Currently the District's sphere of influence is substantially smaller than the jurisdictional boundary. It is likely the reduced SOI was set to include only those areas directly managed by the District. The current SOI is approximately 25,600 acres (40 square miles) and includes the area around Ruth Lake and extends northwest into Humboldt County. No change to the SOI is proposed at this time.



## 8. SPHERE OF INFLUENCE DETERMINATIONS

---

### 1) Present and planned land uses in the area, including agricultural and open-space lands.

Land use within the District is predominantly Resource, Residential Low Density, and Agricultural with other residential and public facility uses. The predominant uses in the area are timberland management and recreation.

### 2) Present and probable need for public facilities and services in the area.

Ruth Lake continues to be a popular recreation area and sees a great influx of activity during the summer and fall months. Based on the landholdings of HBMWD, the need to manage lease holdings around the lake, and the annual influx of visitors, it is anticipated that services will be needed in the area for the foreseeable future.

### 3) Present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.

The District currently has enough capacity to accommodate the recreational needs of visitors to the area. However, there appears to be limited capacity to accommodate additional solid waste. The District may want to work with Trinity County Solid Waste to implement a public information campaign on reducing waste while recreating.

### 4) Existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

The small communities of Ruth and Mad River both reside within the boundary of the District. The nearest larger community with services such as grocery shopping, medical care, and other amenities is the City of Fortuna to the west which is approximately 90 minutes from the Ruth Lake Marina.

### 5) For an update of a sphere of influence of a city or special district that provides public facilities or services related to sewers, municipal and industrial water, or structural fire protection, the present and probable need for those public facilities and services of any disadvantaged unincorporated communities within the existing sphere.

The District does not currently provide community water or wastewater services and fire protection services are provided by STVFD-residential water, sewer, or fire protection services. However, the area can be considered disadvantaged and is in need of could benefit from reliable funding mechanisms to support emergency response expanded services. It is recommended that the District work with other local, state, and federal agencies and service providers on a plan for the sustainable provision of emergency response services and funding mechanisms in the area.



# TRINITY LAFCO

www.trinitylafco.org  
1125 – 16<sup>th</sup> Street, Suite 200  
Arcata, California 95521

## RESOLUTION NO. 2022-02

### APPROVING THE RUTH LAKE COMMUNITY SERVICES DISTRICT MUNICIPAL SERVICE REVIEW AND SPHERE OF INFLUENCE UPDATE

**WHEREAS**, the Trinity Local Agency Formation Commission, hereinafter referred to as the “Commission”, is authorized to conduct municipal service reviews and establish, amend, and update spheres of influence for local governmental agencies whose jurisdictions are within Trinity County; and

**WHEREAS**, the Commission conducted a municipal service review to evaluate the availability, capacity and efficiency of services provided by the Ruth Lake Community Services District, hereinafter referred to as the “District”, pursuant to California Government Code Section 56430; and

**WHEREAS**, the Commission conducted a sphere of influence review for the District pursuant to California Government Code Section 56425; and

**WHEREAS**, the Executive Officer gave sufficient notice of a public hearing to be conducted by the Commission in the form and manner provided by law; and

**WHEREAS**, the Executive Officer’s report and recommendations on the municipal service review and sphere of influence update were presented to the Commission in the form and manner prescribed by law; and

**WHEREAS**, the Commission heard and fully considered all the evidence presented at a public hearing held on the municipal service review and sphere of influence update on February 1, 2022; and

**WHEREAS**, the Commission considered all the factors required under California Government Code Section 56430 and 56425.

**NOW THEREFORE, IT IS RESOLVED, DETERMINED AND ORDERED** as follows:

1. The Commission, as Lead Agency, finds the municipal service review is exempt from further review under the California Environmental Quality Act pursuant to Title 14 California Code of Regulations Section 15306. This finding is based on the use of the municipal service review as a data collection and service evaluation study. The information contained within the municipal service review may be used to consider future actions that will be subject to additional environmental review.
2. The Commission, as Lead Agency, finds the sphere of influence update is exempt from further review under the California Environmental Quality Act pursuant to Title 14 California Code of Regulations Section 15061(b)(3). This finding is based on the Commission determining with certainty the update will have no possibility of significantly affecting the environment given no new land use or municipal service authority is granted.



3. This municipal service review and sphere of influence update is assigned the following distinctive short-term designation: "Ruth Lake CSD MSR/SOI Update 2022".
4. Pursuant to Government Code Section 56430(a), the Commission makes the written statement of determinations included in the municipal service review, hereby incorporated by reference.
5. Pursuant to Government Code Section 56425(e), the Commission makes the written statement of determinations included in the sphere of influence update, hereby incorporated by reference.
6. Pursuant to Government Code Section 56425(i), the Commission does hereby establish the functions and classes of services provided by Ruth Lake CSD as follows: parks and recreation (marina and campgrounds), water (marina and campground water systems), wastewater (marina and campground septic systems and outhouses), solid waste disposal (garbage pickup and solid waste fees collection), and fire protection services (fiscal support to Southern Trinity Volunteer Fire Department).

**BE IT FURTHER RESOLVED** by the Commission that:

The Ruth Lake CSD MSR/SOI Update 2022 is hereby approved, with no change to the sphere of influence for the District which remains smaller than the District Boundary to generally follow roads and lease holdings surrounding Ruth Lake , as depicted in Exhibit "A", attached hereto.

**PASSED AND ADOPTED** at a public hearing of the Trinity Local Agency Formation Commission on the 1<sup>st</sup> day of February 2022, by the following roll call vote:

AYES:  
NOES:  
ABSTAINS:  
ABSENT:

ATTEST:

APPROVED:

\_\_\_\_\_  
Kathy Bull  
Administrator/Clerk

\_\_\_\_\_  
Keith Groves  
Chair



# 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

January 18, 2022

Attn: FWS-R8-ES-2021-0108  
U.S. Fish and Wildlife Service  
MS: PRB/3W,  
5275 Leesburg Pike  
Falls Church, VA 22041-3803

We are writing to provide comments on the Foothill Yellow-Legged Frog (FYLF), Threatened Status with Section 4(d) Rule for Two Distinct Population Segments and Endangered Status for Two Distinct Population Segments.

We concur with the determination that listing the North Coast DPS is not warranted. In addition to all of the findings in your analysis in that regard, as further evidence and justification, we respectfully provide the attached technical memorandum dated November 10, 2017 by Senior Fisheries Biologist, Dennis Halligan of Stillwater Sciences. Mr. Halligan has considerable experience and first-hand knowledge of the robust population of FYLF along the Mad River in Humboldt County, California.

HBMWD supplies wholesale treated groundwater to 88,000 people through 7 municipal agencies, and serves water to numerous other industrial and public entities in the region. HBMWD obtains water from 4 Ranney Collectors installed along the banks of the Mad River. The Collectors are large concrete caissons that extend from the surface to 80-100 ft below grade. The groundwater for these wells is recharged during river low flow summer months by releases from our impound at Ruth Lake Reservoir. Since 1962, the releases through our R. W. Matthews dam travel some 70 miles downstream providing environmental enhancement and benefit to aquatic life throughout this reach of the river, one of those being the FYLF. We believe this to be a contributor to the robust population of FYLF within the Mad River.

We strongly support the determination that the North Coast DPS is not warranted.

We appreciate your consideration of our comments.

Respectfully,

  
John Friedenbach, General Manager

Cc: Justin Ly, North Coast Branch Supervisor, West Coast Region, NOAA Fisheries  
Michael Van Hattem, Senior Environmental Scientist, California Fish & Wildlife





850 G Street, Suite K, Arcata, CA 95521  
phone 707.822.9607

## TECHNICAL MEMORANDUM

DATE: 10 November 2017  
TO: John Friedenbach, HBMWD General Manager  
FROM: Dennis Halligan, Senior Fisheries Biologist  
SUBJECT: Mad River Foothill Yellow-legged Frog Information Review

---

### 1 INTRODUCTION

The Humboldt Bay Municipal Water District (District) is interested in providing the California Fish and Game Commission (Commission) information on foothill yellow-legged frogs (FYLF) in the Mad River to assist the Commission with their status review and California Endangered Species Act (CESA) listing determination of the species. To assist the District, Stillwater Sciences conducted an information review and surveys for FYLF on the Mad River during late September 2017. Stillwater Sciences also requested information on FYLF in the Mad River from the California Department of Fish and Wildlife (CDFW), Green Diamond Resource Company (GDRC), and Six Rivers National Forest (SRNF). In addition, limited surveys for FYLF were conducted in October 2017 on the lower Van Duzen and South Fork Eel rivers in conjunction with annual monitoring of fisheries habitat in reaches subject to gravel extraction activities. This memorandum details the results of the information review and surveys.

### 2 AVAILABLE INFORMATION

Stillwater Sciences contacted CDFW for information on FYLF on the Mad River. We were referred to CDFW (2017) and the Biogeographic Information and Observation System (BIOS), which contained summary results of recent FYLF egg mass surveys conducted on the Mad River and other documents. CDFW's summary stated that single-pass egg mass surveys were conducted in the lower Mad River during breeding season for foothill yellow-legged frog in 2011, 2012, 2015 and 2016. In 2011, CDFW surveyed 13.5 kilometers (km) of the Mad River downstream of the Mad River Hatchery, and detected 59 egg masses/km; in 2012 CDFW surveyed 14.7 km in the same reach and detected 13 egg masses/km (M. Van Hattem, pers. comm., 2016 in CDFW 2017). The 2015 and 2016 survey results were comparable (M. Van Hattem, pers. comm., 2016 in CDFW 2017).

GDRC provided Stillwater with a letter they submitted to the CDFW summarizing their FYLF survey data on the Mad River (GDRC 2017). GDRC has collected data on FYLF egg masses in a 2.2 km reach of the lower Mad River located approximately 4.8 km upstream of the Blue Lake Hatchery from 2008 to 2017. The average density over the 10 years of surveys is 258 egg masses/km. Considering that one female FYLF deposits a single egg mass, then the results of

these surveys provide a minimum estimate of female frogs. The highest density (625 egg masses/km) occurred in 2017 following a very wet winter (Figure 1). GDRCo currently operates according to their Habitat Conservation Plan (HCP), which while not specific for FYLF, does afford a degree of protection from land use impacts.

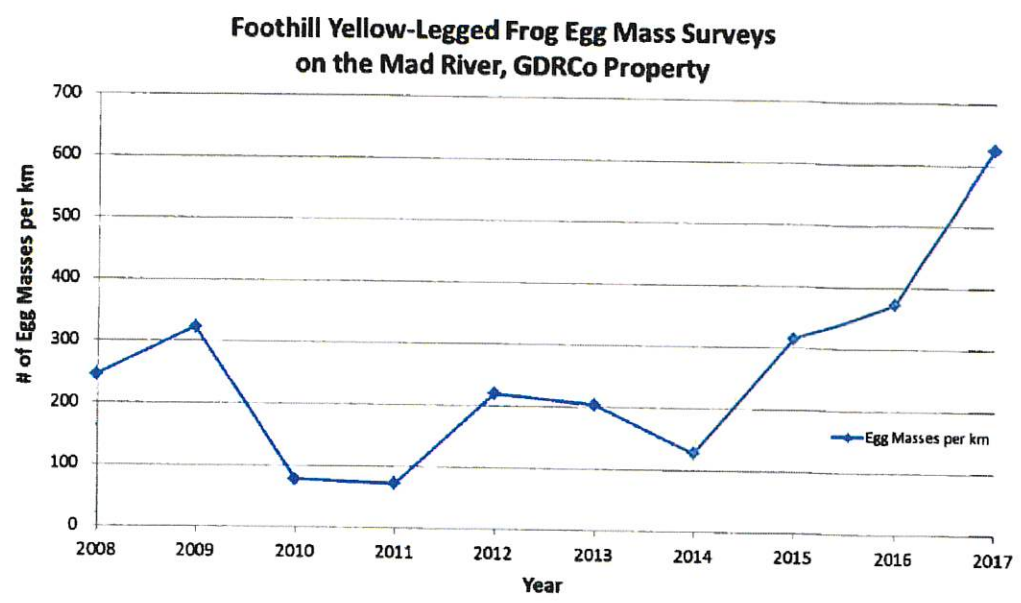


Figure 1. Foothill yellow-legged frog egg mass densities observed along the Mad River by GDRCo biologists from 2008 to 2017 (GDRCo 2017).

No information was received from SRNF; however, Stillwater Sciences reviewed several documents produced by the Forest. These included the Upper Mad River Watershed Analysis (SRNF 1998) and several stream surveys. The various SRNF documents did not discuss specific numbers of egg masses or individuals, but they did mention that FYLF were widespread in the upper watershed.

### 3 SURVEYS

Stillwater Sciences conducted a series of single-pass FYLF surveys from September 25 to October 5, 2017 along specific reaches on the lower Mad, Van Duzen, and South Fork Eel rivers. These surveys counted individual FYLF encountered within the gravel mining reaches of these rivers. The Mad River survey covered five reaches totaling 11 km and recorded 1,285 individual post-metamorphic FYLF (Figure 2), of which approximately 90 percent were sub-adults and 10 percent were adults. This equates to a density of 117 frogs per km. A total of 344 FYLF were recorded in two reaches covering 2.8 km of the lower Van Duzen River (Figure 3), which is equal to a density of 129 frogs/km. A total of 118 FYLF were recorded on a single 2.2-km reach of the South Fork Eel River (Figure 4), which equates to a density of 54 frogs/km. These numbers should be considered minimums because both sides of the rivers, some wetted off-channel areas, and tributaries containing suitable habitats were not surveyed. In addition, observations of adult frogs may be low because females that breed in a given year likely only breed once, departing from the breeding areas shortly following oviposition (Wheeler et al. 2006).





Figure 2. Foothill yellow-legged frog occurrences in the Mad River survey reaches.



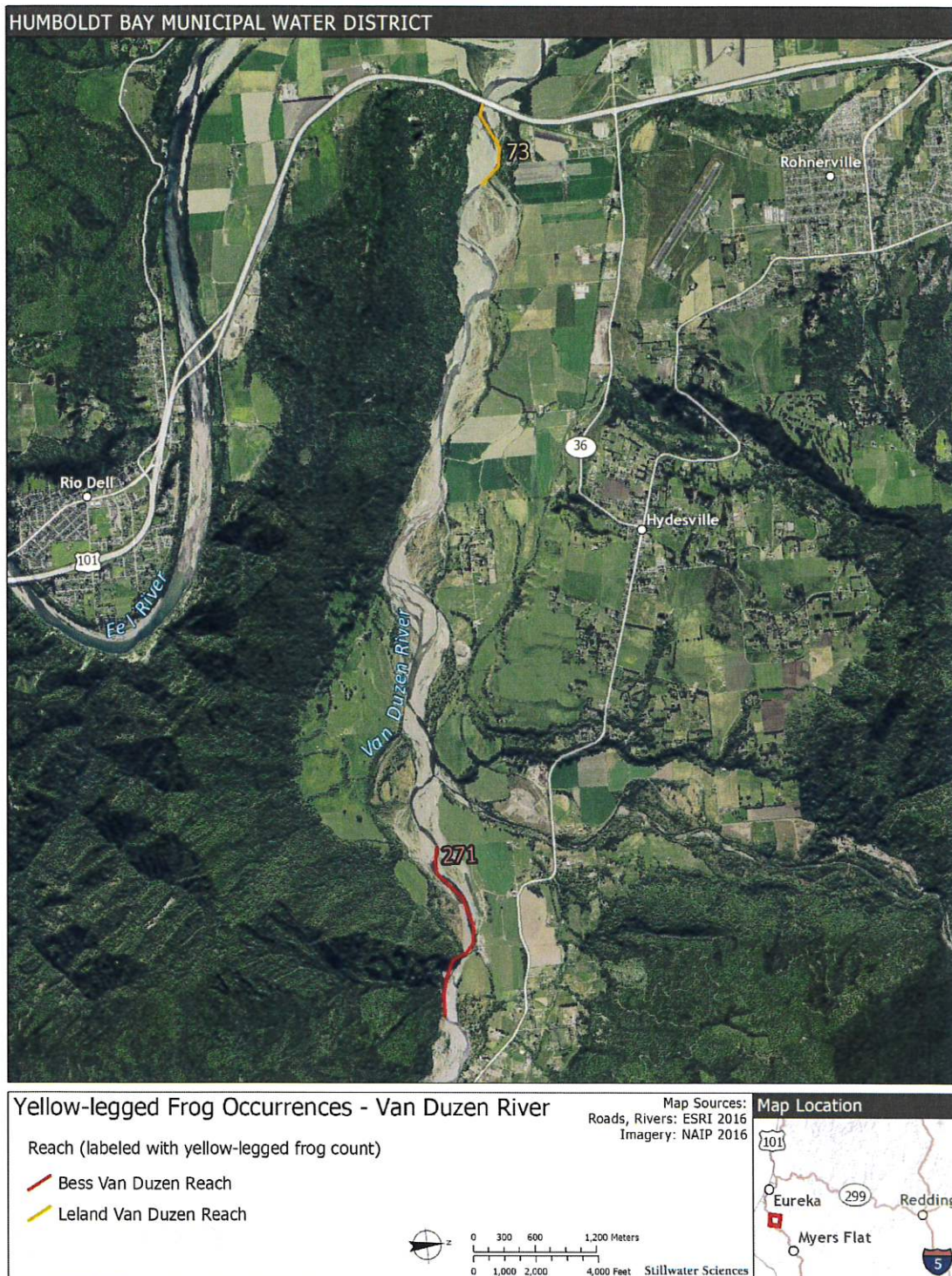


Figure 3. Foothill yellow-legged frog occurrences in the Van Duzen River survey reaches.





Figure 4. Foothill yellow-legged frog occurrences in the South Fork Eel River survey reach.



## 4 DISCUSSION

Based upon the information reported by CDFW, GDRC, SRNF, and Stillwater Sciences, the Mad River appears to support a very robust and widespread population of FYLF. One reason for the strong population on the mainstem Mad River may be that the flow over the Matthews Dam spillway and release schedule maintained by the District generally mimics the natural decrease in the spring hydrograph. A near-natural hydrograph is maintained in the river while the spillway is overtopped and the subsequent release schedule creates stable edgewater habitat conditions along approximately 85 miles of the mainstem Mad River downstream of the dam. The spring and early summer hydrograph in the river increases the likelihood of survival for the egg-through-metamorphosis life history stages. The Mad River regulated hydrograph is unlike many dam-regulated river systems, which are subject to recreational or power demand ramping flows that have the potential to scour out egg masses and larvae (tadpoles). These types of ramping flows (not present on the Mad River) have been identified as a significant adverse factor for the decreasing FYLF populations in many parts of California (CDFW 2017).

The District's operations are also conducted in compliance with their HCP, State Consistency Determination for Coho Salmon, and Long-term Lake and Streambed Alteration Agreement. These regulatory documents require a minimum flow level in the river and other protections that are beneficial for FYLF. In addition, the District has embarked on a program to dedicate a portion of their water right for instream environmental benefit as allowed under Section 1707 of the California Water Code. Once implemented, these environmental flow releases will help buffer the effects of climate change, which has been identified as a threat to FYLF by CDFW (2017).

The limited data collected on the Van Duzen and South Fork Eel rivers also show relatively high counts of FYLF, which support statements in Center for Biological Diversity (2016) and CDFW (2017). The Center for Biological Diversity (2016) stated "The largest foothill yellow-legged frog populations in California are in the north coast range, with healthy populations scattered throughout the region. The strongholds for the species are in the Smith River, Red Cap Creek tributary of the Klamath River, South Fork Trinity River, South Fork Eel River, Redwood Creek, coastal tributaries in Mendocino County, and Russian River tributaries."

## 5 CONCLUSION

In conclusion, the information above indicates that the FYLF populations in the Mad River, and possibly Humboldt County, are robust and capable of withstanding occasional environmental perturbations, as evidenced by their persistence in large numbers after the 2012–2016 drought. In addition, existing and planned regulatory tools (HCPs, LTSAA, and Section 1707 environmental flow dedication) promote FYLF habitat protection and future environmental resiliency in the face of climate change.



## 6 REFERENCES

CDFW (California Department of Fish and Wildlife). 2017. Evaluation of the petition from the Center for Biological Diversity to list the foothill yellow-legged frog (*Rana boylei*) as threatened under the California Endangered Species Act. Report to the Fish and Game Commission. Sacramento, California.

Center for Biological Diversity. 2016. Petition to list the foothill yellow-legged frog (*Rana boylei*) as threatened under the California Endangered Species Act. Submitted to the Fish and Game Commission. Oakland, California.

GDRC (Green Diamond Resource Company). 2017. Information relevant to a proposal to list the Foothill Yellow-legged Frog as threatened under the California Endangered Species Act. Letter submitted to the California Department of Fish and Wildlife.

SRNF (U.S. Department of Agriculture, National Forest Service, Six Rivers National Forest). 1998. Upper Mad River Watershed Assessment. Eureka, California.

Wheeler, C., H. Welsh, and T. Roelofs. 2006. Oviposition site selection, movement, and spatial ecology of the foothill yellow-legged frog (*Rana boylei*). Final Report for the California Department of Fish and Game. Contract No. P0385106. Arcata, California.



## 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

February 4, 2022

Tina Bartlett  
California Department of Fish and Wildlife  
Northern Region  
601 Locust Street  
Redding, CA 96001

### Long-Term Lake and Streambed Alteration Agreement (LTSAA) No. R1-2010-0093 Annual Report for 2021

Dear Ms. Bartlett:

In accordance with *Section 7.1 Yearly Reporting* of our LTSAA, we are providing our ninth annual report. Section 7.1 states that the District shall provide a copy of the District's HCP annual report for the preceding calendar year by February 28<sup>th</sup>. The report summary shall include maintenance activities and diversion records under the LTSAA for the previous year. The District shall report the amount and species of fish that were killed, entrained, rescued, stranded, and/or impinged by operations. The District also holds an Incidental Take Permit issued by CDFW for *Rana boylei* that is valid through 2024. If any take of this species of frog occurs during operations, it will be included in this report. The District respectfully submits our annual report under our LTSAA for your consideration and review.

Attached is a copy of our 2021 calendar year annual report under our HCP.

The District's maintenance activities are summarized and described on pages one through four of the HCP report. During 2021, there was no take of any listed species while performing the activities outlined in the HCP report.

The District's diversion records for water year 2021 are included with the 2021 HCP annual report and are hereby incorporated into this LTSAA report.

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

Sincerely,

  
John Friedenbach  
General Manager

Enclosure

cc: Monty Larson, Cheri Sanville, DFW w/ encls  
Dale Davidsen and Mario Palmero, HBMWD w/o encls.





## 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

February 4, 2022

Justin Ly

NOAA Fisheries, North Coast Branch, Arcata Field Office

1655 Heindon Road

Arcata, CA 95521- 4573

### Regarding: Habitat Conservation Plan – Annual Report for 2021

Dear Mr. Ly,

In accordance with the requirements of the District's Habitat Conservation Plan (HCP), the District must submit a written report to NMFS each year by February 28<sup>th</sup> outlining the activities which occurred in the preceding calendar year, whether take occurred, and results of monitoring activities. Attached is our annual report for 2021.

The HCP outlined a series of projects, monitoring studies to assess impact and take, and a study to address possible alternatives to maintain flow to the direct diversion facility during the low-flow season. All of the projects and studies identified in the HCP were successfully completed and were addressed in prior-year annual reports. Since completion of the projects and studies, the District's annual report has become quite succinct.

Page one of this report lists the activities which occurred in 2021.

Section 15 of the HCP, and Section 7 of the Implementing Agreement require that we provide a copy of our most recent audited financial statement. We expect to receive our most recent audited financial statement by June 1, 2022. We will forward a copy to you as soon as it is issued and available. The District continues to have the financial ability to fulfill its obligations under the HCP.

If you have questions about the current report, please call our office at 707-443-5018.

Sincerely,

John Friedenbach  
General Manager

### Enclosure

cc: Dan Free, NOAA Fisheries w/ encls  
Jacob Shannon, NCRWQCB w/encls,  
Dale Davidsen and Mario Palmero, HBMWD w/ encls



# 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

February 3, 2022

Ondrea Starzhevskiy, City of Arcata  
Mandy Mager, City of Blue Lake  
Brian Gerving, City of Eureka  
Rick Hanger, Fieldbrook-Glendale CSD  
Michael Montag, Humboldt CSD  
Chris Drop, Manila CSD  
Pat Kaspari, McKinleyville CSD

Dear Municipal Customers:

The purpose of this letter is to transmit information about your domestic water use per the requirements of our Ordinance 16 contracts. The following documents are attached:

- Domestic Water Use Report for CY2021 – Presents total water use and the corresponding Average Daily Water Use for each municipality.
- Moving Five-Year Average Water Use Report for CY2021 – Presents total water use and the corresponding Moving Five-Year Average Water Use for each municipality. It will be used to allocate HBMWD's Drinking Water Treatment Facility costs for fiscal year 2022-23.
- Peak Rate Allocation by Municipality for CY2021 – Presents maximum daily water use by month for each municipality. The contract peak rates will continue to be used to allocate HBMWD's Base Water Facility costs for fiscal year 2022-23.

Information on daily water use has been sent with monthly billing statements on an ongoing basis.

Sincerely,

John Friedenbach  
General Manager



Month	Domestic Water Use for CY2021 (millions of gallons)										Total
	Arcata	Blue Lake	Eureka	Fieldbrook	HBMWD	HCSD	Manila	McK	CSD		
Jan-21	42.732	3.875	87.980	4.877	6.651	23.435	1.642	34.768			205.96
Feb-21	42.930	3.942	92.430	4.274	6.333	23.011	2.399	33.588			208.907
Mar-21	48.589	4.663	110.650	4.232	4.847	26.411	4.832	39.326			243.55
Apr-21	46.495	4.688	94.860	4.713	4.673	25.615	1.128	38.624			220.796
May-21	44.964	4.948	97.090	6.077	6.306	23.475	3.53	39.768			226.158
Jun-21	57.965	6.819	121.100	7.824	4.961	28.186	4.545	50.369			281.769
Jul-21	53.682	7.196	109.450	7.324	6.032	22.837	3.935	45.441			255.897
Aug-21	59.133	7.921	123.350	7.929	7.874	19.952	4.455	51.21			281.824
Sep-21	53.847	6.11	110.820	6.282	9.624	18.174	3.811	44.346			253.014
Oct-21	46.149	5.185	103.410	4.805	6.302	18.619	3.323	37.603			225.396
Nov-21	47.087	5.376	101.410	5.224	5.886	14.640	3.270	41.278			224.171
Dec-21	42.826	5.633	99.930	5.340	4.797	14.117	3.045	36.421			212.109
Total Annual Use	586.399	66.356	1252.480	68.901	74.286	258.472	39.915	492.742			2839.551
Monthly Average Use	48.867	5.530	104.373	5.742	6.191	21.539	3.326	41.062			236.629
Avg Daily Water Use (mgd)	1.611	0.182	3.441	0.189	0.209	0.710	0.110	1.354			7.801

**Notes:**

Eureka meter out for calibration/repair February - March

Average daily water use based on 364 days/year (HBMWD based on 356 days).

Fieldbrook and Blue Lake meters are unique in that Blue Lake's usage is deducted from total usage recorded on Fieldbrook's meter because the Blue Lake meter is downstream from the Fieldbrook meter. When Blue Lake's meter is out for calibration/repair or SCADA signal is out, Fieldbrook's high daily usage will be disregarded for that period and vice versa.

Humboldt Bay Municipal Water District  
 Ordinance 16 - Moving Five-Year Average Water Use - CY 2021

# of Days	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	Moving 5-Yr Avg Daily Use	
											MGD	%
Eureka	1350.535	1429.226	1349.681	1281.090	1252.480	3.720	3.894	3.708	3.510	3.441	3.655	45.146%
Arcata	663.070	659.072	614.836	608.061	586.399	1.827	1.796	1.689	1.666	1.611	1.718	21.218%
Blue Lake	70.599	78.276	69.275	65.072	66.356	0.194	0.213	0.190	0.178	0.182	0.192	2.368%
HCS D	324.639	334.215	335.553	293.229	258.472	0.894	0.911	0.922	0.803	0.710	0.848	10.476%
McK CSD	502.558	522.433	511.415	539.628	492.742	1.384	1.424	1.405	1.478	1.354	1.409	17.405%
FCSD	64.523	57.297	58.683	69.156	68.901	0.178	0.156	0.161	0.189	0.189	0.175	2.159%
Manila CSD	31.979	35.496	35.917	37.781	39.915	0.088	0.097	0.099	0.104	0.110	0.099	1.227%
Total Muni	3007.903	3116.015	2975.360	2894.017	2765.265	8.286	8.491	8.174	7.929	7.597	8.095	100%
HB Retail	84.060	141.112	196.186	96.935	74.286	0.232	0.387	0.539	0.270	0.209	0.39	
Total	3091.963	3257.127	3171.546	2990.952	2839.551	8.518	8.877	8.713	8.199	7.806	8.48	
<u>Notes for 2017 water use</u>												
Blue Lake meter out of service August												
Fieldbrook usage based on Blue Lake meter usage (see note re: Blue Lake meter)												
Average daily water use based on 363 days/year (HBMWD daily use based on 363 days)												
<u>Notes for 2018 water use</u>												
Arcata meter out of service April-May												
HCS D meter out of service January-March												
Manila CSD meter out of service November-December												
Average daily water use based on 367 days/year (HBMWD daily use based on 365 days)												
<u>Notes for 2019 water use</u>												
Manila CSD meter out of service January												
Average daily water use based on 364 days/year (HBMWD daily use based on 364 days)												
<u>Notes for 2020 water use</u>												
Blue Lake meter out for calibration/repair April - July												
Fieldbrook usage based on Blue Lake meter usage (see note re: Blue Lake meter)												
<u>Notes for 2021 water use</u>												
Eureka meter out for service February - March												
Average daily water use based on 364 days/year (HBMWD daily use based on 356 days)												



Humboldt Bay Municipal Water District

Peak Rate Allocation by Municipality

Maximum Daily Use in MGD by Month for the Period January 2021 - December 2021

Month	Eureka	Arcata	McKCS	Blue Lake	FGCSD	HCSD	Manila CSD		
							Manila Town	Jeff Meyer	(4)
Jan-21	3.407	1.76	1.548	0.252	0.25	1.014	0.09	0.003	0.093
Feb-21	3.158	1.642	1.580	0.319	0.233	1.005	0.099	0.006	0.105
Mar-21	3.568	1.659	1.463	0.162	0.192	0.844	0.102	0.002	0.104
Apr-21	3.678	1.774	1.589	0.178	0.25	0.981	0.127	0.001	0.128
May-21	3.817	1.883	1.788	0.214	0.317	1.019	0.154	0.001	0.155
Jun-21	3.971	2.014	1.947	0.265	0.382	0.943	0.162	0.001	0.163
Jul-21	3.981	1.944	1.925	0.261	0.361	0.922	0.153	0.001	0.154
Aug-21	4.094	2.172	2.026	0.303	0.324	0.674	0.155	0.001	0.156
Sep-21	3.986	1.999	1.914	0.241	0.308	0.715	0.152	0.001	0.153
Oct-21	3.774	1.748	1.450	0.305	0.213	1.149	0.142	0.001	0.143
Nov-21	3.676	1.726	1.545	0.244	0.228	0.707	0.112	0.001	0.113
Dec-21	3.963	1.617	1.360	0.415	0.247	0.549	0.113	0.002	0.115
<b>Peak-2021</b>	<b>4.094</b>	<b>2.172</b>	<b>2.026</b>	<b>0.415</b>	<b>0.382</b>	<b>1.149</b>	<b>0.162</b>	<b>0.006</b>	<b>0.163</b>
<b>Contract Peak Rate Allocations</b>	<b>7.0</b>	<b>3.0</b>	<b>2.6</b>	<b>0.4</b>	<b>0.43</b>	<b>2.9</b>			<b>0.15</b>

Notes:

- Ordinance 16 calls for Peak Rate Allocation (PRA) calculations to be based on calendar years.  
Peak Rate Allocation is the maximum number of gallons per calendar day of water to which a customer is entitled by contract.
- Due to a meter malfunction or communication problems, daily data was not available for each day this month.
- Due to a meter malfunction or communication problems, daily data was not available at all this month.
- Maximum daily peaks are not available for all of Manila CSD's water usage.  
Jeff Meyer (formerly Sierra Pacific) is part of MCSD; however their use is not measured on the mainline meter which serves the Town.  
The numbers reflected in the Table for Jeff Meyer represent the Average MGD.
- FGCSD and Blue Lake meter's are unique in that Blue Lake's usage is deducted from total usage recorded on FGCSD meter because the Blue Lake meter is downstream from the FGCSD meter. When Blue Lake meter is out for calibration/repair or SCADA signal is out, FGCSD's high daily usage will be disregarded for that period and vice versa.



## 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

February 4, 2022

Jordan Emery  
Ruth Lake CSD  
PO Box 6  
Mad River, CA 95552-0006

RE: Quagga Prevention Plan and unauthorized access to Ruth Lake

Dear Chair Emery,

As you know, the HBMWD Board is very concerned about Ruth Lake, the source of drinking water for approximately 90,000 residents in Humboldt County. If Quagga mussels were to infest Ruth Lake, this would not only impact the water quality and our infrastructure, it would also impact fishing and recreation. Both of our Districts would be impacted.

HBMWD staff reported that since the August Complex wildfire in 2020, Ruth Lake CSD has had issues with access gates, and that these gates were left open for most of the 2021 season and watercraft may have entered the lake without inspection. We are requesting the gates be closed and locked to prevent unauthorized access to the lake. If the gate arms are unable to be moved to the closed position, then another method to block access must be in place.

There are plans to prevent quagga infestation. We have a joint "Prevention Plan for Quagga and Zebra Mussels at Ruth Lake", updated and approved by the Ruth Lake CSD and Humboldt Bay Municipal Water District Board of Directors in April 2019. Prevention plans are required and approved by the California Department of Fish and Wildlife (Section Code 2302). Not following our CDFW approved Prevention Plan 1) puts our approval status in jeopardy, and 2) impacts our past and future grant funding provided by the Department of Boating and Waterways.

Regulations aside, the HBMWD Board needs to know our Districts have done everything we can to prevent Quagga mussel infestation. Please confirm receipt of this letter and also confirm that Ruth Lake CSD will comply with our request to lock malfunctioning gates, and not leave them open allowing unauthorized access and in violation of the Prevention Plan. Controlling access to prevent infestation is the key.

Thank you,

A handwritten signature in black ink, appearing to read "Sheri Woo".

Sheri Woo  
Board President

Cc: Caitlin Canale, GM RLCSD  
John Friedenbach, GM HBMWD



# CONTINUING BUSINESS

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

To: Board of Directors  
From: John Friedenbach  
Date: February 10, 2022  
Subject: Water Resource Planning (WRP) – Status Report

.....

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

**1) Top-Tier Water Use Options**

**a) Local Sales**

- i) Nordic Aquafarms – They are moving forward with permitting and EIR document. The draft EIR is available for review at: <https://humboldt.gov/3218/Nordic-Aquafarms-Project>. The comment period ends on February 8, 2022.
  - ii) Trinidad Rancheria mainline extension. District and Rancheria Counsels have finalized the mainline extension agreement. Attached for your consideration and possible approval of final agreement between HBMWD and the Trinidad Rancheria.
- The Rancheria continues to move forward with its funding efforts for the project.

**b) Transport**

The Transport Committee met with Congressman Huffman on January 25<sup>th</sup>. Committee members Rupp and Latt will report out about the meeting.

**c) Instream Flow Dedication**

The committee is scheduling a meeting between the committee and NMFS to discuss Operational Decision Process flow chart of flow releases from the hydro plant at Matthews Dam.

Due to Covid, the timeline for grant deliverables is behind schedule. A grant performance request for extension will be submitted to the Wildlife Conservation Board.



## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

## MAINLINE EXTENSION AGREEMENT

**THIS MAIN LINE EXTENSION AGREEMENT** ("Agreement") is entered into as of \_\_\_\_\_, 2022, by and between the **HUMBOLDT BAY MUNICIPAL WATER DISTRICT** ("District"), a California public entity, and the **CHER-AE HEIGHTS INDIAN COMMUNITY OF THE TRINIDAD RANCHERIA** ("Tribe"), a federally recognized Indian Tribe. The District and Tribe may be referred to individually as a "Party" or collectively as the "Parties".

**RECITALS**

1. WHEREAS, the District is a duly formed and existing Municipal Water District, formed pursuant to Division 20 of the California Water Code and providing municipal water services to parcels within its sphere of influence and District boundaries.
2. WHEREAS, the Tribe is a federally recognized Indian tribe acknowledged to have the immunities and privileges available to federally recognized Indian Tribes by virtue of their government-to-government relationship with the United States as well as the responsibilities, powers, limitations, and obligations of such tribes.
3. WHEREAS, the United States government holds lands in the State of California in trust for the benefit of the Tribe over which the Tribe exercises jurisdiction and possesses sovereign governmental powers. The Trinidad Rancheria Trust Land, which is held in trust for the benefit of the Tribe and subject to this Agreement ("Tribe's Lands"), are depicted in **Exhibit A** attached hereto and incorporated herein. The Tribe's Lands are located outside of the District's current boundaries and sphere of influence.
4. WHEREAS, the Tribe intends to further develop the Tribe's Lands, including Tribal facilities and residences that are currently or may be constructed within the Trinidad Rancheria as needed ("Project").
5. WHEREAS, the Tribe has requested that District provide water service to the Project, which will necessitate an extension of the District's water main from the approximate northern portion of the northern boundary of the McKinleyville Community Services District to the Project.
6. WHEREAS, the District has determined that it has available water supply to provide water service to the Project, subject to the Tribe's installation and construction of certain system improvements and other terms and conditions as provided by this Agreement.

## AGREEMENT

NOW, THEREFORE, in consideration of the hereinafter mutual promises and covenants, and for other good and valuable consideration as set forth herein, the receipt and sufficiency of which are expressly acknowledged, the District and the Tribe agree as follows.

**Section 1. Effective Date.** This Agreement shall become effective on the date it is fully executed by the parties. Each party warrants and represents to the other that the person executing this Agreement has the full authority and capacity to execute this Agreement and bind the respective party to the terms hereof.

**Section 2. Regulatory Approvals.**

**2.1 Regulatory Approvals.** The District shall have no obligation under this Agreement unless and until each of the following conditions are satisfied in full by the Tribe (collectively, the "Regulatory Approvals"):

**2.1.1 Local Area Formation Commission Approval.** To the extent required by law, the Tribe understands and agrees that the District shall have no obligation under this Agreement unless and until the extraterritorial extension of water service contemplated hereunder is approved by the Humboldt Local Area Formation Commission ("LAFCo"). The Tribe acknowledges that LAFCo may condition its approval of the extraterritorial extension of water service contemplated hereunder upon the performance of certain actions, including, but not limited to, review under the California Environmental Quality Act ("CEQA").

**2.1.2 County Approval.** The Tribe understands and agrees that the District shall have no obligation under this Agreement unless and until the extraterritorial extension of water service and the improvements contemplated hereunder are approved by the County of Humboldt ("County") as reflected in a final Coastal Development Permit or other final permit as may be required by the County. The Tribe acknowledges that the County may condition its approval of the extraterritorial extension of water service and the improvements contemplated hereunder upon the performance of certain actions, including but not limited to CEQA review.

**2.1.3 State Water Board Approval.** The Tribe understands and agrees that the District shall have no obligation under this Agreement unless and until this Agreement and the extraterritorial extension of water service contemplated hereunder are approved by the California State Water Resources Control Board or the Regional Board, as applicable.

**2.1.4 Bureau of Indian Affairs Approval.** To the extent required by law, the Tribe shall obtain any and all approvals from the Bureau of Indian Affairs that may be required by law to extend the District's water service and required water line extension to the Tribe's Lands, including approval of any easements or other property rights across the Tribe's Lands.

**2.2 Regulatory and Approval Costs.** The Tribe shall pay, either directly or by way of reimbursement to the District, any and all application, processing, or other lawful costs imposed by any



government entities having jurisdiction or approval authority over the Work; provided that the Tribe reserves the right to challenge the imposition of such costs as unlawful. Without limiting the generality of the foregoing, the Tribe shall be responsible for any costs associated with environmental review under applicable laws, including CEQA. In the event the District pays any such costs, the Tribe shall reimburse the District within thirty (30) days of a written demand by the District. The Tribe's obligation under this sub-section applies regardless of whether the regulatory agency approves or denies the application.

### **Section 3. Cost Recovery.**

**3.1. For District Services.** Upon execution of this Agreement, the Tribe agrees to advance to District a deposit in the amount of five thousand dollars (\$5,000) to fund the District engineering, legal and administrative services in connection with District's study and investigation of water service to the Project, plan review, inspection of construction, testing of improvements, and other costs incurred by District in the performance of its duties under this Agreement and otherwise in connection with extending and providing water and service to the Project. District will draw on this deposit to pay or reimburse periodic invoices from the District consultants and to reimburse District for the cost of District staff time and materials. If, before acceptance of the Work (as that term is defined in Section 4), the deposit becomes depleted or 20% or less of the deposit remains, District reserves the right to require additional deposits to cover additional anticipated District costs for such District services incurred by the District for inspecting and reviewing the Work. If any requested deposit or payment is not timely made, District may so notify the Tribe and it will have twenty (20) days to cure the default. If deposit or payment has not been made within the twenty (20)-day period or if the funds become depleted, then District will suspend all services in connection with the Work pending receipt of the deposit or payment. If the deposit or payment remains unpaid for sixty (60) days or more, then District may terminate this Agreement. District will refund to the Tribe any deposit remaining upon termination of the Agreement, without interest. District shall deposit the Tribe's deposits into a special fund for the purpose of paying and reimbursing District costs. Any Tribe deposit remaining upon completion and acceptance of the Work will be refunded, without interest, to the Tribe. If the final total District costs exceed the amount of the deposit(s), the Tribe must pay the difference upon demand and before the District accepts the Work.

**3.2 District Fees.** In addition to any other costs or expenses required by this Agreement, the Tribe shall pay to the District any hookup or meter fees applicable for the Tribe's water connection at the then-current rates, established by the District's Board of Directors in accordance with District Ordinance 13, and not to exceed hookup or meter fees generally applicable to other customers with similarly sized meters.

**Section 4. Plans and Specifications.** The Tribe, at its sole cost and expense, and in consultation with District and the District engineer, will design and prepare detailed plans, specifications and drawings for the construction of the improvements necessary to extend and provide water service to the Project, and will submit them to the District for approval. The plans, specifications, and drawings must comply with all District ordinances, resolutions, rules, regulations, policies, standards and specifications, as well as all

other applicable federal, state and local standards and requirements, whichever are most stringent. The plans, specifications, and drawings, when approved in writing by District and its engineer, will become a part of this Agreement. The improvements necessary to extend and provide water service to the Project, as such improvements are described on the approved plans, specifications and drawings, will be referred to as the "Work." The Tribe may modify the plans, specifications and drawings for the Work prior to or during the course of construction, provided that any modification is approved in advance and in writing by District.

## **Section 5. Construction of Work.**

**5.1. Construction by the Tribe.** The Tribe, at its sole cost and expense, shall furnish, construct and install the Work, and, where necessary, pay the cost of acquiring land or rights-of-way necessary for the construction and installation of the Work. The construction and materials must be in accordance with the provisions of this Agreement; the approved plans, specifications and drawings; District Code, ordinances, resolutions, rules, regulations, policies, standards and specifications; other applicable federal, state and local statutes, regulations, ordinances, codes and other requirements; and standard construction practices.

**5.2. Materials.** Prior to commencing construction of any portion of the Work, the Tribe or its contractor must submit to District a written list of materials, in a form acceptable to District, showing the particular manufacturer and specifications of all materials proposed to be installed by the Tribe. The District will either disapprove with reasons or approve the list of materials. Only materials approved in advance by District may be installed on the Work.

**5.3 Licensed Contractor.** The contractor constructing and installing the Work (the "Contractor") must be licensed pursuant to the California Business and Professions Code to do the Work. No construction can be performed on the Work except by a licensed Contractor approved by District. District may request evidence of qualifications that the Contractor has satisfactorily constructed other projects of like kind and magnitude and comparable difficulty. To the extent required by law, the Tribe and its Contractor, and any contract entered into by the Tribe and its Contractor, must comply with California Labor Code provisions concerning payment of prevailing wage rates, penalties, employment of apprentices, hours of work and overtime, keeping and retention of payroll records, and other requirements applicable to public works projects within the meaning of the Labor Code.

**5.4 Performance Bond.** Prior to commencement of construction of any portion of the Work by the Tribe's Contractor, the Tribe or its Contractor must provide District with a faithful performance bond in a sum equal to no less than 100% of the estimated cost of the Work to be constructed in public or private streets or rights-of-way or on public property ("Performance Bond"). The Performance Bond will be for the purpose of ensuring the proper and timely completion of the Work. In the event of the failure of the Tribe to complete the Work covered by the Performance Bond and District completes construction of such Work or any portion of it, the Tribe or the Tribe's Contractor, and the Tribe's or Contractor's surety under the Performance Bond will be jointly and severally liable to District for the costs of completion, including, but not limited to, management and administrative costs, and engineering, legal



and other costs incurred relating to the completion. District will bill the Tribe and the surety for such costs, which bill must be paid within thirty (30) days of its date. Interest will accrue on any late payment at the rate set forth in California Code of Civil Procedure section 685.010(a) (i.e., ten percent (10%) per annum) or the maximum rate allowed by law, whichever is less.

**5.5 Time for Performance.** The Tribe agrees to commence construction of the Work within six (6) months from the date of receipt of all final Regulatory Approvals, and it will complete construction of the Work within four (4) years from the date of commencement. Time is of the essence of this Agreement. Upon a showing of good cause by the Tribe, District may extend these deadlines. Any extension granted by District may be done without notice to any of the Tribe's sureties, and the extension will not relieve any surety's liability. District also may condition the granting of any extension by requiring acceptable new or amended faithful performance guarantee. If construction of the Work has not been completed and accepted by District within these deadlines, and any extensions, then District may terminate this Agreement; *provided that*, termination shall not be effective until the District sends the Tribe written notice of its intent to terminate this Agreement and the Tribe fails to complete the Work within ninety (90) days of its receipt of the written notice. The Tribe must give District at least forty-eight (48) hours advance notice of the commencement of construction and installation of the Work. Any construction performed without notice to and inspection by District will be subject to rejection.

**5.6 Inspections.** District, may, at its option, inspect and test all or part of the construction or material being used in construction of the Work and the Tribe will provide reasonable assistance in performing all inspection and testing. The inspection and testing of the Work will not relieve the Tribe of its obligation to construct the Work in accordance with the approved plans, specifications and drawings. If all or any portion of the Work, or any materials used in connection with the Work, are found to be defective, substandard or nonconforming, then the Tribe must replace, repair or otherwise remedy the Work to the satisfaction of District, notwithstanding that the Work and materials may have been previously overlooked or inspected by District. The Tribe must pay for the reasonable costs of inspection and testing by District and District's engineer.

**5.7 Final Inspection.** Upon completion of construction of the Work (or any portion of the Work), the Tribe agrees to notify District and request a final inspection of the Work. District will inspect and test the Work to determine whether it meets the requirements of this Agreement. District will not accept any Work that does not satisfy District inspection and testing requirements. Pursuant to section 4.6, above, the Tribe must pay the costs of inspections and tests by District and District's engineer. The Tribe also will be responsible for all reasonable costs incurred in the testing of the Work as needed or required by other governmental agencies having jurisdiction.

**5.8 Termination Prior to Construction.** Notwithstanding anything in this Agreement to the contrary, the Tribe may terminate this Agreement at any time prior to commencement of construction of any portion of the Work by giving written notice to District. After commencement of Work, the Tribe may terminate this Agreement only with the written consent of District, which consent may be given subject

to reasonable conditions as necessary or appropriate to protect the public health, safety, aesthetics or welfare.

**Section 6. Permits, Licenses, and Easements.** The Tribe must obtain, maintain and comply with all applicable federal, state, county and other permits, licenses, approvals, and entitlements, including encroachment permits, that are necessary or appropriate for the Work. The Tribe must give all notices required by and comply with all applicable federal, state, county and other laws, statutes, regulations, codes, ordinances, rules, regulations and policies relating to the construction of the Work. The Tribe agrees to obtain all real property and permanent and temporary easements of a width as determined by District to be necessary for the Work and for ingress and egress to and from the facilities for the purpose of construction, installation, operation, maintenance, repair, removal, replacement and improvement of the Work. All completed Work-related grant deeds, easements and bills of sale must be in a form approved by District.

**Section 7. Transfer of Property and Easements.** For purposes of this Agreement, the "District Owned Improvements" means all the Work excluding the "private water line" beyond (downstream from) the water meter, meter stop and meter box. After District has finally inspected and approved the Work and as a condition precedent to District's acceptance of the Work, the Tribe must deliver conveyance documents (e.g., deeds, easements, bills of sale) satisfactory in form and content as necessary and appropriate to transfer absolute and unencumbered ownership of the completed District-Owned Improvements to District. Title to the District-Owned Improvements and the interests in real property transferred must be good, clear and marketable title and free and clear of all encumbrances, liens or charges, except that to the extent the Work extends into the Tribe's Lands, the Tribe shall consent to the grant of a right of way to the District pursuant to 25 C.F.R. Part 169, to extend for the term of the Will Serve Agreement attached as Exhibit B, and any extensions thereto, for the purpose of maintaining and operating the District-Owned Improvements. The Tribe will obtain and pay any costs of title insurance deemed necessary by District. With or without separate conveyance documents, all right, title and interest of the Tribe in and to the completed District-Owned Improvements shall transfer to District upon District's written notice of acceptance of Work.

**Section 8. Maintenance**

8.1. Prior to District's acceptance of the Work, the Tribe or its Contractor must provide District with a maintenance bond in a sum equal to 50% of the cost of the District-Owned Improvements to be transferred to District by the Tribe ("Maintenance Bond"). The Maintenance Bond is for the purpose of warranting all materials and workmanship furnished pursuant to this Agreement for one year from the date of District's notice of acceptance of the Work.

8.2. The Tribe or its Contractor and/or its surety under the Maintenance Bond must repair or replace to the satisfaction of District all or any portion of the Work that may prove defective in workmanship or materials, ordinary wear and tear excepted, together with any other Work or facilities which may be damaged or displaced in so doing.



8.3. In the event of failure to comply with the above-stated conditions within a reasonable time, District is authorized to have the defect repaired and made good. The Tribe or its Contractor, and the Tribe's or Contractor's surety under the Maintenance Bond will be jointly and severally liable to District for the costs of repair, including, but not limited to, management and administrative costs, and engineering, legal and other costs incurred relating to the repair. District will bill the Tribe and the surety for the costs, which bill must be paid within thirty (30) days of its date. Interest will accrue on any late payment at the rate set forth in California Code of Civil Procedure section 685.010(a) (i.e., ten percent (10%) per annum) or the maximum rate allowed by law, whichever is less.

**Section 9. Tribe Assistance.** The Tribe, both before and after District's acceptance of the Work, will cooperate with District and secure and provide any information, documents or data reasonably requested by District to accept the ownership, operation and maintenance of the Work and implement the transfer of the Work.

**Section 10. Ownership and Operation and Maintenance Responsibilities.** After acceptance of the Work by the District Board of Directors, the District-Owned Improvements shall become the property of District on the date that the Work is accepted by District Board. Upon such date, the Tribe will be deemed to have conveyed and transferred all of its right, title and interest in and to the completed District-Owned Improvements to District. District thereafter will own and be free in every respect to operate, maintain, repair, replace, manage, expand, and improve the District-Owned Improvements, as it deems appropriate. District assumes no obligation as to operation and maintenance of the District-Owned Improvements until such time as it accepts the Work. After District's acceptance of the Work, the Tribe or the successor landowner will continue to own and be responsible for the operation, maintenance, repair and replacement of the portion of the Work not conveyed to District (i.e., the private water line).

**Section 11. Risk of Loss.** Until the date of District's acceptance of the Work, all risk of loss or injury, damage or destruction to the Work shall be upon the Tribe. After the date of the District's acceptance of the Work, and except as provided by the Maintenance Bond and any applicable insurance or indemnification obligation, all risk of loss or injury or destruction to the District-Owned Improvements shall be upon District.

**Section 12. Water Service.** After District gives its notice of acceptance of the Work, it will provide water service to the Project in accordance with the terms and conditions of the Will Serve Agreement, in the form attached hereto as **Exhibit B**. All District utility service will be provided in accordance with District ordinances, resolutions, regulations, rules, policies, and rates and charges, as the same may be amended from time to time. The Tribe shall not, nor shall it allow any person to, use or commence operation of any part of the Work prior to the notice of acceptance of the Work by District, except for construction and testing purposes, without the express written consent of District. District's water service obligation under this Agreement will not exceed the scope of the Project depicted on **Exhibit A** of this Agreement, or exceed the terms and conditions of the Will Serve Agreement attached as **Exhibit B**.

**Section 13. Indemnification and Hold Harmless.**

**13.1 In General.** The Tribe agrees to indemnify, protect, defend and hold harmless District and its officers, employees, engineers, and agents, from any and all claims, demands or charges and from any loss or liability, including all costs, expenses, attorney's fees, litigation costs, penalties, and other fees arising out of or in any way connected with the construction of the Work or the performance or failure to perform under this Agreement by the Tribe, its unelected executive officials, agents, employees, vendors, suppliers, consultants, sub-consultants, sub-subcontractors, anyone employed by any of them or for whose acts they may be liable, or any or all of them ("Claims"), except for Claims arising from the active negligence or willful misconduct of the District and its officers, employees, engineers, or agents or Claims in which the underlying cause, damage, or injuries arise out of or are in any way connected with the District's operation, maintenance, repair, replacement, management, expansion, or modification of the District-Owned Improvements after acceptance of the Work. The parties agree and acknowledge that the Tribe's duties under this section extend to claims, lawsuits and liability of or against District resulting from the alleged failure of the Contractor to comply with any provision of California Labor Code division 2, part 7, chapter 1 (sections 1720-1861) in connection with the construction of the Work by the Tribe's Contractor.

**13.2 Regulatory Approval Claims.** In the event any claim, action, or proceeding is instituted against the District, and/or its officers, agents and employees, by any third party on account of the processing or approval of the Agreement or the extension of water service to the Project (including but not limited to any alleged defect in any environmental review and mitigation) ("Regulatory Claims"), the Tribe shall defend, indemnify and hold harmless the District, and/or its officers, agents and employees, except for liability arising from the active negligence or willful misconduct of the District and its officers, employees, or agents. This obligation is limited to the payment of all costs of defense, any amounts awarded by the Court by way of damages or otherwise, including any attorney fees and court costs. District may elect to participate in such litigation at its sole discretion and at its sole expense. As an alternative to defending any such action, the Tribe may terminate this Agreement by written notice to the District.

**13.3 Survival.** The Tribe's obligations to indemnify and defend shall survive the expiration or earlier termination of this Service Agreement until such time as any Claim or Regulatory Claim against the Indemnified Parties, or any of them, for such matter indemnified hereunder is fully and finally adjudicated to be barred by the applicable statute(s) of limitations.

**Section 14. Insurance.**

14.1. The Tribe or its Contractor at their sole cost and expense must procure and maintain for the duration of this Agreement the following types and limits of insurance:



Type	Limits No Less Than:
Commercial general liability	\$5,000,000/occurrence
Automobile liability	\$5,000,000/accident for bodily injury and property damage
Worker's compensation	Statutory limits
Professional liability	\$2,000,000 per occurrence or claim; \$2,000,000 policy aggregate

14.2. The general and automobile liability policy(ies) must be endorsed (consistent with Cal. Insurance Code section 11580.04) to name District, its officers, employees and agents as additional insureds regarding liability arising out of the Work. The Tribe's or Contractor's coverage will be primary and will apply separately to each insurer subject to a claim or lawsuit, except with respect to the limits of the insurer's liability. District's insurance, if any, will be excess and shall not contribute with the Tribe's or Contractor's insurance.

14.3 Insurance must be placed with insurers with a current A.M. Best's rating of A-:VII or better, unless otherwise acceptable to District.

14.4 The Tribe or its Contractor shall require and verify that all subcontractors maintain insurance meeting all requirements stated herein and the Tribe or its Contractor will ensure that District is an additional insured on insurance required from subcontractors.

14.5 Prior to commencing the Work, the Tribe must provide to District the following proof of insurance: (a) certificate(s) of insurance on ACORD Form 25-S (or insurer's equivalent) evidencing the required insurance coverages; and (b) endorsement(s) on ISO Form CG 2010 (or insurer's equivalent), signed by a person authorized to bind coverage on behalf the insurer(s), certifying the additional insured coverages.

#### **Section 15. Limited Waiver of Sovereign Immunity.**

15.1 By executing this Agreement, the Tribe does not waive, limit, or modify the Tribe's sovereign immunity from unconsented suit, mediation, arbitration, or judicial litigation, except as expressly provided in this Agreement. For purposes of actions based on disputes between the District and the Tribe that arise under or are related to this Agreement or the Work and the enforcement of any judgment or award resulting therefrom obtained in accordance with the terms and conditions set forth herein, the Tribe expressly and irrevocably grants this limited waiver of its right to assert sovereign immunity from suit and consents to be sued in the Superior Court of the State of California in and for the County of Humboldt (referred to herein as the "Applicable Court"). All actions brought pursuant to this limited waiver shall be brought in the Applicable Court, and no other court. No action shall be brought in court pursuant to this limited waiver prior to the observance and implementation of the Dispute Resolution provisions of

Section 16 of this Agreement, which are conditions precedent to the commencement of any such action. Notwithstanding anything stated herein to the contrary, this limited waiver of sovereign immunity is limited solely to disputes arising under this Agreement and does not apply to any other matter, party, or dispute; and is further limited solely to claims for injunctive relief to enforce the terms of this Agreement, specific performance of this Agreement, declaratory relief to construe the terms of this Agreement, and actual damages for breach of the terms of this Agreement, and for civil actions to enforce any judgment or award based on any such claims adjudicated by the Applicable Court.

15.2 The waivers and consents to jurisdiction expressly provided for under this section shall extend to all civil actions authorized by this Section 15, including, but not limited to, actions to compel any proceeding herein, any action to enforce or execute on any judgment rendered in any such proceedings, and any appellate proceeding emanating from any such proceedings. The Tribe does hereby unconditionally waive any claim or defense of exhaustion of tribal administrative or judicial remedies for civil actions authorized by this Section 15.

15.3 Prior to the effective date of this Agreement, the Tribe shall adopt a resolution, in accordance with tribal law, that expressly waives its sovereign immunity as stated in this Section 15, and authorizes the Tribal Chairman, or other tribal member or entity authorized by tribal law to waive sovereign immunity as set forth in this Section 15, which waiver shall be irrevocable and binding on the Tribe for the term of this Agreement and thereafter for the period of the applicable statute of limitations for any actions described in Sections 15.1 and 15.2, notwithstanding the expiration or sooner termination of this Agreement.

**Section 16. Dispute Resolution.** The Parties shall make their best efforts to resolve disputes that arise under this Agreement by good faith negotiations whenever possible. Therefore, except for the right of either party to seek injunctive relief against the other when circumstances are deemed to require immediate relief, the Tribe and the District shall first meet and confer in good faith for the purpose of resolving disputes and to foster a spirit of cooperation and efficiency in the administration and monitoring of the performance of and compliance with the terms, provisions, and conditions of this Agreement, as follows:

- (a) Either party shall give the other, as soon as possible after the event giving rise to the concern, a written notice setting forth the facts giving rise to the dispute and with specificity, the issues to be resolved.
- (b) The other party shall respond in writing to the facts and issues set forth in the notice within fifteen (15) calendar days of receipt of the notice, unless both parties agree in writing to an extension of time.



- c) The parties' respective executive officers shall meet and confer in good faith by telephone or in person in an attempt to resolve the dispute through negotiation within thirty (30) calendar days after receipt of the notice set forth in subdivision (a), unless both parties agree in writing to an extension of time.
- d) Disputes that are not otherwise resolved, may be resolved in the Superior Court of California in and for the County of Humboldt in accordance with the terms and conditions set forth in Section 15 of this Agreement.
- e) By entering into this Agreement, the Tribe acknowledges and agrees that the Government Claims Act (the "Act"), including California Government Code Section 814, applies to the District. No action, claim or proceeding may be brought against any member of the Board of Directors or District public official, elected official, appointed official or employee, employee or agent to enforce this Agreement.

**Section 17. Notices.**

All notices required or provided for under this Agreement shall be in writing and delivered in person or sent by certified mail, postage prepaid, return receipt requested, to the principal offices of the District and Tribe. Notice shall be effective on the date delivered in person, or on the date when the postal authorities indicated that the mailing was delivered to the address of the receiving party indicated below:

Notice to the District:	Humboldt Bay Municipal Water District Attn: District General Manager 828 7th St, Eureka, CA 95501
With courtesy copy to:	friedenbach@hbmwd.com
Notice to the Tribe:	Cher-Ae Heights Indian Community Of The Trinidad Rancheria Attn: Chief Executive Officer 1 Cher-Ae Lane, Trinidad, CA 95570
With courtesy copy to:	jhostler@trinidadrancheria.com

Such written notices, demands, correspondence and communications may be sent in the same manner to such other persons and addresses as either the District and/or Tribe may from time to time designate by mail as provided in this section. The District and/or Tribe may change its address by giving notice in writing to other party and thereafter notices shall be delivered or sent to such new address.

**Section 18. No Third-Party Beneficiaries.** Nothing in this Agreement, whether express or implied, shall be construed to give any person, other than the parties hereto, any legal or equitable right, remedy, claim or benefit under or in respect of this Agreement, or any provision contained within such Agreement or any right to purport to enforce any provision hereof or to claim any right hereunder.

**Section 19. Amendments.** This Agreement may be amended only by mutual written agreement of the parties hereto which writing must be duly executed by the lawfully authorized officers or officials of each party.

**Section 20. Assignment.** Neither the Tribe or District shall assign any of its rights nor transfer any of its obligations under this Agreement without the prior written consent of the other party hereto and any attempt to so assign or so transfer without such consent shall be void and without legal effect and shall constitute grounds for termination.

**Section 21. Section Headings.** The headings of the several sections, and any table of contents appended hereto, shall be solely for convenience of reference and shall not affect the meaning, construction or effect hereof.

**Section 22. Incorporation by Reference.** Any and all exhibits to this Agreement are incorporated herein by reference.

**Section 23. Remedies Not Exclusive.** Subject to the terms and conditions of Section 15 of this Agreement, no remedy herein conferred upon or reserved to either party hereto is intended to be exclusive of any other remedy or remedies, and each and every such remedy, to the extent permitted by law, shall be cumulative and in addition to any other remedy given hereunder or now or hereafter existing at law or in equity or otherwise.

**Section 24. Time is of the Essence.** Time is of the essence in this Agreement and each covenant and term is a condition herein.

**Section 25. Waiver of Default.** No delay or omission to exercise any right or power arising upon the occurrence of any event of default shall impair any such right or power or shall be construed to be a waiver of any such default or an acquiescence therein; and every power and remedy given by this Agreement shall be exercised from time to time and as often as may be deemed expedient in the sole discretion of either party hereto.

**Section 26. Entire Agreement and Amendment.** In conjunction with the matters considered herein, this Agreement contains the entire understanding and agreement of the District and Tribe and there have been no promises, representations, agreements, warranties or undertakings by any of the parties hereto, either oral or written, of any character or nature hereafter binding except as set forth herein. This Agreement may be altered, amended or modified only by an instrument in writing, executed by the District and Tribe to this Agreement and by no other means. Each party hereto waives their future right to claim, contest or assert that this Agreement was modified, canceled, superseded, or changed by any oral agreements, course of conduct, waiver or estoppels.

**Section 27. Successors and Assigns.**

All representations, covenants and warranties set forth in this Agreement, by or on behalf of, or for the benefit of any or all of the parties hereto, shall be binding upon and inure to the benefit of such party, its successors and assigns.



**Section 28. Compliance with Law.**

Both parties hereto shall, at their sole cost and expense, comply with all applicable tribal, county, state and federal ordinances and statutes now in force or which may hereafter be in force with regard to this Agreement.

**Section 29. California Law.**

Federal law and the laws of the State of California shall govern this Agreement. Any litigation regarding this Agreement or its contents shall be filed in the Superior Court of the State of California County of Humboldt. Except to the extent provided in the Limited Waiver of Sovereign Immunity in Article VI of this Agreement, nothing herein shall extend the jurisdiction of the State of California, the District, or any other local government over the Tribe or lands held by the United States in trust for the Tribe.

**Section 30. Execution in Counterparts.**

This Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the parties shall preserve undestroyed, shall together constitute one and the same instrument.

**CHER-AE HEIGHTS INDIAN COMMUNITY OF THE TRINIDAD RANCHERIA**

\_\_\_\_\_  
\_\_\_\_\_, Tribal Chairperson

\_\_\_\_\_  
Date

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

\_\_\_\_\_  
Sherri Woo, President of the Board of Directors

\_\_\_\_\_  
Date

**EXHIBIT LIST:**

- Exhibit A – Depiction of the Tribe’s Land and Project
- Exhibit B – Will Serve Agreement

Exhibit A

FOLLOWS THIS PAGE

DRAFT





Wethaven Trust Land

Baker Ranch

Trinidad Rancheria Trust Land

Legend and scale information:

- North arrow pointing up with the letter 'N' above it.
- A white rectangular box with a black border, labeled "Federal Trust Land Boundary".
- A scale bar with markings at 0, 375, 750, and 1,500 Feet.

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



**Exhibit B****WILL SERVE AGREEMENT**

**THIS WILL SERVE AGREEMENT** (“Service Agreement”) is entered into as [TO BE INSERTED ON THE EFFECTIVE DATE], by and between the **HUMBOLDT BAY MUNICIPAL WATER DISTRICT** (“District”), a California public entity, and the **CHER-AE HEIGHTS INDIAN COMMUNITY OF THE TRINIDAD RANCHERIA** (“Tribe”), a federally recognized Indian Tribe. The District and Tribe may be referred to individually as a “Party” or collectively as the “Parties”.

**RECITALS**

1. WHEREAS, the District is a duly formed and existing Municipal Water District, formed pursuant to Division 20 of the California Water Code and providing municipal water services to parcels within its sphere of influence and District boundaries.
2. WHEREAS, the Tribe is a federally recognized Indian tribe eligible for the special programs and services provided by the United States to Indians and possessing inherent powers of self-government.
3. WHEREAS, reference is made hereto to that written Mainline Extension Agreement to which this Service Agreement is attached as Exhibit B (“Mainline Extension Agreement”). The Recitals set forth in the Mainline Extension Agreement are hereby incorporated herein by this reference. All capitalized terms not otherwise defined in this Service Agreement shall be defined as stated in the Mainline Extension Agreement.
4. WHEREAS, subject to the terms and conditions of this Service Agreement, the District agrees to provide water service to the Project.

**AGREEMENT**

NOW, THEREFORE, in consideration of the hereinafter mutual promises and covenants, and for other good and valuable consideration as set forth herein, the receipt and sufficiency of which are expressly acknowledged, the District and the Tribe agree as follows.

**Article I. Effective Date and Condition Precedent**

**Section 1.1 Effective Date.** This Service Agreement shall be become effective following acceptance of the Work by the District as stated in the Mainline Extension Agreement. Each party warrants and represents to the other that the person executing this Service Agreement has the full authority and capacity to execute this Service Agreement and bind the respective party to the terms hereof.

**Section 1.2 Condition Precedent.** The District shall have no obligation under this Service Agreement unless and until the District has accepted the Work in the manner required by the Mainline Extension Agreement.



**Article II. Water Service****Section 2.1 Water Service**

- (a) Subject to all applicable ordinances of the District and state and federal law, the District agrees to provide water service to the Project by way of a single master meter with a single [TO BE INSERTED UPON APPROVAL OF THE PLANS AND SPECIFICATIONS]-inch (\_\_\_") connection ("Master Meter") located in the location set forth in the approved plans and specifications, as described in Section 4 of the Mainline Extension Agreement. Except as expressly set forth in this Service Agreement, the Tribe shall not perform any work, alterations, or improvements to the Master Meter without the expressed prior written approval of the District's General Manager.
- (b) Subject to the expressed conditions stated in **Exhibit 1**, the District shall supply water to Master Meter in accordance with the flow and capacity specifications set forth in **Exhibit 1**, hereto and incorporated herein. The District shall have no obligation under this Service Agreement to increase the capacity or flow in excess of the limits set forth in **Exhibit 1** regardless of future development on the Tribe's Land. By mutual written agreement, the District and the Tribe may alter the flow and capacity specifications set forth in **Exhibit 1**. The Tribe warrants and represents to the District that the flow and capacity specifications set forth in **Exhibit 1**, hereto, are satisfactory for its intended and contemplated development plans.
- (c) At its sole cost and expense, the Tribe will design, construct, own, maintain, and be solely responsible for the construction, operation, and maintenance of all water conveyance infrastructure which are downstream of the Master Meter, including, but not limited to, any and all pipes, connections, meters, fire hydrants or other fire suppression equipment, or other infrastructure to deliver water from the Master Meter to the individual connections within the Project. The District's sole obligation is to supply a flow of water to the Master Meter in accordance with and subject to the conditions stated in **Exhibit 1**, and the District shall have no responsibility whatsoever to construct, operate, repair, inspect, or maintain water conveyance infrastructure downstream of the Master Meter.
- (d) Notwithstanding anything to the contrary in this Service Agreement, the Tribe shall, at its sole cost and expense, install, inspect, maintain, test, and report on the back flow prevention system as set forth in **Exhibit 1**, hereto. The Parties understand and agree that the Tribe's strict performance with all requirements set forth in **Exhibit 1** is a material term of this Service Agreement and is necessary for the safe, lawful, and efficient operation of the District's ability to deliver water to the Project and to other parcels within the District's boundaries. The District may discontinue the flow of water to the Master Meter, with or without prior notice to the Tribe, if the Tribe fails to comply with the back flow prevention regulations set forth in **Exhibit 1**, hereto.
- (e) The District assumes no responsibility, and the Tribe expressly releases the District from, loss or damage due to lack of water pressure, either high or low, and merely agrees to furnish such quantities and pressures as are available in its general distribution system. Water availability is subject to shut downs or variations required by the operations or the systems.

**Section 2.2 Payment of User Fees.** The Tribe shall pay user fees, which fees shall be passed and approved in accordance with California law, including Proposition 218, and shall not exceed the user fees applicable to similarly situated users, - for water provided to the Master Meter in accordance with applicable District Resolution and Ordinances, as adopted from time-to-time by the District's Board of Directors.

### **Article III. Term**

**Section 3.1. Term.** This Service Agreement shall commence on the Effective Date and thereafter continue in full force and effect for a period of fifty (50) years, unless terminated in accordance with the terms of this Service Agreement ("Initial Term"). Following the Initial Term, this Service Agreement shall perpetually be automatically renewed for successive six (6) year terms thereafter (each a "Renewal Term") until and unless either Party provides the other Party with three hundred and sixty-five (365) days prior written notice to the end of the Initial Term or the Renewal Term. The Initial Term and the Renewal Term are referred to collectively herein as the Term.

### **Article IV. Obligations Of District; Indemnity**

**Section 4.1. Exclusive Responsibility to Deliver Water Downstream of Master Meter.**

(a) The Parties acknowledge, understand and agree that the District's responsibility under this Service Agreement is to deliver water to the Master Meter in accordance with the technical specifications set forth in **Exhibit 1**, hereto, and applicable local, state, and federal law. Because of the sovereign and unique characteristics of the Tribe's Land, which are held in trust by the United States and generally not subject to local control, the Tribe specifically and exclusively undertakes the responsibility and cost to deliver water downstream of the Master Meter to any and all individual connections within the Project.

(b) The Tribe shall have the sole and exclusive responsibility to supply, regulate, invoice, and collect any and all charges for water service to users downstream of the Master Meter within the Project. The Tribe's obligation to pay the District for water supplied to the Master Meter is not contingent upon or in any way affected by the Tribe's ability to collect user charges within the Project area.

(c) Nothing in this Service Agreement shall entitle or permit the Tribe to use water from the Master Meter to service any connection not located on the Project or not located on the Tribe's Land.

**Section 4.2. No Contractual Relationship with Residents.**

The Parties acknowledge, understand and agree that this Service Agreement does not create, and shall not be construed to create, any contractual or other relationship between the District any person, user,



or resident in the Project. No person residing within the Project shall be a third-party beneficiary of this Service Agreement.

**Section 4.3. Indemnity.**

(a) Definitions. For purposes of this Section 4.3, "Indemnified Parties" shall mean: the District, and all of its officials, directors, representatives, employees, consultants, agents, successors, and assigns. For purposes of this Section 4.3, "Claim" and "Claims" shall include claims, demands, obligations, damages, actions, causes of action, suits, demands for arbitration, losses, judgments, fines, penalties, liabilities, costs, and expenses (including, without limitation, fees, costs, and other disbursements to attorneys, experts, consultants, or other professionals) of every kind or nature whatsoever that may arise from or in any manner related (directly or indirectly) to the supply of water and water service provided by the Tribe downstream of the Master Meter to any individual connection within the Project, including, but not limited to, any negligent and/or willful acts, errors, and/or omissions of the Tribe, its principals, officers, agents, employees, vendors, suppliers, consultants, sub-consultants, sub-subcontractors, anyone employed by any of them or for whose acts they may be liable, or any or all of them, regardless of any passive negligence or strict liability of an Indemnified Party.

(b) Extent of Indemnification. To the fullest extent permitted by law, Tribe shall indemnify and hold harmless the Indemnified Parties, and each of them, from and against any and all Claims. *Provided that*, notwithstanding the foregoing, the Tribe shall not be obligated under this Service Agreement to indemnify, including the cost to defend, the Indemnified Parties for Claims arising out of, pertaining to, or relating to the active negligence or willful misconduct of the Indemnified Parties.

(c) Duty to Defend. Tribe shall, at its sole cost and expense and with legal counsel approved by the District (which approval shall not be unreasonably withheld), defend the Indemnified Parties, and each of them, from any Claims for which Tribe is bound to indemnify the Indemnified Parties pursuant to Section 4.3. Notwithstanding the foregoing, the Tribe shall not be obligated to pay costs and expenses for legal counsel in excess of the prevailing rates for such costs and expenses in the County of Humboldt. The duty to defend is wholly independent of and separate from the duty to indemnify, and such duty to defend exists regardless of any ultimate liability of the Tribe. Such defense obligation shall arise immediately upon presentation of a Claim and written notice of such Claim being provided to the Tribe.

(d) Survival of Obligation. The Tribe's obligations to indemnify and defend shall survive the expiration or earlier termination of this Service Agreement until such time as any Claim against the Indemnified Parties, or any of them, for such matter indemnified hereunder is fully and finally adjudicated to be barred by the applicable statute(s) of limitations.

**Article V. Limited Waiver Of Sovereign Immunity**  
**And Government Claims Act Applicability To District; Dispute Resolution**

**Section 5.1 Limited Waiver of Sovereign Immunity.**

(a) By executing this Service Agreement, the Tribe does not waive, limit, or modify the Tribe's sovereign immunity from unconsented suit, mediation, arbitration, or judicial litigation, except as expressly provided in this Service Agreement. For purposes of actions based on disputes between the District and the Tribe that arise under or are related to this Service Agreement and the enforcement of any judgment or award resulting therefrom obtained in accordance with the terms and conditions set forth herein, the Tribe expressly and irrevocably grants this limited waiver of its right to assert sovereign immunity from suit and consents to be sued in the Superior Court of the State of California in and for the County of Humboldt (referred to herein as the "Applicable Court"). All actions brought pursuant to this limited waiver shall be brought in the Applicable Court, and no other court. No action shall be brought in court pursuant to this limited waiver prior to the observance and implementation of the Dispute Resolution provisions of Section 5.3 of this Service Agreement, which are conditions precedent to the commencement of any such action. Notwithstanding anything stated herein to the contrary, this limited waiver of sovereign immunity is limited solely to disputes arising under this Service Agreement and does not apply to any other matter, party, or dispute; and is further limited solely to claims for injunctive relief to enforce the terms of this Service Agreement, specific performance of this Service Agreement, declaratory relief to construe the terms of this Service Agreement, and actual damages for breach of the terms of this Service Agreement, and for civil actions to enforce any judgment or award based on such claims adjudicated by the Applicable Court.

(b) The waivers and consents to jurisdiction expressly provided for under this section shall extend to all civil actions authorized by this Section 5.1, including, but not limited to, actions to compel any proceeding herein, any action to enforce or execute on any judgment rendered in any such proceedings, and any appellate proceeding emanating from any such proceedings. The Tribe does hereby unconditionally waive any claim or defense of exhaustion of tribal administrative or judicial remedies for civil actions authorized by this Section 5.1.

(c) Prior to the effective date of this Service Agreement, the Tribe shall adopt a resolution, in accordance with tribal law, that expressly waives its sovereign immunity as stated in this Section 5.1, and authorizes the Tribal Chairman, or other tribal member or entity authorized by tribal law to waive sovereign immunity as set forth in this Section 5.1, which waiver shall be irrevocable and binding on the Tribe for the term of this Service Agreement and thereafter for the period of the applicable statute of limitations for any actions described in Sections 5.1(a) and (b), notwithstanding the expiration or sooner termination of this Service Agreement.

#### **Section 5.2 No Third Party Beneficiaries.**

(a) In addition to Section 4.2 of this Service Agreement, no provision of this Service Agreement or any waiver of sovereign immunity contained herein shall provide or create any third-party beneficiary rights or any other rights of any kind in any Person other than the District and the Tribe, and, all provisions of the Service Agreement will be personal and solely between the District and the Tribe. Nothing in this Service Agreement, whether express or implied, shall be construed to give any Person, other than the Parties hereto, any legal or equitable right, remedy, claim or benefit under or in respect of



this Service Agreement, or any provision contained within such Service Agreement or any right to purport to enforce any provision hereof or to claim any right hereunder.

(b) Solely for the purpose of this section, "Person" shall include any individual person and any governmental entity or legal entity, including, without limitation, corporations, limited liability companies, partnerships or associations or any other entity of any kind or type.

**Section 5.3 Dispute Resolution.** The Parties shall make their best efforts to resolve disputes that arise under this Service Agreement by good faith negotiations whenever possible. Therefore, except for the right of either party to seek injunctive relief against the other when circumstances are deemed to require immediate relief, the Tribe and the District shall first meet and confer in good faith for the purpose of resolving disputes and to foster a spirit of cooperation and efficiency in the administration and monitoring of the performance of and compliance with the terms, provisions, and conditions of this Service Agreement, as follows:

- (a) Either party shall give the other, as soon as possible after the event giving rise to the concern, a written notice setting forth the facts giving rise to the dispute and with specificity, the issues to be resolved.
- (b) The other party shall respond in writing to the facts and issues set forth in the notice within fifteen (15) calendar days of receipt of the notice, unless both parties agree in writing to an extension of time.
- (c) The parties' respective executive officers shall meet and confer in good faith by telephone or in person in an attempt to resolve the dispute through negotiation within thirty (30) calendar days after receipt of the notice set forth in subdivision (a), unless both parties agree in writing to an extension of time.
- (d) Disputes that are not otherwise resolved, may be resolved in the Superior Court of California in and for the County of Humboldt in accordance with the terms and conditions set forth in this Article 5 of this Service Agreement.

**Section 5.4 Government Claims Act.** By entering into this Service Agreement, the Tribe acknowledges and agrees that the Government Claims Act (the "Act"), including California Government Code Section 814, applies to the District. No action, claim or proceeding may be brought against any member of the Board of Directors or District public official, elected official, appointed official or employee, employee or agent to enforce this Service Agreement.

#### Article VI. Miscellaneous

**Section 6.1 Notices.** All notices required or provided for under this Service Agreement shall be in writing and delivered in person or sent by certified mail, postage prepaid, return receipt requested, to the principal offices of the District and Tribe. Notice shall be effective on the date delivered in person, or on

the date when the postal authorities indicated that the mailing was delivered to the address of the receiving party indicated below:

Notice to the District: Humboldt Bay Municipal Water District  
Attn: District General Manager  
828 7th St, Eureka, CA 95501

With courtesy copy to: [friedenbach@hbmwd.com](mailto:friedenbach@hbmwd.com)

Notice to the Tribe: Cher-Ae Heights Indian Community Of The Trinidad  
Rancheria  
Attn: Chief Executive Officer  
1 Cher-Ae Lane, Trinidad, CA 95570

With courtesy copy to: [jhostler@trinidadrancheria.com](mailto:jhostler@trinidadrancheria.com)

Such written notices, demands, correspondence and communications may be sent in the same manner to such other persons and addresses as either the District and/or Tribe may from time to time designate by mail as provided in this section. The District and/or Tribe may change its address by giving notice in writing to other party and thereafter notices shall be delivered or sent to such new address.

**Section 6.2 [Intentionally Omitted]**

**Section 6.3 Amendments.** This Service Agreement may be amended only by mutual written agreement of the parties hereto which writing must be duly executed by the lawfully authorized officers or officials of each party.

**Section 6.4 Assignment.** Neither the Tribe or District shall assign any of its rights nor transfer any of its obligations under this Service Agreement without the prior written consent of the other party hereto and any attempt to so assign or so transfer without such consent shall be void and without legal effect and shall constitute grounds for termination.

**Section 6.5 Section Headings.** The headings of the several sections, and any table of contents appended hereto, shall be solely for convenience of reference and shall not affect the meaning, construction or effect hereof.

**Section 6.6 Incorporation by Reference.** Any and all exhibits to this Service Agreement are incorporated herein by reference.

**Section 6.7 Remedies Not Exclusive.** Subject to the terms and conditions of Section 5.1 of this Service Agreement, no remedy herein conferred upon or reserved to either party hereto is intended to be exclusive of any other remedy or remedies, and each and every such remedy, to the extent permitted by law, shall be cumulative and in addition to any other remedy given hereunder or now or hereafter existing at law or in equity or otherwise.



**Section 6.8 Time is of the Essence.** Time is of the essence in this Service Agreement and each covenant and term is a condition herein.

**Section 6.9 Waiver of Default.** No delay or omission to exercise any right or power arising upon the occurrence of any event of default shall impair any such right or power or shall be construed to be a waiver of any such default or an acquiescence therein; and every power and remedy given by this Service Agreement shall be exercised from time to time and as often as may be deemed expedient in the sole discretion of either party hereto.

**Section 6.6 Entire Agreement and Amendment.** In conjunction with the matters considered herein, this Service Agreement contains the entire understanding and agreement of the District and Tribe and there have been no promises, representations, agreements, warranties or undertakings by any of the parties hereto, either oral or written, of any character or nature hereafter binding except as set forth herein. This Service Agreement may be altered, amended or modified only by an instrument in writing, executed by the District and Tribe to this Service Agreement and by no other means. Each party hereto waives their future right to claim, contest or assert that this Service Agreement was modified, canceled, superseded, or changed by any oral agreements, course of conduct, waiver or estoppels.

**Section 6.7 Successors and Assigns.** All representations, covenants and warranties set forth in this Service Agreement, by or on behalf of, or for the benefit of any or all of the parties hereto, shall be binding upon and inure to the benefit of such party, its successors and assigns.

**Section 6.8 Compliance with Law.** Both parties hereto shall, at their sole cost and expense, comply with all applicable tribal, county, state and federal ordinances and statutes now in force or which may hereafter be in force with regard to this Service Agreement.

**Section 6.9 California Law.** Federal law and the laws of the State of California shall govern this Service Agreement. Any litigation regarding this Service Agreement or its contents shall be filed in the Superior Court of the State of California County of Humboldt. Except to the extent provided in the Limited Waiver of Sovereign Immunity in Article V of this Service Agreement, nothing herein shall extend the jurisdiction of the State of California, the District, or any other local government over the Tribe or lands held by the United States in trust for the Tribe.

**Section 6.10 Execution in Counterparts.** This Service Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the parties shall preserve undestroyed, shall together constitute one and the same instrument.

**CHER-AE HEIGHTS INDIAN COMMUNITY OF THE TRINIDAD RANCHERIA**

\_\_\_\_\_  
\_\_\_\_\_, Tribal Chairperson

\_\_\_\_\_  
Date

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

\_\_\_\_\_  
\_\_\_\_\_, President of the Board of Directors

\_\_\_\_\_  
Date

**EXHIBIT LIST**

Exhibit 1 – Technical Specifications

DRAFT



Exhibit 1

[TO BE INSTERED AFTER APPROVAL OF PLANS AND SPECIFICATIONS FOR MAINLINE WORK]

DRAFT

# Marin water agencies explore new sources of supply

Marin Independent Journal



Water rushes down the spillway at Peters Dam at Kent Lake near Lagunitas, Calif., on Jan. 6, 2022. Recent winter rains have filled the reservoir to its limit. (Douglas Zimmerman/Special to the Marin Independent Journal)

By **WILL HOUSTON** | [whouston@marinij.com](mailto:whouston@marinij.com) |  
January 30, 2022 at 5:10 p.m.

After facing critical water shortages last year, Marin County's two largest water agencies are exploring new supply options.

Connecting to other water agencies, desalination, capturing more rainwater and raising existing dams are among the options being explored by Marin Municipal Water District, which serves 191,000 residents in central and southern Marin, and the North Marin Water District, which serves about 62,000 residents in Novato and West Marin.

The two agencies met this month to discuss what new sources of supply could be added.

While recent rainfall has provided a short reprieve, both districts said they must plan for unpredictable rainfall, especially in the face of climate change.



Jay Lund, co-director of the Center for Watershed Sciences at the University of California, Davis, said most of the easy options for adding new sources of water have already been implemented. As a result, any new sources will likely require a more rigorous review and come at a higher price.

“As we look forward into the future, things get increasingly expensive and increasingly awkward in terms of regulations and logistics,” Lund said. “I think the state is going to understand this, that Marin is not going to be the only place that has these problems. I think people are going to have to be understanding over time. I think it will be a mix of things done over time, not just expanding water supplies and water sources but also further efforts to reduce water use.”

The Marin Municipal Water District, which faced the possibility last year of depleting its local reservoirs by this summer, plans to hold three public workshops between March and June to discuss what sources of supply should be considered and prioritized. From these meetings, the district plans to draft a report with the aid of a consultant detailing the various pros and cons of the options.

“I think we have to have absolute bluntness about the challenges and opportunities so that we can really weigh what these options are,” board member Monty Schmitt said during the board’s Jan. 18 discussion.

District staffers said their intent is to explore a wide range of options. Some of these have already been studied or are being considered, such as a pipeline over the Richmond-San Rafael Bridge; desalination; buying more water from Sonoma County during the rainy season; groundwater banking; expanding the recycled water system; and more water use restrictions for landscaping and development. Other options that have not received as much attention include dredging local reservoirs or raising dams; fog capture; selective removal of vegetation to increase runoff into reservoirs; and cloud seeding to promote more rainfall.

The district has about a two-year supply of water in its seven local reservoirs, which provide about 75% of its supply. The other 25% comes from Russian River water imports from the Sonoma Water agency.

The district has not increased reservoir supplies since it created the Soulajule Reservoir and doubled the size of the Kent Lake reservoir in the early 1980s. At the Jan. 18 meeting, some district board members were surprised to hear staff proposing the option of raising dams.

“It just feels like a very significant shift from what we’ve been hearing from management in the past 12 years,” board member Cynthia Koehler said.

One of the primary reasons the district has not considered expanding reservoir storage stems from a 1995 state order. The order requires about half of the new water supply

built at Kent Lake be released into Lagunitas Creek for the benefit of endangered coho salmon, threatened steelhead trout and other species. A similar order is in place for Soulajule Reservoir.

While the 1995 order does not address future reservoir expansion, staff said there had been a reluctance to open the door on water rights because of the possibility of the state imposing more restrictions. While acknowledging this would be uncharted territory, staff said it is at least worth looking into.

“We really do just feel like we need to explore it and not just accept the historical reference that it’s not going to go well for us,” Paul Sellier, the district operations director, told the board.

Larry Russell, the board president, said it is important to know that taking this step would be like “walking on eggshells.”

“Let’s not get our users all fired up that we’ve got a door that’s going to open here because it may slam on our fingers harder than we wish,” Russell said.

Larkspur resident James Holmes said the district should make every effort to free itself from what he called a “Draconian” order.

“This board should not treat the terrible 1995 order as the immutable barrier but rather as an obstacle to be overcome and overcome as quickly as possible,” Holmes told the board.

Another option the district is considering is pumping water out of its second-smallest reservoir, Phoenix Lake, which has issues with sedimentation and low alkalinity. The lake holds about a half-percent of the district’s water supply.

Rather than pumping that water directly to the Bon Tempe Treatment Plant, the district would pump the water into the nearby Bon Tempe Reservoir, where it would be diluted and then treated.

Board member Larry Bragman said that as the district considers larger projects, such as a pipeline over the Richmond-San Rafael Bridge, he said he is “very much interested in increasing the efficiency of what we have.”

For desalination, district staff said they will be able to rely on past studies of a proposed plant along San Francisco Bay near San Rafael. The district had previously tested pilot desalination plants in the early 1990s and early 2000s but chose not to proceed with the project in 2010.

Other options include partnering with neighboring water agencies in the Bay Area to create a desalination plant that could provide water for the region.



One obstacle the district has in building its own desalination plant is a 2010 voter-approved measure that requires voter approval for financing and construction of a plant. Staff said the board could direct staff to look into rescinding this requirement.

District customer Paul Deuter said the board needs to set a specific target on how much more water it wants to add.

"I think part of the problem is we kind of don't know how much we need," Deuter told the board.

Schmitt, who has called for a three-year water supply, agreed.

"Without knowing what our goal is, it's boundless," Schmitt said during the meeting. "It makes it very hard to determine whether there is one project that meets our needs.

At North Marin Water District, a study is already underway to identify new sources of water, including increasing the capacity of its Stafford Lake reservoir and capturing more rainfall from nearby canyons.

The district's 60,000 residents in the greater Novato area get 75% of their water from the Sonoma Water imports with the remaining 25% coming from the district's only reservoir, Stafford Lake. Stafford Lake would have gone dry last summer had the district not purchased and pumped in Russian River water during the winter of 2020-2021.

The study by the West Yost engineering firm recommended options such as installing a slide gate on the spillway at Stafford Lake dam, which would allow it to hold an additional 700 acre-feet of water, or about 16% of the lake's current capacity of 4,300 acre-feet. An acre-foot is the amount of water it takes to submerge 1 acre under a foot of water.

That project is estimated to cost about \$710,000 to build, or about \$1,000 per acre-foot of new supply, as opposed to dredging the lake, which was estimated to add 550 acre-feet of water at a cost of \$26.7 million, or \$48,500 per acre-foot of new supply.

But this project's effectiveness in bolstering supplies would rely on the district receiving rainfall. Another option presented to the district is capturing rainfall in the nearby Leveroni and Bowman canyons just north of the lake. The study found about 628 acre-feet of water could be added at a cost of about \$101 per acre-foot, not including treatment costs.

"This study is really bringing to light that we have a lot of different sources of water, but our big problem is storage," said district board member Jim Grossi said during the board's Jan. 25 meeting. "I think that needs to be looked at."

Other options were deemed infeasible by the study. Recharging groundwater in the Novato basin, for example, would only yield a small amount of water at a high cost compared to other groundwater basins in California. The Novato basin is thin and can only hold about 50 to 100 acre-feet of water. Groundwater could be extracted from or recharged into the basin at a rate of tens of gallons per minute, while other basins have a rate in the low hundreds or thousands of gallons per minute, according to West Yost.

However, the district could partner with other groundwater storage project in the region, such as one being studied by the Sonoma Water agency.

Desalination was deemed infeasible given the high cost and the district's size. However, the district could collaborate with other agencies for a regional desalination plant. West Yost estimated it would likely be 15 years before such a project would be completed.

Board member Mike Joly said the district should not wait to begin looking into the potential for a regional desalination plant.

"Clearly we should be at least studying certain technologies that do not just rely on water coming from the sky," Joly said.

While he said desalination will ultimately be a solution in the future, board president Stephen Petterle said completing such a project will not solve short-term water needs that will be exacerbated by state-mandated housing development and large projects in Novato, such as the proposal to build more than 1,000 homes at the former Fireman's Fund Insurance campus.

"I think ultimately, the solution is desalination, but that's a long way away," Petterle said. "It takes regional coordination, which California has never had with water."

The district plans to review more detailed cost estimates this spring and eventually prioritize which projects to begin.



## **Will Houston**

Will Houston covers environment, transportation, West Marin and the city of Novato for the Marin IJ. He covered environment, cannabis and county government for the Eureka Times-Standard and was a contributor to the Monterey Herald. He graduated with a Bachelor of Science degree in biology from San Diego State University. Reach the author at [whouston@marinij.com](mailto:whouston@marinij.com) or follow Will on Twitter: [@Will\\_S\\_Houston](https://twitter.com/Will_S_Houston)

[whouston@marinij.com](mailto:whouston@marinij.com)  
[Follow Will Houston @Will S Houston](https://twitter.com/Will_S_Houston)





**Jared Blumenfeld**  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Meredith Williams, Ph.D., Director  
700 Heinz Avenue  
Berkeley, California 94710-2721



**Gavin Newsom**  
Governor

January 26, 2022

[REDACTED]  
McKinleyville, California 95519-9208

Dear [REDACTED]:

The Department of Toxic Substances Control (DTSC) is conducting environmental investigations at the former McNamara and Peepe Lumber Mill (Site) located at 1619 Glendale Drive in McKinleyville, California. Your home is located near the Site. The Site previously operated as a lumber mill and used pentachlorophenol (PCP); a chemical historically used as an industrial lumber preservative. Sampling has found that groundwater at the Site is contaminated with PCP. Given certain conditions, groundwater can move underground and away from the Site.

The Humboldt Bay Municipal Water District provided DTSC with your contact information, and expressed concern that your private well may be used for drinking water purposes and could potentially be contaminated with PCP. With your permission, DTSC would like to sample your private well to ensure PCP is not present. DTSC's contractor will collect groundwater samples, which would then be sent to a laboratory for analysis. There is absolutely no cost to you; this is a project of the California state government. DTSC and its contractors will follow appropriate health and safety guidance to minimize your risk of potential exposure to COVID-19. If PCP is detected in your well at an unsafe level, DTSC would present options to you and your family while the situation is remedied.

January 26, 2022

Page 2 of 2

DTSC previously called and left you a voicemail on January 24<sup>th</sup> and a representative from our contractor, SHN Consulting Engineers and Geologists, Inc., called and left you a voicemail on January 25<sup>th</sup>. We ask that you please contact us so we can set up an appointment for the sampling in the week of February 7, 2022, and perhaps answer any questions you may have about the proposed sampling. Please contact us via telephone at (510) 540-3881 or via email at [Nicole.Yuen@dtsc.ca.gov](mailto:Nicole.Yuen@dtsc.ca.gov), and leave us your name, email address, and a phone number so we may contact you regarding this matter.

Sincerely,

**Nicole  
Yuen**

Digitally signed by  
Nicole Yuen  
Date: 2022.01.26  
17:00:01 -08'00'

Nicole Yuen  
Senior Environmental Scientist  
Site Mitigation and Restoration Program – Berkeley Office

cc: (via email)

John Friedenbach  
Humboldt Bay Municipal Water District  
[friedenbach@hbmwd.com](mailto:friedenbach@hbmwd.com)



**RESOLUTION NO. 2022-02****A RESOLUTION OF THE BOARD OF DIRECTORS OF THE HUMBOLDT BAY MUNICIPAL WATER DISTRICT PROCLAIMING A LOCAL EMERGENCY PERSISTS, RE-RATIFYING THE PROCLAMATION OF A STATE OF EMERGENCY BY EXECUTIVE ORDER NO. N-33-20 ON MARCH 4, 2020, AND RE-AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE LEGISLATIVE BODIES OF HUMBOLDT BAY MUNICIPAL WATER DISTRICT FOR THE PERIOD OF FEBRUARY 10, 2022 THROUGH MARCH 12, 2022 PURSUANT TO BROWN ACT PROVISIONS.**

WHEREAS, the Humboldt Bay Municipal Water District is committed to preserving and nurturing public access and participation in meetings of the Board of Directors; and

WHEREAS, all meetings of the Humboldt Bay Municipal Water District's legislative bodies are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963), so that any member of the public may attend, participate, and watch the District's legislative bodies conduct their business; and

WHEREAS, the Brown Act, Government Code section 54953(e), makes provision for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

WHEREAS, a proclamation is made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the jurisdictions that are within the District's boundaries, caused by natural, technological or human-caused disasters; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, the Board of Directors previously adopted a Resolution, Number 2020-01 on January 13, 2022, finding that the requisite conditions exist for the legislative bodies of Humboldt Bay Municipal Water District to conduct remote teleconference meetings without compliance with paragraph (3) of subdivision (b) of section 54953; and

WHEREAS, as a condition of extending the use of the provisions found in section 54953(e), the Board of Directors must reconsider the circumstances of the state of emergency that exists in the District, and the Board of Directors has done so; and

WHEREAS, emergency conditions persist in the District, specifically, as a result of the COVID-19 pandemic, the Governor proclaimed a state of emergency on March 4, 2020 (N-33-20), in accordance with the section 8625 of the California Emergency Services Act, and the state of emergency remains in effect; and

WHEREAS, as a result of the COVID-19 pandemic, the Humboldt County Health Officer has imposed and has recommended measures to promote social distancing as more particularly set forth in his August 6, 2021, Order, among other prior orders and CDC guidance; and

WHEREAS, the Board of Directors does hereby find that as a result of the COVID-19 pandemic, social distancing recommendations and conditions causing imminent risk to attendees has caused, and will continue to cause, conditions of peril to the safety of persons within the District that are likely to be beyond the control

of services, personnel, equipment, and facilities of the District, and desires to affirm a local emergency exists and re-ratify the proclamation of state of emergency by the Governor of the State of California and re-ratify local social distancing recommendations; and

WHEREAS, as a consequence of the local emergency persisting, the Board of Directors does hereby find that the legislative bodies of Humboldt Bay Municipal Water District shall continue to conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section 54953, and that such legislative bodies shall continue to comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of section 54953; and

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE HUMBOLDT BAY MUNICIPAL WATER DISTRICT DOES HEREBY RESOLVE AS FOLLOWS:

1. That the Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

2. That the Board of Directors hereby considers the conditions of the state of emergency in the District and proclaims that a local emergency persists throughout the District, and the state of emergency continues to directly impact the ability of the members of the Board to meet safely in person, and further that local officials continue to impose or recommend measures to promote social distancing;

3. That the Board hereby ratifies the Governor of the State of California's Proclamation of State of Emergency, effective as of its issuance date of March 4, 2020;

4. That the staff, General Manager, and legislative bodies of the Humboldt Bay Municipal Water District are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including, continuing to conduct open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

5. That this Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of March 12, 2022, or such time the Board of Directors adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the legislative bodies of Humboldt Bay Municipal Water District may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.

PASSED AND ADOPTED by the Board of Directors of Humboldt Bay Municipal Water District, this 10th day of February, 2022, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

---

Sheri Woo, President

---

J. Bruce Rupp, Secretary/Treasurer



**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: John Friedenbach  
Date: February 10, 2022  
Re: NCRP/WRTC Lidar Project

**Discussion**

As the Board may recall, at our September 2021 meeting, the Board authorized participation in the Mad River watershed wide lidar project coordinated by the North Coast Resource Partnership and the Watershed Research and Training Center.

As a condition of our participation and financial contribution, we required that the full extent of the Mad River watershed be included and provided to the District.

By participating in the US Geological Survey's Broad Area Authority, the project will be getting some of the lowest price and highest quality datasets available. In addition, the project will be bringing in significant State and Federal funding for this program. Another advantage of this proposal is the data product would be managed through the USGS 3DEP and National Map programs. This provides significant long term data management solutions and open access.

The HBMWD has several specific operational interests in this data.

- Lidar is the best available tool for mapping infrastructure and identifying geotechnical hazards.
- This data will be a powerful tool for implementing the recently awarded \$5million CALFIRE Forest Health Grant.
- Lidar provides the best available data on forest structure and is critical for developing forest resilience strategies.
- As the HBMWD develops its watershed management partnership with the US Forest Service, this dataset will provide useful data to guide ecological restoration to maintain high water quality.
- This dataset will be invaluable for long term sediment mitigation in the August complex burn area and potential impacts to the Ruth Reservoir capacity.
- The dataset will also provide similar capabilities across the rest of the Mad River Watershed and throughout the HBMWD service area.

**Recommendation**

Staff recommends that the Board authorize the General Manager to sign the Joint Funding Agreement for 2022 North Coast Resource Partnership Lidar Acquisition, California and implement the project on behalf of the District, including making the District's \$20,000 financial contribution to the project.



# United States Department of the Interior

United States Geological Survey  
National Geospatial Technical Operations Center

U.S. Geological Survey      U.S. Geological Survey  
1400 Independence Road      PO Box 25046 MS 510  
Rolla, MO 65401                  Denver, CO 80225

Customer #:  
Agreement #:  
TIN#: 94-6050067  
Fixed Cost: No

## Joint Funding Agreement

For

### 2022 North Coast Resource Partnership Lidar Acquisition, California

This agreement is entered into as of the \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ by the U.S. GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF INTERIOR party of the first part, and Humboldt Bay Municipal Water District, party of the second part.

- 1) The parties hereto agree that subject to the availability of appropriations and in accordance with their respective authorities there shall be maintained in cooperation to collect Quality Level 1 lidar data for a portion of the north state of California as specified in the accompanying Statement of Work

herein called the program, see attached statement of work. The USGS legal authority is 43 USC 36C; 43 USC 50; and 43 USC 50b.

- 2) The following amounts shall be contributed to cover all of the cost of the necessary field and analytical work directly related to this program. 2(b) includes In-Kind Services in the amount of: \$ 0.00

- a) by the party of the first part during the period

Amount	Date		Date
<u>\$ 0.00</u>	<u>Date of Last Signature</u>	To	<u>3/31/2026</u>

- b) by the party of the second part during the period

Amount	Date		Date
<u>\$ 20,000.00</u>	<u>Date of Last Signature</u>	To	<u>3/31/2026</u>

- c) Additional information on other potential partners contributing to this program through separate agreements with USGS (participants and funding amounts are projected and are subject to change):

Participant	Amount
USGS National Geospatial Program	\$ 1,699,207.98
CA Natural Resources Agency	\$ 3,000,000.00
Sonoma County Water Agency	\$ 50,000.00
Sonoma County Agricultural Preservation and Open Space District	\$ 50,000.00
University of California San Diego	\$ 500,000.00
NRCS	\$ 1,749,000.00
USFWS	\$ 37,100.00
<b>Estimated Total of Separate Agreements:</b>	<b>\$ 7,085,307.98</b>

- d) All contributions are subject to the 6% on NET GPSC special rate assessment which will be deducted from the dollar figure in section 2b. This assessment is to cover GPSC (Geospatial Products and Services Contract) program management and oversight.
- e) The National Geospatial Program provides leadership for USGS geospatial coordination, production and service activities. The Program engages partners to develop standards and produce consistent and



accurate data through its National Map Liaisons. Operational support is provided by the National Geospatial Technical Operations Center. These and other Program activities that are essential to the National Spatial Data Infrastructure (NSDI) are managed as a unified portfolio that benefits geospatial information users throughout the Nation.

- f) This Agreement can be changed or amended only by a written instrument signed by the Parties. This Agreement may be terminated by either Party on sixty (60) days written notice to the other Party. In the event of an early termination, USGS shall be reimbursed for any completed work or work in progress on the effective date of termination (i.e., when the Agreement actually terminates following the receipt of written notice from the other Party). Any unspent advanced funds will be returned to Partner. The USGS shall provide a copy of the outcomes completed as of the effective date of termination in the event of an early termination of the Agreement.
- 3) The costs of this program may be paid by either party in conformity with the laws and regulations respectively governing each party.
  - 4) The field and analytical work pertaining to this program shall be under the direction of or subject to periodic review by an authorized representative of the party of the first part.
  - 5) The areas to be included in the program shall be determined by mutual agreement between the parties hereto or their authorized representatives. The methods employed in the field and office shall be those adopted by the party of the first part to insure the required standards of accuracy subject to modification by mutual agreement.
  - 6) During the course of this program, all field and analytical work of either party pertaining to this program shall be open to the inspection of the other party, and if the work is not being carried on in a mutually satisfactory manner, either party may terminate this agreement upon 60 days written notice to the other party with compensation to USGS for work performed to that point.
  - 7) The original records resulting from this program will be deposited in the office of origin of those records. Upon request, copies of the original records will be provided to the office of the other party.
  - 8) Each Party is free to publish the information and data developed in the performance of the statement of work (SOW). The Parties acknowledge that scientific information and data developed using USGS funds or contracts as a result of the SOW are subject to applicable USGS Fundamental Science Practices (FSP) review, approval, and release requirements, which are available in Survey Manual Chapter 502.4, Fundamental Science Practices: Review, Approval, and Release of Information Products. The USGS is required to provide timely public access to the results of scientific information and data that does not contain sensitive protected information. Data and associated metadata will be open format and publicly accessible. The data and metadata will also be open access and machine readable in accordance with USGS FSP requirements available in Survey Manual Chapter 502.7, Fundamental Science Practices: Metadata for USGS Scientific Information Products Including Data and Survey Manual Chapter 502.8, Fundamental Science Practices: Review and Approval of Scientific Data for Release.
  - 9) USGS will issue billings utilizing Department of Interior Bill for Collection (form DI-1040). The USGS will submit invoices by the following prescribed schedule:

Partner to be billed quarterly on the following schedule: \$10,000 in February 2022 and \$10,000 in May 2022. Bills are independent of actual expenses and product delivery.

Payments of bills are due within 60 days of the billing date. If not paid by the due date, interest will be charged at the U.S. Treasury Current Value of Funds Rate for each 30-day period, or portion thereof, that the payment is delayed beyond the due date. (31 USC 3717; Comptroller General File B-212222, August 23, 1983.)"

- 10) The Task Order issued by USGS to the selected GPSC Contractor provides full details regarding project collection requirements and resulting deliverables. A copy of the Task Order will be provided to the partner prior to the Request for Proposal.
- 11) Every effort will be made to award contract(s) to complete the objective of this program. However, if the total funding amount is not sufficient to complete the work as described, then adjustments will be made to either obtain additional funding or the project will be re-scoped to the mutual satisfaction of all stakeholders. Partners will be notified of any excess funds after task award. Upon notification, partners have 30 days to choose, in collaboration with USGS, to have excess funds applied to a re-scoped or new task order. If Partners do not make a decision within 30 days, the excess funds will be returned to the Partners.

- 12) If data acquisition cannot be completed during a single season due to unacceptable capture conditions, then it is possible that the remaining AOI would be acquired during the next suitable collection window which may or may not be in the same calendar year.
- 13) If data is to be collected over military properties, then DoD clearance may be required. The USGS GPSC contractor is responsible for obtaining all required DoD clearances and notifying the USGS Contracting Officer's Representative and USGS Technical Point-of-Contact of any restrictions. Should unexpected restrictions affect access to data over military properties, then only federal funds will be applied to those areas.
- 14) Data acquired concerning federally recognized Tribal lands may not be published by the USGS if the Tribe objects in writing to public release of any products identified by the Tribe as sensitive protected information resulting from remotely sensed data acquisition over their lands. All other project area data outside of the Tribal lands boundaries will be published. USGS may use the restricted data internally and/or provide a copy of the restricted data to federal agencies for their internal use. All non-federal entities must receive written permission from the Tribe to receive a copy of the restricted data regardless of their status as a funding partner. Entities who receive a copy may not further distribute the restricted tribal data.
- 15) If USGS receives a FOIA request for the data, we would work with the Tribe to protect the data from release under the FOIA to the best of our ability under the law. However, after our FOIA Office reviews any such request and after appropriate coordination with the Tribe and consultations and discussions with the Office of the Solicitor, Division of Indian Affairs and Division of General Law, it may be determined that USGS has no legal basis to protect the information. Also, in the event that USGS were to deny such a FOIA request, USGS's decision could be overturned on appeal by the Department of the Interior's FOIA Appeals Office or by a federal court.
- 16) For agreements that are associated with, or become associated with Broad Agency Announcement (BAA) proposals for 3DEP projects prior to BAA selection, the execution of this agreement does not guarantee any commitment of USGS funds, nor does the execution of the agreement constitute greater consideration of any related proposal under the BAA selection process.




**U.S. Geological Survey United States  
Department of the Interior**

**Humboldt Bay Municipal Water  
District**

USGS Point of Contact

Name:	Carol Ostergren
Address:	2885 Mission Street Santa Cruz CA 95060
Telephone:	(831) 460-7539
Email:	costergren@usgs.gov


Partner Point of Contact

Name:	John Friedenbach
Address:	General Manager PO Box 95 Eureka CA 95502-0095 
Telephone:	(707) 443-5018
Email:	friedenbach@hbmwd.com

USGS Billing Contact

Name:	Janet Anselm
Address:	1400 Independence Road, MS 323 Rolla, MO 65401
Telephone:	(573) 308-3814
Email:	janselm@usgs.gov

Partner Financial Contact

Name:	Chris Harris
Address:	Business Manager PO Box 95 Eureka CA 95502-0095 
Telephone:	(747) 443-5018
Email:	harris@hbmwd.com

Signatures and Date

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name: David A. Brostuen

Name: John Friedenbach

Title: Director, USGS-NGTOC

Title: General Manager

Feb. 1, 2022

## STATEMENT OF WORK

### 2022 North Coast Resource Partnership Lidar Acquisition, California

#### 1. Purpose

The USGS and the North Coast Resource Partnership consortium (northern California) will collaborate to acquire high-resolution Quality Level 1 digital elevation data developed from airborne lidar (Light Detection and Ranging) for an area of approximately 17,404 square miles in the partner Area of Interest (AOI) (see Section 5). The data will be used to generate classified Lidar Point Clouds (LPC) and Digital Elevation Models (DEMs) for supporting local and regional wildfire fuels and hazard mapping; evacuation route planning; disaster response; carbon monitoring; watershed management; engineering design; sea-level-rise adaptation; wildlife habitat management; forest management; flood planning and mitigation; environmental and conservation planning; and landscape-scale conservation planning to support the CA 30 x 30 initiative.

Data acquisition is planned for spring 2022 as snow-free leaf-on conditions allow. Acquisition may extend into later flying seasons if necessary, based on discussions between the USGS, contractor, and partners. The project will consist of high accuracy classified bare-earth lidar data in LAS format as well as raster DEMs per project requirements.

The North Coast Resource Partnership represents a consortium of state, county, tribal, and local partners in California, and the partnership, along with a representative from CA Natural Resources Agency, will serve as advisors and technical points of contact during the course of this project. Partners providing funding to the project include the CA Natural Resources Agency, Sonoma County Agricultural Preservation and Open Space District, Sonoma County Water Agency, University of California-San Diego, and Humboldt Bay Municipal Water District.

#### 2. General Terms

USGS will select a qualified contractor to perform the lidar collection and processing via the Bureau's Geospatial Product and Service Contract (GPSC). GPSC task orders are awarded to qualified contractors through federal government solicitation. Qualified contractors are selected for base contract award in accordance with Public Law 92-528 (Brooks Act) and FAR 36.6 - Architect-Engineering Services, which establishes a qualifications-based selection process, in which contracts for Architectural and Engineering services are negotiated based on demonstrated competence and qualification for the type of professional services required.



Contractor selection is based on the following 6 criteria:

- (1) Professional qualifications necessary for satisfactory performance of required services;
- (2) Specialized experience and technical competence in the type of work required;
- (3) Capacity to accomplish the work in the required time;
- (4) Past performance on contracts with Government agencies and private industry in terms of cost control, quality of work, and compliance with performance schedules;
- (5) Location in the general geographical area of the project and knowledge of the locality of the project and;
- (6) Acceptability under other appropriate evaluation criteria.

Level of effort is negotiated on each task order issued under the base contracts. This process is aligned with the Department's consultant RFP and selection process.

The Task Order issued by USGS to the selected GPSC Contractor provides full details regarding project collection requirements, deliverables, schedules, and deadlines. A copy of the Task Order will be provided to the partners.

USGS will:

- Execute separate Joint Funding Agreements with partners in support of the total project cost.
- Prepare a Task Order for agreed upon products and services.
- Serve as Government Point of Contact during the full period of the agreement.
- Administer data validation for standard USGS Lidar Base Specification (LBS) v2021A (or subsequent version) products and deliverables and manage all data deliverables.
- Require that all land surveys conducted in support of this project be performed under the supervision of a qualified professional land surveyor.
- Receive, inspect, and catalog all project deliverables.
- Prepare Data Validation Reports for standard USGS LBS v2021A (or subsequent version) products and distribute to relevant project Points of Contact.
- Return data to contractor as needed for error correction/rework.
- Provide preliminary data products to partners; timing and products to be determined at task order kickoff meeting.
- Provide one copy of final data to each partner signing a Joint Funding Agreement in support of this project. Funding partners include:
  - CA Natural Resources Agency
  - Sonoma County Water Agency
  - Sonoma County Agricultural Preservation and Open Space District
  - University of California San Diego
  - Humboldt Bay Municipal Water District

Partners will:

- Provide funding for the project as described in Section 2 of the respective JFAs.
- Pay contract project costs plus applicable GPSC assessment fee which is calculated by USGS as 6% of the contracted project cost, not to exceed the amount specified in the respective JFA.
- Assist the USGS NGTOC in resolving project issues as needed and appropriate.

- Provide available information, including informal observations from interested parties, on ground conditions to facilitate project flight planning.
- Adhere to restrictions regarding the use and distribution of preliminary data products.
- Be responsible for reviewing and publishing any additional products and services beyond USGS LBS v2021A (or subsequent version) standard deliverables.
- Agree to designate Karen Gaffney at North Coast Resource Partnership and Nathaniel Roth at the CA Natural Resources Agency as the consortium technical points-of-contact with USGS.

### 3. Specifications and Deliverables

Unless otherwise stated all specifications and deliverables will meet or exceed the (Quality Level 1) USGS LBS v2021A (or subsequent version) (<https://www.usgs.gov/3DEP/lidarspec>)

#### General Requirements

Data shall be of Quality Level 1 (QL 1), meeting the following accuracy requirements:

Quality Level	Pulse Density	Vertical Accuracy RMSEz	Aggregate Nominal Pulse Spacing (ANPS)	Aggregate Nominal Pulse Density (ANPD)	DEM Post Spacing
1	8 pulses/m <sup>2</sup>	10 cm	0.35 m	8 pulses/m <sup>2</sup>	0.5 m

- Horizontal Datum: Horizontal NAD83 (2011).
- Vertical Datum: NAVD88 using the currently approved Geoid model 18 from the National Geodetic Survey (NGS) for purposes of performing conversions from ellipsoidal heights to orthometric heights. Data to be delivered in orthometric heights.
- Coordinate System and Projection: UTM Zone 10N (EPSG: 6339) in Meters; NAVD88 (EPSG: 5703) in Meters, and the GEOID 18 model.
- Tiling Scheme: U.S. National Grid naming convention, 1000 Meters x 1000 Meters, non-overlapping tiles.
- DEM: 0.5 Meter Cells, individually tiled from bare Earth, hydro-flattened, delivered in GeoTIFF format.
- Leaf-on vegetation conditions to the extent possible.
- Data collection shall meet the USFS specification of ensuring a >50% overlap.

The lidar data will be processed to produce a classified point cloud, tile-based bare earth DEMs, and related products. These elevation products will be placed in the public domain and will be made available for viewing and download through the USGS National Map.

#### Additional Products, Services, and Specifications beyond USGS Lidar Base Standards

- Tidal coordination required
- Intensity images, 1000 Meters x 1000 Meters, non-overlapping tiles, 0.5 Meter Cells



USGS does not commit to performing Data Validation for these additional products or services. Data Validation of these will be the responsibility of the partner. If any issues with the products or services are found by the partner within 60 days of data delivery USGS will pursue corrections on behalf of the partner.

USGS reserves the right but does not commit to publishing these additional products and services.

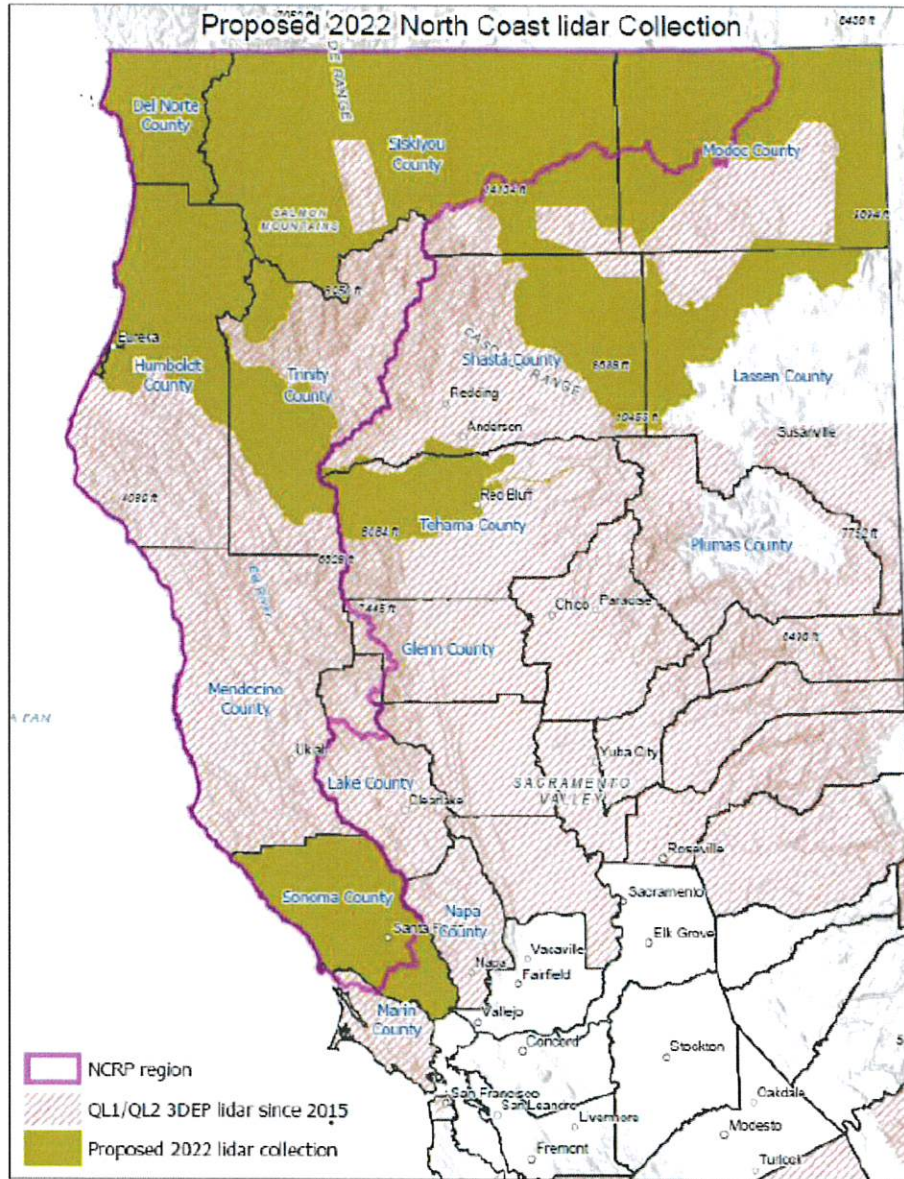
**4. Contacts**

<b>USGS Administrative</b>		<b>Partner Administrative</b>
Jim Almekinder	Name	See associated Joint Funding Agreements
GPSC Agreement Lead		
P.O. Box 25046, MS 510	Address	
Denver, CO 80225-0046		
573-308-3549	Telephone	
jalmekinder@usgs.gov	E-Mail	
<b>USGS Financial</b>		<b>Partner Financial</b>
Jim Almekinder	Name	See associated Joint Funding Agreements
GPSC Agreement Lead		
P.O. Box 25046, MS 510	Address	
Denver, CO 80225-0046		
573-308-3549	Telephone	
jalmekinder@usgs.gov	E-Mail	
<b>USGS Technical</b>		<b>Partner Technical</b>
Jayna Winehouse	Name	Karen Gaffney
Commercial Partnership Team		West Coast Watershed
P.O. Box 25046, MS 510	Address	P.O. Box 262
Denver, CO 80225-0046		Healdsburg, CA 95448-0262
303-202-4502	Telephone	(707) 433-7377
jwinehouse@usgs.gov	E-Mail	<a href="mailto:kgaffney@westcoastwatershed.com">kgaffney@westcoastwatershed.com</a>
	Name	Nathaniel Roth
		CA Natural Resources Agency
	Address	715 P Street, MS1900
		Sacramento, CA 95814
	Telephone	(916) 531-0134
	E-Mail	<a href="mailto:nathaniel.roth@conservation.ca.gov">nathaniel.roth@conservation.ca.gov</a>
<b>USGS Liaison</b>		<b>Partner Data Deliveries</b>
Carol Ostergren	Name	See Section 6

USGS National Geospatial Program		
2885 Mission Street	Address	
Santa Cruz CA 95060		
831-460-7539	Telephone	
costergren@usgs.gov	E-Mail	

5. Project Area Map

Map Graphic





## 6. Data Delivery

### California Natural Resources Agency:

Nathaniel Roth  
California Department of Conservation  
715 P Street, MS1900  
Sacramento, CA 95814  
(916) 531-0134  
[nathaniel.roth@conservation.ca.gov](mailto:nathaniel.roth@conservation.ca.gov)

### University of California San Diego:

Neal Driscoll  
9500 Gilman Dr. #0244  
La Jolla, CA 92093  
(858) 882-5026  
[ndriscoll@ucsd.edu](mailto:ndriscoll@ucsd.edu)

### Humboldt Bay Municipal Water District:

John Friedenbach  
General Manager  
PO Box 95  
Eureka CA 95502-0095  
(707) 443-5018  
[friedenbach@hbmwd.com](mailto:friedenbach@hbmwd.com)

### Sonoma County Water Agency:

Susan Haydon  
404 Aviation Blvd.  
Santa Rosa, CA 95403  
(707) 547-1937  
[Susan.haydon@scwa.ca.gov](mailto:Susan.haydon@scwa.ca.gov)

### Sonoma County Agricultural Preservation and Open Space District:

Allison Schichtel  
Senior Conservation Planner  
747 Mendocino Ave, Suite 100  
Santa Rosa, CA 95401  
(707) 565-7353  
[allison.schichtel@sonoma-county.org](mailto:allison.schichtel@sonoma-county.org)

**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: John Friedenbach  
Date: February 10, 2022

Re: HSU Senior Capstone Projects

**Discussion**

As you may recall, during our December Board meeting we discussed the request by Dr. Josephine Archibald to partner with her Environmental Resources Engineering class's senior capstone projects. This involves group analysis, research and design of a project using their environmental resources engineering skills and the presentation of a capstone report. Although the directors provided several important issues/concepts for consideration at our December meeting, none contained the required design aspect element for the course. Staff captured all of the director's project suggestions for use at a future date when the opportunity arises.

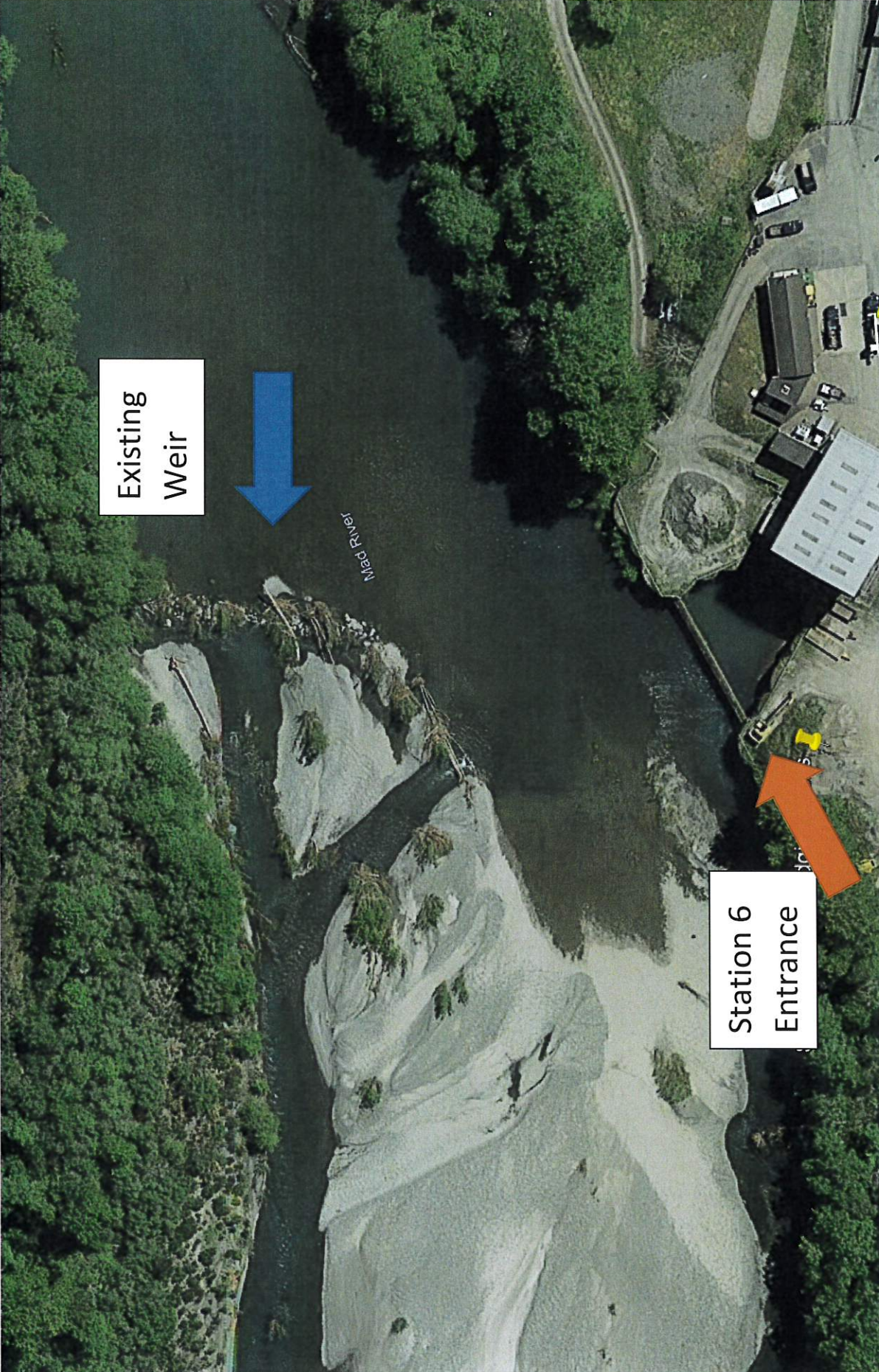
For the capstone projects, the following projects have been selected.

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



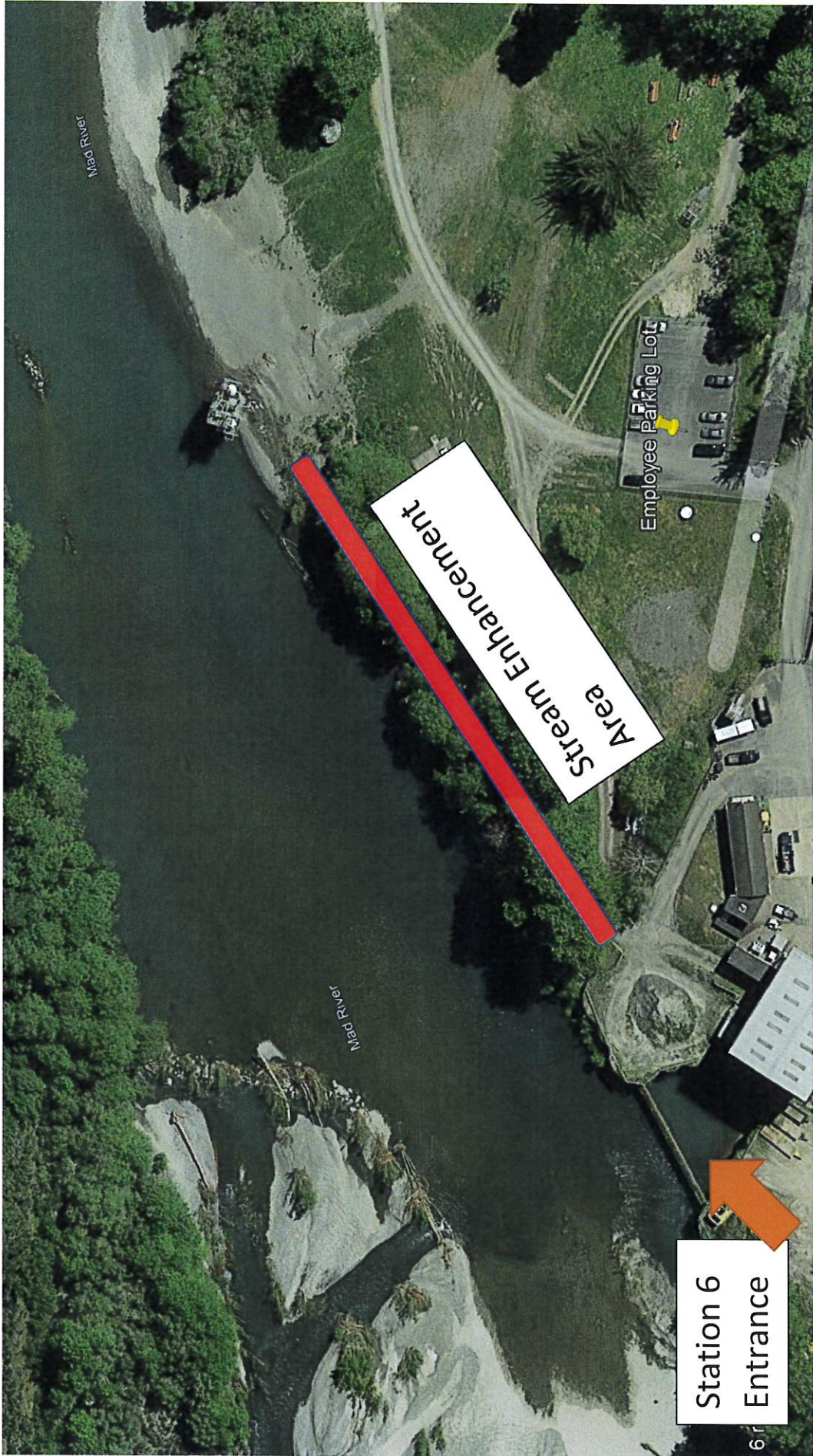
**Next Steps**

Staff has met the students and conducted 3 project site visits (Projects 1 -3). Project 4 site visit is scheduled for February 18<sup>th</sup>. At the end of the semester, late April, the students will present their project capstone reports to their class. I will also request that they make a presentation to our board. That may involve a special board meeting to coincide with their class presentations. We can discuss our options further at our board meeting. Once the designs are received, staff will review internally for viability and project funding, and then discuss options with the directors at a board meeting.



**PROJECT 1**





**PROJECT 2**

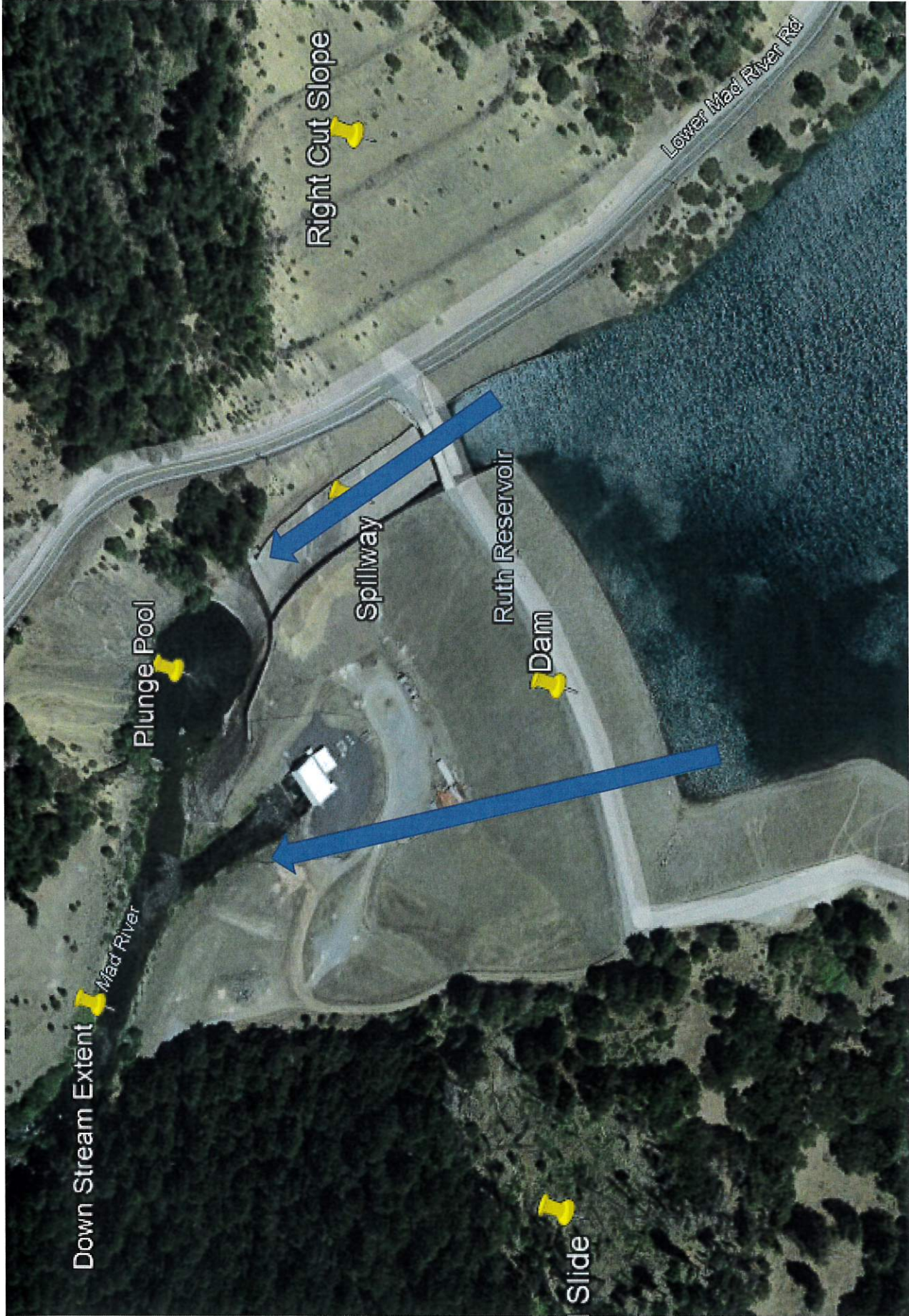




Desired river course: East of Collector 4; West of Collector 5.

### PROJECT 3





**PROJECT 4**



**Humboldt Bay Municipal Water District**

To: Board of Directors

From: Chris Harris

Date: February 10, 2022

Re: Informal bidding Ordinance for California Uniform Public Construction Cost Accounting Act (CUPCAA)

**Background**

**October 14, 2021:** Directors approved district participation in the CUPCAA, raising the bidding thresholds and simplifying the bidding process for smaller projects.

	Previous Thresholds	CUPCAA Thresholds
Work can be completed using Force Account	\$1,000-\$35,000	\$1,000-\$60,000
Work can be completed by negotiated contract or by purchase order – bids are not mandated		\$1,000-\$60,000
Work completed by informal bidding process	\$1,000-\$35,000	\$60,001-\$200,000*
Work completed by formal bidding process	\$35,001+	\$200,001+

*\* If bids received are in excess of \$200,000, the Board may, by adopting a resolution, award the contract (up to \$212,500) to the lowest bidder, if the Board has determined the cost estimate of the agency was reasonable.*

**January 13, 2022:** Ordinance 24 presented for public hearing and to the Board for discussion and review.

**January 27, 2022:** Notice for Public Hearing to be held February 10, 2022 printed in Times Standard.

**Recommendation**

After the Board has opened the Public Hearing; received any public input; and closed the Public Hearing; then Staff recommends approval of *Ordinance 24 – Informal Bidding Procedures Under the CUPCAA*.

**Attachments**

Ordinance 24 – Informal Bidding Procedures Under the CUPCAA



**ORDINANCE 24 – AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE HUMBOLDT BAY MUNICIPAL WATER DISTRICT TO PROVIDE INFORMAL BIDDING PROCEDURES UNDER THE UNIFORM PUBLIC CONSTRUCTION COST ACCOUNTING ACT (Section 22000, et seq. of the Public Contract Code)**

WHEREAS, Humboldt Bay Municipal Water District (District) opted in to the California Uniform Public Construction Cost Accounting Act (Act) by Resolution 2021-20 effective October 14, 2021; and

WHEREAS, pursuant to section 22304 of the Public Contract Code, the District shall adopt an informal bidding ordinance to govern the selection of contractors to perform public projects pursuant to subdivision (b) of Section 22032 of the Public Contract Code

NOW, THEREFORE, the Board of Directors of Humboldt Bay Municipal Water District does ordain as follows:

Section 1. Recitals. The District hereby finds and determines that the above recitals are true and correct and are incorporated herein.

Section 2. Informal Bidding Procedures. Public projects, as defined by the Act and in accordance with the limits listed in section 22032 of the Public Contract Code, may be let to contract by informal procedures as set forth in section 22032, *et seq.*, of the Public Contract Code.

Section 3. Contractors List. Humboldt Bay Municipal Water District shall comply with the requirements of section 22034 of the Public Contract Code by maintaining a Contractor's List.

Section 4. Notice Inviting Informal Bids. Where a public project is to be performed which is subject to the provisions of the Ordinance, a notice inviting informal bids shall be circulated using any of the following:

1. Notices inviting informal bids may be mailed, faxed, or emailed to all contractors for the category of work to be bid, as shown on the list developed and maintained in accordance with section 3, above.
2. Notices inviting informal bids may be mailed to all construction trade journals as specified by the California's Uniform Construction Cost Accounting Commission in accordance with section 22036 of the Public Contract Code. Additional contractors and/or construction trade journals may be notified at the discretion of the District, provided, however, that if the product or service is proprietary in nature such that it can be obtained only from a certain contractor or contractors, the notice inviting informal bids may be sent exclusively to such contractor or contractors.

Section 5. Award of Contracts. The General Manager or designated agent (Superintendent or Business Manager) is authorized to award informal contracts pursuant to this Ordinance.

Section 6. California Environment Quality Act Compliance. The District Board of Directors find, pursuant to Title 14 of the California Code of Regulations, Section 15061(b)(3), that this Ordinance is exempt from the requirements

Humboldt Bay Municipal Water District  
Ordinance 24  
Approved 10th day of February, 2022

of the California Environmental Quality Act (CEQA) in that it is not a Project which had the potential for causing significant effect on the environment.

Section 7. Severability. If any provisions, section, subsection, sentence, clause, phrase, or sections of the Ordinance, or the application of same to any person, or set of circumstances, is for any reason held to be unconstitutional, void, or invalid, the validity of the remaining portions, provisions, or regulations contained herein shall not be affected, it being the intent of the Board of Directors in adopting the Ordinance that no portions, provisions, or regulations contained herein shall become inoperative, or fail by reason of the unconstitutionality of any other provision hereof, and all provisions of the Ordinance are declared to be severable for that purpose.

Section 8. Ordinance Effective Date. This Ordinance shall be in full force and effect thirty (30) days from and after the date of its adoption.

**PASSED AND ADOPTED** by the Humboldt Bay Municipal Water District Board of Directors on the 10<sup>th</sup> day of February, 2022 by the following rollcall vote:

I HEREBY CERTIFY that the foregoing Ordinance was duly INTRODUCED at a regularly held meeting of the Board of Directors of the HUMBOLDT BAY MUNICIPAL WATER DISTRICT on the 13th day of January, 2022, and was PASSED and ADOPTED by the Board of Directors of the HUMBOLDT BAY MUNICIPAL WATER DISTRICT on the 10<sup>th</sup> day of February, 2022 by the following vote

AYES:

NOES:

ABSENT:



# New Business

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

To: Board of Directors  
From: Sherrie Sobol  
Date: January 28, 2022  
Subject: 2020 Census and Redistricting

\*\*\*\*\*

**Background:**

Every ten years, cities and counties with district elections must redraw their boundaries so they have substantially equal populations and comply with the federal Voting Rights Act of 1965.

Elections Code Division 21. State and Local Reapportionment, Chapter 8. Special Districts (22000-22001) states:

*Each district required by its authorizing act to adjust division boundaries pursuant to this section shall, by resolution, after each federal decennial census, and using that census as a basis, adjust the boundaries of any divisions so that the divisions are, as far as practicable, equal in population and in compliance with Section 10301 of Title 52 of the United States Code, as amended, to the extent those provisions apply.*

*Before adjusting the boundaries of a division pursuant to Section 22000 or for any other reason, the governing body of the district shall hold at least one public hearing on the proposal to adjust the boundaries of the division prior to the public hearing at which the governing body votes to approve or defeat the proposal.*

**Current:**

This staff report is informational only. Humboldt County Elections Department requires the District finalize it's redistricting by April 17, 2022. Staff is working to provide the Board with multiple scenarios to meet this requirement and will provide them to the Board next month (March 10,2022) the first of two public hearings where the Board will have an opportunity to discuss the options and receive public input. The final public hearing and finalizing of division boundaries will take place on April 14, 2022. Both public hearings will be noticed in the Times-Standard at least ten days prior to the public hearing.

**Next Steps:**

Public Hearings to consider redistricting will be held on March 10 and April 17. Once the Board approves any changes via Resolution, the information will be provided to the Humboldt County Elections Department.



**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

To: Board of Directors  
From: John Friedenbach  
Date: February 10, 2022  
Subject: District's Safety Program

-----  
Once again it is time for our annual employee recognition regarding workplace safety. Dale and I will provide an overview of our program and accomplishments at our Board meeting next week. This memo provides a brief introduction.

**PRIORITY AND PLACE**

Achieving employee safety and public safety is a top priority for the District. I am pleased to work for an organization that values this objective and takes safety seriously.

The Board has adopted five goals which support our District Mission. Goal Number 1 is Safety and Public Health. It reads:

- Employ safe work practices to ensure worker and public safety at all times. Strive for no on-the-job reportable injuries each year.
- Operate the regional water system in accordance with state and federal safe drinking water laws and regulations at all times to protect public health.

The District has a "safety philosophy" as well as a strong safety program. The Board has consistently supported our safety philosophy and program.

**COMPONENTS OF THE PROGRAM**

Important components of the District's safety program are as follows:

- 1) Buy-in and support *from* Management. We need to set the standard and "walk the talk."
- 2) Buy-in and involvement *by* the employees.
- 3) A meaningful Injury, Illness and Prevention Plan (this is a regulatory requirement).
- 4) An active Safety Committee that is listened to and supported. Our committee is comprised of the Superintendent, one Supervisor, and two employees (one from the Maintenance Department and one from Operations). Membership on the committee rotates each year. Attached for your information are minutes from the last safety committee meeting for you to see the issues that are addressed.
  - a. A meaningful training program. The District has an extensive training program which supports not only employee safety, but ongoing operations, and emergency response activities too. We use ACWA/JPIA's extensive "lending library" for training resources (such as DVDs, videos, manuals), and we also use the North Coast Safety Consortium for local classroom training and other specialize training as necessary. Attached is this year's inhouse safety training program which lists the training topic as well as the instructor.
- 5) Properly fitted and maintained Personal Protective Equipment (PPE) which is suited to the job. The District provides employees with the necessary PPE such as hardhats, safety glasses, hearing protection, respirators, self-contained breathing apparatus, and protective electrical gear. The District trains in its proper use and care. As a matter of policy, the District also reimburses employees for the cost of safety shoes appropriate to the position and provides District safety attire.

- 6) Other Resources – Safety Manual. The District has developed and maintains a comprehensive safety manual to guide work practices, as well as meet various regulatory requirements. The Table of Contents of our Safety Manual is attached for your information.
- 7) Coordination with Humboldt County Public Health, Cal OES, and OSHA for upgraded safety protocols for COVID-19 protections for the staff and public, such as maintaining social distancing, upgraded workspace protections, regular sanitizing, and wearing masks indoors.
- 8) Recognition – The District instituted a safety incentive/reward program for full-time regular employees. The District pays \$200 incentive to each current employee who has been employed for at least six months and meets the criteria listed below. The District also awards one grand prize of \$500, based on a drawing of all eligible employees. This year, Bill Wardrip is the grand prize winner.

**Criteria** to be eligible for incentive award:

- 1. Participate in at least seventy five percent (75%) of monthly safety meetings during the calendar year. For newly hired employees that meet the eligibility requirements, percentage applies to eligible monthly safety meetings.
- 2. Wear appropriate PPE when required on the job.
- 3.
  - 3a. Provide one safety awareness or preventative suggestion to supervisor and have it documented at a safety meeting or with the Safety Committee.
  - 3b. Report an incident or near miss incident or unsafe conditions.
  - 3c. Receive a “satisfactory” rating on annual performance evaluation under the “Safe Practices” category.

One of  
3 per  
calendar  
year

I am proud of the “safety culture” developed at the organization, and the results we have achieved. We have employees who “think about” safety and routinely employ safe work practices. Especially with the continued protocols imposed due to COVID-19, the staff has really risen to the challenge. Additionally, the District participates in ACWA/JPIA’s Commitment to Excellence Program and H.R. LaBounty Safety Award Program. We continually strive for implementation of best practices to prevent injuries and claims.

I would also like to acknowledge that Dale Davidsen, our Superintendent, Chris Merz our Assistant Maintenance Supervisor and Chris Harris our Business Manager who are instrumental in the continuation of the safety culture that exists within the organization today along with all of our employees who work safely every day. The entire staff continue to promote and grow this safety awareness.

Once again, Dale and I wish to thank the Board for your support in this area. Your support truly makes a difference.

Attachments:

- 2022 Safety Training Program Topics and minutes from last meeting
- Table of Contents from Safety Manual
- ACWA/JPIA Commitment to Excellence
- ACWA/JPIA H.R. LaBounty Safety Award Application – Spring 2022



## Eureka Office Safety Meeting Schedule – 2022

January – COVID19 Prevention Plan–update/WIIPP

February – Employee Health Resources (including Mental Health)

March – Tsunami Preparedness

April – Fire Extinguisher & Fire Safety

May – Workplace Ergonomics/Vision Safety

June – Workplace Violence Prevention

July – Stress Reduction Exercises

August – Heat Exhaustion

September – EAP Review

October – Great Shake–Out Earthquake Drill

November – Winter Driving Tips

December – Healthy Holidays

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
Workplace Illness and Injury Prevention Program  
Safety Committee Meeting

## Minutes

Date: October 19, 2021

1. **Meeting** called to order at 0806hrs.
2. **Members** Attending: Dale Davidsen  
Steve Marshall  
Matthew Davis  
Chris Merz
3. **Minutes** were approved from Meeting 21\_3 on July 21, 2021. M/S/C SM/MD/All

**Old Business:**

- A. It has been brought to attention that the District's "Contractor Pre-Work Checklist" could be updated to reflect more current safety policies and safe work practices. *(Dale will evaluate what content shall be altered and create a site orientation form for outside contractors to review before starting work on District property. This form has been created but some suggestions have been made for alterations upon review. Edits will be made and then submitted for approval. NLT-~~7-22-20, 10-21-20, 1-21-21, 4-21-21, 7-21-21, 10-20-21, 1-11-22~~)*
- B. It has been observed that some of the District's Safety Manual policies and procedures on various topics could be revised or updated. A list of these policies and procedures will be created by the Safety Committee. *(These revisions will be assigned to committee members to complete as time allows. Some revisions have been made to certain policies and programs. Currently, the Districts Fire Prevention Plan is in the process of being revised. Prevention plans for Essex and the TRF have been completed. The procedure for Ruth Headquarters fire system operation is still being developed, pending on completion of plumbing in the new system. NLT-Until all necessary changes are met.)*
- C. Through recent chlorine leak response training, the purchase of some additional non-critical response equipment has been brought to attention. Some of these items would aid in a response and should possibly be reviewed for a future budget project. *(A list of items has been generated and reviewed by the committee. It was discussed and agreed that this item would be a great budget project for the future, depending on the development of onsite hypochlorite generation. This item of business will be held in the interim. NLT-Pending on development of onsite hypochlorite generation)*
- D. Tim Farrell suggested possibly installing an exterior emergency shut-down button on the outside of the Chlorine Building to reduce the risk of exposure during a potential leak situation. *(This idea was reviewed by committee members as a valid safety improvement. The button location being on the exterior of the building did pose some questions of concern, in regard to this being the appropriate location for it. Through*



*committee review, it was decided that a shut-down button located on the Essex SCADA System would be the best location. It has been discussed to complete this programming and installation during the Chlorine Building PLC upgrade project, but is also contingent on the Districts development of onsite hypochlorite generation. NLT-Shut-down button will be programmed into SCADA in the second phase of the PLC upgrade project)*

- E. Discuss the Districts facility safety inspection forms with new safety committee members and assign locations for inspections. Forms will be completed by the October meeting and open for review. *(Inspections of Ruth Hydro, Main Office, Essex, and TRF are completed. Most deficiencies have been taken of, currently waiting on supplies for restocking various first aid kits. NLT-~~10-20-21~~, 1-11-22)*
- F. It was mentioned that the Main Office interior access ladder to the roof could possibly be updated to a conventional pull-down ladder, for ease of safe accessibility. *(A fixed wall mounted ladder has been purchased and is on the Maintenance Department Work List to be installed. NLT-~~1-21-21~~, ~~4-21-21~~, ~~7-21-21~~, ~~10-20-21~~, 1-11-22)*
- G. It was mentioned to possibly install backup cameras in fleet vehicles that didn't already have them. *(A survey of the fleet has been conducted and Unit's 2, 11, 12 & 15 would be trucks that would need backup cameras. Due to the cost of cameras, the committee suggested making this a budget project for the next fiscal year. NLT 3-1-22)*
- H. A proposed suggestion of constructing a permanent break room at the TRF was brought to a committee member's attention. This topic was discussed, and is going to be proposed as an 2021-2022 budget project. The location of the room will be located in the Mezzanine of the Filter Building. It also would possibly serve as an additional EOC (Emergency Operating Center) if needed. *(This project has been approved by the board of directors, materials have been purchased and construction has started. NLT- Dependent on workload)*
- I. A question of what would the response time to a "no acknowledgment" alarm be, if an operator didn't respond? For a hypothetical situation, it was discussed that the operator could be incapacitated and unable to monitor SCADA. What kind of actions would be implemented to avoid a water quality issue? *(After reviewing this topic, it was noted that local emergency services should be aware of who to contact if they come across a District staff member in the need of aid after normal work hours. Emergency contact numbers have been updated with local emergency services. The current call list for Advanced Security is still in need of updating, Dale to follow-up. NLT-~~10-20-21~~, 1-11-22) – (Call list changed and completed 10-22-21)*
- J. A suggestion of creating a more ergonomically way to fill, rinse, and dump mop buckets for housekeeping purposes was brought to attention. It was noted that both the Essex and TRF facilities could benefit from having a more established mop fill and wash down area.

*(Locations and materials for this project have been discussed amongst committee members. Due to the cost of materials, it was decided to make this agenda item a budget project for the next fiscal year. NLT-3-1-22)*

4. **New Business:**

- A. It was proposed that the District should consider purchasing some illuminated stop/slow paddles and wands to help flaggers direct traffic during night time operations. *(This item was approved for purchase by committee members and will be completed before next meeting. NLT-1-11-22)*
- B. It was mentioned that the fuel cans used currently to fill District equipment could be updated with newer spill proof types to prevent a potential spill accident. *(New spill proof fuel cans will be purchased immediately. NLT-1-11-22)*
- C. Bruce Brashear brought up that the safety chain on the handrail for Collector #2 cable car shed could be painted yellow to prevent a potential collision with the cable car. *(This item will be added to the Maintenance Shop Worklist to be completed. NLT-1-11-22)*
- D. The election results of new SB 198 committee members are: Josiah Hargadon and Lui Ahmad for the 2022 committee.

5. **Meeting** adjourned: 0844 hrs.

6. **Next** meeting scheduled for January 11, 2022.

Prepared by: Chris Merz

Copy: General Manager  
Superintendent  
Maintenance Supervisor  
Operations Supervisor  
Bulletin board (Essex & Ruth Hydro) and file



## TABLE OF CONTENTS

### **General Policies/Plans**

1. Workplace Illness & Injury Prevention Program
2. Code of Safe Practices
3. General Emergency Action Plan for Each Facility (including fire protection component)
4. OSHA Inspection Procedures

### **Hazardous Materials/Chemicals Plans**

5. Hazard Communications Program
6. Chemical Hygiene Plan
7. Chlorine Emergency Procedures
8. Process Safety Management (for chlorine system)
9. Risk Management Plan (for accidental release of chlorine)
10. Chlorine Leak Emergency Action Plan Flowchart
11. Evacuation Map for Essex Control
12. Chlorine Leak Decontamination Procedure

### **Safe Work Practices and Procedures**

13. Respiratory Protection Program
14. Confined Spaces Policy & Procedures
15. Energy (Lockout) Policy
16. Hot Work Permit



ASSOCIATION OF CALIFORNIA WATER AGENCIES  
**JOINT POWERS**  
INSURANCE AUTHORITY

# Commitment to Excellence

## **HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

and the Association of California Water Agencies/Joint Powers Insurance Authority (ACWA/JPIA) in mutual support for ensuring the most consistent, cost effective, and broadest possible affordable insurance coverage and related services, and in partnership with all ACWA/JPIA members, and in the interest of reducing **Humboldt Bay Municipal Water District's** insurance costs, commit to a program of excellence that, through the implementation of "best practices" reduces the potential and frequency of:

- **Vehicle Losses**
- **Infrastructure Related Losses**
- **Construction Related Losses**
- **Employment Practices Claims**
- **Ergonomic (Musculoskeletal) and Fall Injuries**

Walt "Andy" Sells (CEO, ACWA/JPIA)  
Signature

Carol Risch (General Manager)  
Signature

[Signature] (Board Member)  
Signature

[Signature] (Board Member)  
Signature

[Signature] (Board Member)  
Signature

[Signature] (Board Member)  
Signature

[Signature] (Board Member)  
Signature





# H.R. LaBounty Safety Awards Nomination Form

---

**Nomination Deadlines:**

Spring Awards: **February 1, 2022**

Fall Awards: **September 1, 2022**

**Agency:** Humboldt Bay Municipal Water District

**Project/Initiative Title:** Installation of a swingable, fixed, attic access ladder

Implementation Date: December 2021

Cost to Implement: \$781.00

Staff Time Required: 20hrs

Number of Employees/Facilities Impacted: 22 Employees/1 Facility

**Employee/Department/Committee Nominated:**

Name(s): HBMWD Staff/Supervisors

Job Title/Department: Maintenance

---

## Nomination Summary

*Write a brief summary of your project/initiative. Clearly state the problem/hazard recognized by the nominee and the specific reasons that they initiated corrective action.*

The main goals of this new ladder installation was to design and fabricate a safer fixed ladder with a swingable section, to provide for proper clearances for accessing electrical panels and conduit for new standby generator transfer switch as well as addressing other ergonomic and potential safety issues with existing fixed wall mounted wooden ladder. The original wood cleated fixed ladder had step clearance issues due to its close mounting to the wall where mounted creating limited foot hold. It also had limitations for weight capacity, and an undesirable ergonomic condition at the transition between it and the next level second ladder leading to roof top parapet hatch.

*Describe the specific actions taken to resolve the problem(s) or challenge(s). Share the best practices that made this initiative successful for the agency and its impact.*

The first step to resolve problem was to come up with a design of a ladder that would correct the clearance and ergonomics issues of the existing ladder. Due to its mounting location and the need to have it a portion of the ladder swing off of the wall to provide access to nearby electrical panel the design was complicated. Since this wasn't a cookie cutter installation, a lot of idea's were discussed between staff and supervisors on how to make this design come together and also function correctly. Once the design was chosen, a standard metal ladder was purchased and the fabrication customization work commenced. Mounting brackets were altered to be hinged and pinned to an additional fabricated wall mounted bracket. The ladder was also modified a couple feet off of the ground to allow proper foot hold clearances around the conduit for the generator transfer switch and a drop-down support was made to reinforce the bottom part of the ladder since it was not mounted to the floor. The precarious transition between the two levels of ladders was corrected by mounting the second level ladder in a fashion that the ladder rung spacing between the two ladders was identical but still allowing the attic access cover to slide closed. After many hours of head scratching and a couple of mock-up installations success was achieved!

*State whether the hazard was reduced with engineering controls, introduced a new administrative or work procedure, or relied on personal protective equipment to solve the problem.*

A potential fall hazard was reduced by designing and modifying a wooden ladder that had safer attributes including ergonomics than the previous one installed.

*Describe any extraordinary circumstances that made this nominee's safety accomplishments significant. Describe whether the nominee influenced safety in the workplace, encouraged employee participation in safety efforts, obtained organizational "buy in" to implement the solution.*

There is not a specific nominee for this submittal. This was recognized as a potential safety hazard by the staff and supervisors here at HBMWD. A joint effort from multiple talented team members helped to develop a solution that created the proper clearance, improved it ergonomically, created the necessary access to electrical panels and reduced a potential safety hazard. As always, I believe that all members of HBMWD have "buy in" participation in all safety efforts and this project reflects that.

*Describe whether the project/initiative addressed a hazard or exposure included in the JPIA Commitment to Excellence Program.*

I believe that this initiative did address a couple of hazards/exposures listed in the JPIA Commitment to Excellence Program. The categories would be construction safety and field ergonomics

Office/Field Ergonomics



- Vehicle Operations
- Slip/trip/falls – falls from heights
- Other:

*List and attach any supporting materials that you feel are important for the reviewers to gain a complete picture of the nomination. Digital photos, supporting documentation, sample forms, etc.*

See attached pictures

---

---

**Nominated by:** Chris Merz

**Date:** 1-14-22

---

---

**General Manager:** John Friedenbach

**Date:** 1-14-22

---

---

Please email this form with supporting documents and digital photos (jpg) to [tlofinq@acwajpia.com](mailto:tlofinq@acwajpia.com).

**Humboldt Bay Municipal Water District**

To: Board of Directors

From: John Friedenbach

Date: February 10, 2022

Re: Participation in the Trinity County Local Hazard Mitigation Plan (LHMP)

**Background**

The Disaster Mitigation Act (DMA) is federal legislation that requires proactive, pre-disaster planning as a prerequisite for receiving funding available under the Robert T. Stafford Act. Hazard mitigation is the use of long- and short-term strategies to reduce or alleviate the loss of life, personal injury, and property damage that can result from a disaster. It involves strategies such as planning, policy changes, programs, projects, and other activities that can mitigate the impacts of hazards.

Trinity County has developed and is updating its hazard mitigation plan to reduce risks from natural disasters and to comply with the DMA. This plan will act as the key to funding under the Federal Emergency Management Agency (FEMA) hazard mitigation grant programs.

In order to be eligible for Hazard Mitigation Grant opportunities that become available in **Trinity County**, our District needs to be included in the Trinity County Hazard Mitigation Plan and formally adopt their plan with our annex. The Trinity County LHMP is in the process of being updated. HBMWD prepared an annex that is included as part of Trinity County's plan. See attached HBMWD annex.

**Next Steps**

Once FEMA has approved the Trinity County LHMP, as a plan participant, HBMWD will need to adopt a resolution adopting the Trinity County LHMP. At the appropriate time, staff will bring back a draft resolution to adopt the Trinity County LHMP so that our District will remain eligible for FEMA Hazard Mitigation Grant funding opportunities for our infrastructure located in Trinity County.



# Chapter 6: Humboldt Bay Municipal Water District Annex

---

## 6.1 Hazard Mitigation Plan Point of Contact

### Primary Point of Contact

John Friedenbach, General Manager  
828 7<sup>th</sup> Street  
Eureka, CA 95501-1114  
Telephone: 707-443-5018  
e-mail Address: [office@hbmwd.com](mailto:office@hbmwd.com)

### Alternate Point of Contact

Chris Harris, Business Manager  
PO Box 95  
Eureka, CA 95502-0095  
Telephone: 707-443-5018  
e-mail: [harris@hbmwd.com](mailto:harris@hbmwd.com)

## 6.2 Jurisdiction Profile

The Humboldt Bay Municipal Water District was formed on March 19, 1956 pursuant to the California Municipal Water District Act. It is a special district created to develop a regional water system to provide a reliable supply of drinking and industrial water to customers in the greater Humboldt Bay area of Humboldt and Trinity Counties. The source of water supply is the Ruth Lake Reservoir located in Trinity County. The reservoir was created by construction of the R.W. Matthews Dam. The District has 30 employees—7 at the Eureka office, 20 at the operations center near Essex, and 3 at the District’s Ruth Lake facilities. Operations are primarily funded by charging costs incurred to its customers for water delivered.

The HBMWD has participated in both the counties’ planning meetings for their respective Mitigation Plans. Documentation of meeting schedules, sign-in sheets and public participation can be found in their corresponding sections. The District’s governing body is its Board of Directors which has adoptive powers whom will assume the responsibility for the adoption, implementation, monitoring, and evaluating of this mitigation plan annex.

The Humboldt Bay Municipal Water District (HBMWD) is principally located and operated in Humboldt County, along with the majority of its facilities and infrastructure. However, two major components of HBMWD’s operations—the R.W. Matthews Dam and the Gosselin Hydro-electric Power House—are located in Trinity County. Only the facilities and infrastructure located in Trinity County are addressed in this annex, while the facilities and infrastructure located in Humboldt County are addressed in the Humboldt Operational Area Hazard Mitigation Plan, January 2020, of which the HBMWD is also a participant.

The District has two separate and distinct pipeline systems – one delivers treated drinking water and the other untreated raw water. The District supplies treated drinking water on a wholesale basis to the following 7 municipal agencies located in Humboldt County: the cities of: Arcata, Eureka and Blue Lake; and the community services districts of: Fieldbrook-Glendale, Humboldt, Manila and McKinleyville. Via this wholesale relationship, the District serves water to a population of approximately 88,000. The District also directly serves treated drinking water to approximately 200 retail customers. The District supplies untreated, raw water on a wholesale basis to industrial customers located on the Samoa Peninsula for industrial purposes. Revenue generated from fees for service fund the District operations.

Currently, the District does not serve any industrial customers. We are working diligently to market this resource.

The District's service area is the greater Humboldt Bay area, including the community of McKinleyville to the north, College of the Redwoods to the south, and the City of Blue Lake to the east.

The following is a summary of key information about the jurisdiction:

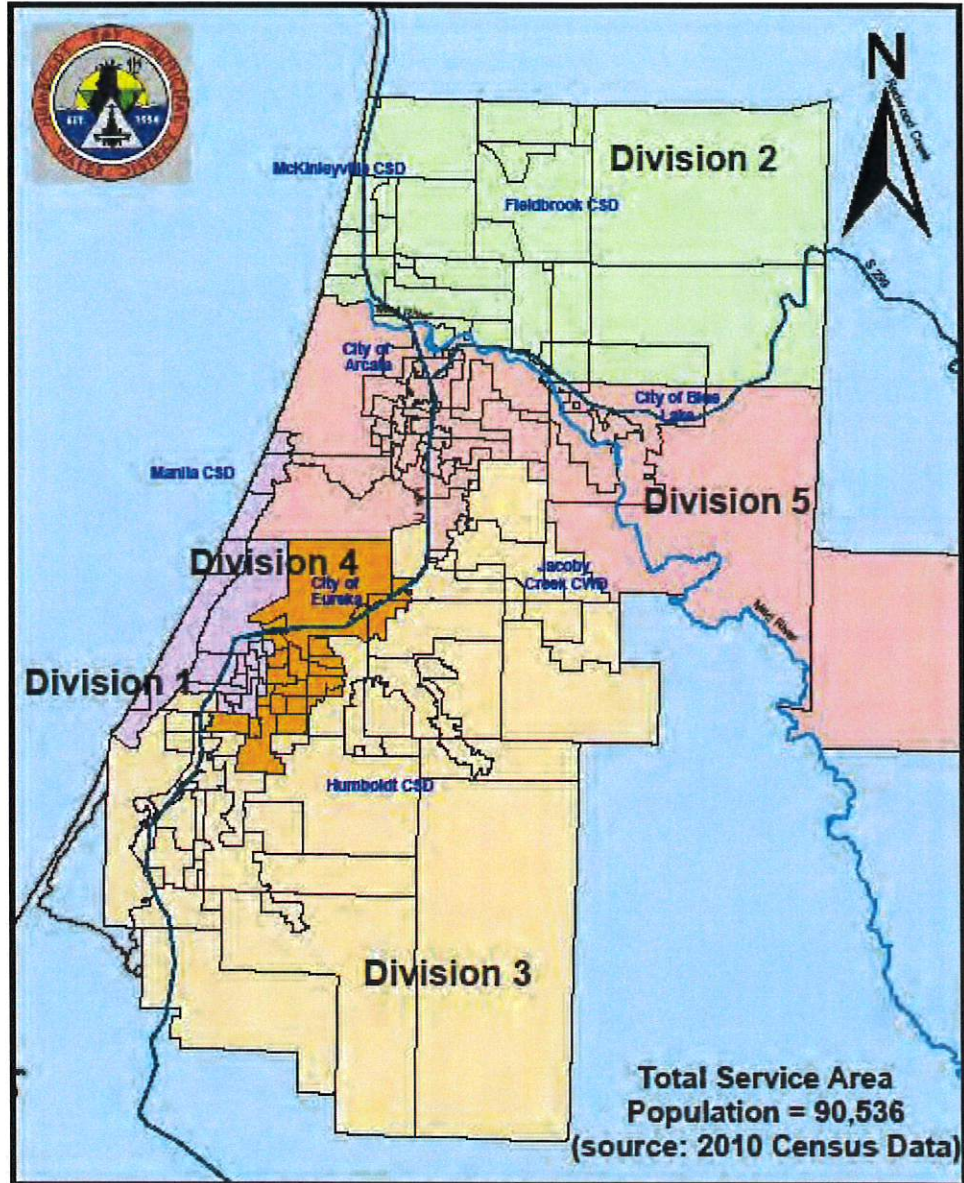
**Population Served**— Approximately 88,000 (via seven wholesale municipal customers and 200 retail customers) in Humboldt county, according to 2020 US Census data.

- **Land Area Served**— 225,000 acres, or 350 square miles
- **Value of Area Served**— The estimated value of the total area served by the jurisdiction is \$7,739,711,061 (Tax Year 2021).
- **Land Area Owned**— Approximately 2,600 acres
- **List of Critical Infrastructure/Equipment Owned by the Jurisdiction located in Trinity County:**
  - R.W. Matthews Dam/Ruth Reservoir [\$250,000,000]
  - Gosselin Hydro-Electric Power House [\$3,000,000]
- **Total Value of Critical Infrastructure/Equipment**— The total value of critical infrastructure and equipment located in Trinity County that is owned by the jurisdiction is \$253,000,000 (scheduled value for insured items only). It would cost hundreds of millions of dollars to replace critical infrastructure.
- **List of Critical Facilities Owned by the Jurisdiction located in Trinity County:**
  - R.W. Mathews Dam (Trinity County) [\$250,000,000]
  - Ruth Headquarters Building (Trinity County) [\$250,000]
- **Total Value of Critical Facilities**—The total value of critical facilities located in Trinity County that is owned by the jurisdiction is \$250,250,000 (scheduled value for insured items only)
- **Current and Anticipated Service Trends**— Meter service growth.

The jurisdiction's division boundaries in Humboldt County are shown on Figure 6.1 (HBMWD Division Boundary Map) and the jurisdiction's property boundaries surrounding Ruth Lake in Trinity County are shown on Figure 6.2 (HBMWD Ruth Lake Property Boundaries).

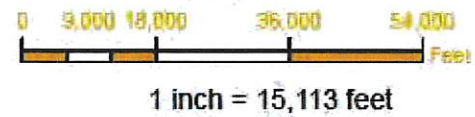
## Figure 6.1 HBMWD Division Boundary Map





**HBMWD Divisions Map**

- Legend**
- Divisions**
- Division 1
  - Division 2
  - Division 3
  - Division 4
  - Division 5



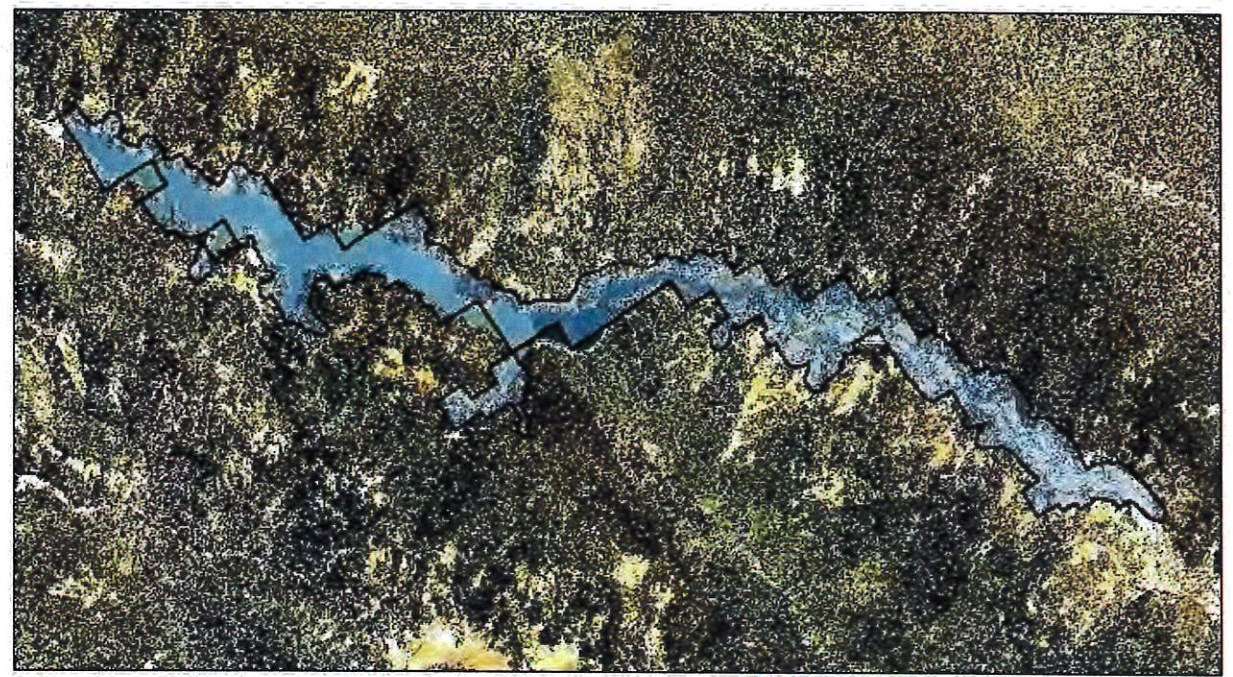
Division areas are made up from contiguous election precincts. Any questions about specific residential locations within / without a Division Boundary should be directed to the Humboldt County Elections Department: 3033 H Street, Room 20, Eureka, 707-445-7481.

Date Approved: May 1, 2013




Figure 6.2 HBMWD Property Boundary Surrounding Ruth Lake

### HBMWD Property Boundaries around Ruth Lake



0 0.75 1.5 3 Miles

 HBMWD Property Boundaries around Ruth Lake

All data, information, and maps are provided "as is" without warranty or any representation of accuracy, timeliness or completeness. The burden for determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requester. The Humboldt Bay Municipal Water District makes no warranties, express or implied, as to the use of the information obtained here. There are no implied warranties of merchantability or fitness for a particular purpose. The requester acknowledges and accepts all limitations, including the fact that the data, information, and maps are dynamic and in a constant state of maintenance, correction and update.





### 6.3 Jurisdiction-Specific Natural Hazard Event History

Although hazards have occurred throughout Humboldt and Trinity Counties, Table 6-1 lists all past occurrences of natural hazards within the District’s jurisdiction only. Data on past natural hazard events was gathered from the following sources:

Hazards & Vulnerability Research Institute (2013). The Spatial Hazard Events and Losses Database for the United States (SHELDUSTM), Version 12.0 [Online Database]. Compilation of county-level hazard data for 18 different natural hazards (information on past hazard events). Columbia, SC: University of South Carolina. Available from <http://www.shelbus.org>

DISASTER DECLARATION HISTORY FROM FEMA. AVAILABLE FROM <a href="https://www.fema.gov/disasters">HTTPS://WWW.FEMA.GOV/DISASTERS</a> .			
TABLE 6-1. NATURAL HAZARD EVENTS			
Type of Event	FEMA Disaster # (if applicable)	Date	Preliminary Damage Assessment
Flood	DR-183	12/24/1964	Significant-amount unknown
Drought	Emergency declaration #3023	1977	Minimal (short duration)
Earthquake	N/A	Dec 1994	\$7,000
Winter storms, flooding, landslides, mud flows	DR-1044	01/09/1995	\$22,500
Severe winter storms, flooding	DR-1046	03/12/1995	\$97,000
Severe Weather	N/A	12/12/1995	\$115,000
Severe winter storms, flooding	DR-1155	01/04/1997	\$204,500
Severe winter storms, flooding	DR-1203	02/09/1998	\$59,000
Flooding, severe winter storms, and landslides	M#1628	02/03/2006	\$84,000
Flooding, severe winter storms, and landslides	DR-4431-CA	02/13/2019	\$290,000
Wildfires	4610-DR-CA	07/14/2021	\$315,000

### 6.4 Hazard Risk Ranking

The hazards and their rankings contained in both mitigation plans for Humboldt and Trinity Counties reflect the impacts they have in their overall planning areas. Table 6-2 presents the ranking of the hazards of concern within the jurisdiction of the HBMWD. The Risk Rating Scores are based on the probability of occurrence and the potential impact on HBMWD’s constituency, vital facilities, and the facilities’ functionality after an event (this includes the impact of hazards on all of HBMWD’s facilities and constituents, including those in Humboldt County). Refer to the footnotes in Table 6.2 for more detailed information addressing calculation methods.

Although Table 6.2 shows Earthquakes as the number one hazard and Dam Failure as number 3, for HBMWD assets at risk located in Trinity County alone, Dam Failure presents the greatest risk for HBMWD, followed by Earthquake, which could potentially trigger a dam failure. The extent of major impacts of a failure at Matthews Dam in Trinity County would likely include: the inundation (Flood Hazard) of Lower Mad River Road from the location of the dam to where this road intersects State Highway 36, approximately 7-8 miles downstream; with minor impacts within the remaining four miles to the Humboldt/Trinity County line. The small community of Mad River is also located near the intersection of Highway 36 and Lower Mad River Road. It would take an estimated 40-45 minutes for the initial leading wave to reach the Highway 36 intersection. Immediate notification and evacuation of people within the predicted inundation zone would be of critical importance, given this short timeframe.

For this reason, and for purposes of this annex, only Dam Failure and Earthquakes are considered of high priority and addressed in the HBMWD’s mitigation strategy section

**TABLE 6-2.  
HAZARD RISK RANKING**

Rank	Hazard Type	Risk Rating Score (Probability x Impact)	Category
1	Earthquake	48	High
2	Flood	30	Medium
3	Dam Failure	24	Medium
4	Severe Weather	22	Medium
5	Sea-Level Rise	18	Medium
5	Tsunami	18	Medium
6	Landslide	12	Low
7	Wildfire	6	Low
7	Drought	6	Low



## 6.5 Applicable Regulations and Plans

Humboldt Bay Municipal Water District is a Special District under the California constitution. As such, it does not promulgate laws and regulations relating to hazard mitigation. Existing codes, ordinances, policies or plans concerning Dam Regulation standards are promulgated by the following agencies:

- California Department of Dam Safety (DSOD)
- Federal Energy Regulatory Commission (FERC)

Both the California DSOD and Federal FERC promulgate and implement dam safety laws and regulations. HBMWD complies with these programs and regulations thereby reducing the risk of operating the R. W. Matthews dam.

## 6.6 Hazard Mitigation Action Plan and Evaluation of Recommended Initiatives

The HBMWD District goals for hazard mitigation within Trinity County are consistent with the Trinity County goals listed in Chapter 4. They are listed below. Table 6-3 lists the all initiatives that make up the jurisdiction's hazard mitigation strategies within Trinity County. Table 6-4 identifies the priority process for each initiative.

Trinity County Hazard Mitigation Goals and Objectives:

### **Goal 1: Reduce the possibility of injuries and loss of life.**

#### **Goal 1 Objectives:**

- 1.1 *Strengthen early notification and warning systems.*
- 1.2 *Strengthen communications systems and address gaps.*
- 1.3 *Ensure there are safe places for people to stay and/or necessary supplies during an event.*
- 1.4 *Revise land development regulations, if needed.*
- 1.5 *Advance community resilience through preparation, adoption, and implementation of state, regional, and local hazard mitigation plans and projects.*

### **Goal 2: Minimize damage to structures and property, as well as disruption of essential services and human activities.**

#### **Goal 2 Objectives:**

- 2.1 *Implement projects to protect critical and necessary assets in hazard risk areas.*
- 2.2 *Establish and maintain partnerships among all levels of government, private sector, and non-profit organizations that improve and implement methods to protect life and property.*
- 2.3 *Protect essential infrastructure.*

### **Goal 3: Protect the environment.**

#### **Goal 3 Objectives:**

- 3.1 *Encourage hazard mitigation measures that promote and enhance natural processes and minimize adverse impacts on the ecosystem.*
- 3.2 *Implement wildfire mitigation and watershed protection strategies as identified in the Community Wildfire Protection Plan (CWPP).*

### **Goal 4: Promote hazard mitigation as an integrated public policy and as a standard business practice.**

#### **Goal 4 Objectives:**

- 4.1 *Continually build linkages among hazard mitigation, disaster preparedness and recovery programs.*
- 4.2 *Use mandatory local general plan, zoning and subdivision requirements to help establish resilient and sustainable communities.*
- 4.3 *Promote and enhance outreach and education efforts by all agencies with hazard*

mitigation plans and programs to encourage engagement of stakeholder groups.  
 4.4 Coordinate efforts to consider climate change impacts in planning decisions.

<b>TABLE 6-3. HAZARD MITIGATION ACTION PLAN MATRIX</b>					
Applies to new or existing assets	Hazards Mitigated	Lead Agency	Estimated Cost	Sources of Funding	Timeline
<b>HBMWD-1 Stabilize surficial slide below the left abutment of the dam</b>					
Existing	Dam Failure	HBMWD	\$1.5 M	FEMA HMGP and local agency funds	5 to 10 years
<b>Initiative-2 Replace Log boom at R.W. Mathews Dam (Ruth Reservoir) to improve dam safety</b>					
Existing (Humboldt County Update)	Dam Failure	HBMWD	\$115,000	District Funds	Completed
<b>Initiative-3 Develop Dam Contingency Failure Plan &amp; Implement recommended action re: notification &amp; evacuation systems</b>					
Existing	Dam Failure	HBMWD / Trinity  County / Humboldt	\$100,000	FEMA HMGP and local agency funds	5 to 10 years
<b>Initiative- 4 Retrofit or replace spillway wall at R.W. Matthews Dam</b>					
Existing (Humboldt County Update)	Dam Failure, Earthquake	HBMWD	\$ 2 M	FEMA HMGP or District Funds	5 to 10 years
<b>Initiative – 5 Revetment of creek at Sheriff’s Cove to access dam and log boom from water.</b>					
New	Dam Failure	HBMWD	\$500,000	FEMA HMGP and District funds	5 to 10 years



**TABLE 6-4.  
MITIGATION STRATEGY PRIORITY SCHEDULE**

Initiative #	Benefits	Costs	Do Benefits Equal or Exceed Costs?	Is Project Grant-Eligible?	Can Project Be Funded Under Existing Programs/ Budgets?	Priority <sup>a</sup>
1	M	H	Y	Y	N	H
2	H	H	Y	Y	Y	H
3	M	M	Y	N	N	M
4	H	H	Y	Y	N	H
5	H	H	Y	Y	N	H

a. Explanation of priorities

- High Priority: Project meets multiple plan objectives, benefits exceed cost, funding is secured under existing programs, or is grant eligible, and project can be completed in 1 to 5 years (i.e., short term project) once funded.
- Medium Priority: Project meets at least 1 plan objective, benefits exceed costs, requires special funding authorization under existing programs, grant eligibility is questionable, and project can be completed in 1 to 5 years once funded.
- Low Priority: Project will mitigate the risk of a hazard, benefits exceed costs, funding has not been secured, project is not grant eligible, and time line for completion is long term (5 to 10 years).

## 6.7 Resolution of Adoption

**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: John Friedenbach  
Date: February 10, 2022  
Re: Samoa Peninsula Clean CA Local Grant Program Public Art Project

**Background**

The Humboldt Bay Harbor and Recreation District and Redwood Community Action Agency (RCAA) are partnering to submit a grant application under the Clean CA Local Grant Program.

The Clean CA Local Grant Program is to achieve the following goals:

- Reduce the amount of waste and debris within public rights-of-way, pathways, parks, transit centers, and other public spaces.
- Enhance, rehabilitate, restore, or install measures to beautify and improve public spaces and mitigate the urban heat island effect.
- Enhance public health, cultural connection, and community placemaking by improving public spaces for walking and recreation.
- Advance equity for underserved communities.

The following is what RCAA has proposed in the grant application for the utility vaults and water tank owned by HBMWD:

- Organizing additional murals on Humboldt Bay Municipal Water District concrete utility vaults. The murals will be installed by professional local artists throughout coastal areas of the Samoa Peninsula to reduce graffiti. The Peninsula Community Collaborative has previously installed murals on multiple similar utility vaults, with great success – graffiti and vandalism were reduced, and residents are proud of the artistic additions.
- Installing a mural on a large utility tank. A professional local muralist will install a mural on the Humboldt Bay Municipal Water District's frequently-graffitied large water storage tank located on the Samoa Peninsula. The mural will evoke a beach/ ocean theme and be designed to minimize vandalism and increase community pride.
- Additional temporary signage or barriers to discourage access to HBMWD areas to prevent erosion

As the Board may recall, the District participated in a similar project in 2019 for some of our air relief vaults on the Samoa Peninsula. The grant application due date was February 1<sup>st</sup>, so time was of the essence and I authorized inclusion of the above descriptions in their grant application.

**Next Steps**

Should the grant application be approved, staff will bring back to the Board for discussion and authorization for our participation in the program including decisions concerning appropriate District infrastructure, if any.



# Engineering



# Memorandum

February 01, 2022

<b>To</b>	John Friedenbach, HBMWD		
<b>Copy to</b>	HBMWD Board Members; Dale Davidsen, HBMWD; Chris Harris, HBMWD; Malia Gonzales, GHD		
<b>From</b>	Nathan Stevens	<b>Tel</b>	(707) 267-2204
<b>Subject</b>	HBMWD Collector 2 Rehabilitation Project – Bid Results and Recommendations	<b>Project no.</b>	11218863

The District received one bid for the Collector 2 Rehabilitation Project on January 21, 2022 with the following result:

Contractor	Base Bid Amount	Additive Bid Amount	Total Bid Amount
Mercer-Fraser Company	\$3,808,000.00	\$783,400.00	\$4,591,400.00

As the sole bidder, Mercer-Fraser Company is the apparent low bidder. Mercer-Fraser is intending to subcontract a portion of the work on this project to Full Bore, Inc. Full Bore would be responsible for furnishing and installing the 10-foot stainless steel blanks and furnishing, installing, and developing the lateral screens. We have checked the State and Federal Contract databases, and the prime's and subcontractor's licenses are in good standing. They have not been debarred from performing construction work, nor do they have any current complaints or claims against them noted on the State Contractor's Licensing database.

In addition to licensing requirements, the bid documents had experience requirements. The construction methods and equipment required for this project are highly specialized. The bid documents are explicit regarding required contractor qualifications. The requirements include that the bidder must have completed five projects to install new lateral well screens in an existing radial collector well in the past ten years. Provisions in the bid documents allow for the District to disqualify and reject any bid from an unqualified bidder. Mercer-Fraser is known locally as an experienced, competent contractor within their areas of experience. However, based on a review of the qualifications statement provided in the bid, the contractor team does not meet the required experience for this project. The contractor's bid lists experience in the following trenchless pipe installation methods: horizontal directional drilling, pipe jacking and boring, tunneling, micro-tunneling, and pipe reaming. However, the contractor team did not provide any radial collector well experience. While the lateral installation method required for this project is in some ways similar to jacking and boring, performing work approximately 70 feet below the ground surface at the bottom of a confined radial collector is work that is unique and requires specialized knowledge, experience, and equipment.

Aside from the experience concerns with the bid results, there are also funding concerns. The funding for the Collector 2 Rehabilitation Project includes grant funding from the North Coast Resource Partnership (NCRP) Proposition 1 Integrated Regional Water Management (IRWM) grant program and a District match. The budget for construction for this project (IRWM grant budget plus District match) is \$2,097,750, which is \$1,710,250 below the base bid from Mercer-Fraser and \$2,493,650 below their total bid. A similar project for Collectors 1/1A was bid in November 2015. That project included two collectors and was bid slightly differently than the Collector 2 project, so bid results between the two projects are not directly compared. However, when analyzing the base bid prices on a cost per linear foot of lateral screen installed basis, the price from Mercer-



Fraser for the Collector 2 project was over double the price for the Collectors 1/1A project. While prices of labor and materials have increased since the Collectors 1/1A project was bid, it appears that the bid for Collector 2 is higher than would be expected if multiple bidders had participated, and it is possible that the District could get a lower price for this work if the project is re-bid in the future.

From an engineering perspective, based on the lack of qualifications from the sole bidder, GHD recommends that the Board of Directors reject the bid from Mercer-Fraser for the construction of the Collector 2 Rehabilitation Project and consider re-issuing the project for bid in the winter of 2022/23. This approach could result in more competitive bids and potentially reduce project costs for the District. District staff has consulted legal counsel to confirm that the District has the right, as stated in the bid documents and in Public Contract Code Sections 20640-20645, to reject any and all bids.

I have attached a copy of the complete tabulated bid results to this memo. Please do not hesitate to call me if you have any questions.

Regards



**Nathan Stevens, PE**  
District Engineer

Encl.: Tabulated Bid Results

**Bid Tabulation Results**

**Owner:** Humboldt Bay Municipal Water District

**Project Name:** Collector 2 Rehabilitation Project

**Project Location:** HBMWD West End Rd, Humboldt County, CA

**Date of Bid:** January 21, 2022

**Prepared by:** Malia Gonzales

**BASE BID SCHEDULE**

Item No.	Description	Units	Quantity	Mercer-Fraser	
				Unit Cost	Total Cost
1	Mobilization/Demobilization	LS	1	\$450,000.00	\$450,000.00
2	Percolation Pond	LS	1	\$150,000.00	\$150,000.00
3	Dewatering Pumps and Piping with Caisson	LS	1	\$300,000.00	\$300,000.00
4	Installation of Ports and 10-foot Blanks	EA	4	\$50,000.00	\$200,000.00
5	Setup for Lateral Jacking	LS	1	\$160,000.00	\$160,000.00
6	Furnish, Install & Develop 12" Diameter, Type 304 Stainless Steel lateral screen. Four 150-foot laterals with 140 feet of screen	LF	560	\$4,300.00	\$2,408,000.00
7	Furnish and Install (2) 12" Stainless Steel Gate Valves with Tags and Install (2) Additional Valves to be Provided by Owner	LS	1	\$75,000.00	\$75,000.00
8	Initial & Final Performance Tests	LS	1	\$65,000.00	\$65,000.00
<b>TOTAL BASE BID AMOUNT.</b>				<b>\$3,808,000.00</b>	
<b>TOTAL OF BASE + ADDITIVE BID AMOUNT</b>				<b>\$4,591,400.00</b>	



Humboldt Bay Municipal Water District  
Collector 2 Rehabilitation Project  
Bid Opening

3:00 p.m.  
January 21, 2022

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

Contractor	Total Bid Amount
Mercer-Fraser Company	\$4,591,400



## CHANGE ORDER

PROJECT: HBMWD 12 kV Switchgear Relocation

Change Order No.: 8Date: 2/2/2022Page No.: 1 of 1**DESCRIPTION OF CHANGE:**

As noted in Change Order #6, the District was to provide the new cable required for the changes associated with Feeder #5. The District performed measurements to determine how much new cable was required for the Feeder #5 work and purchased a corresponding amount of cable. However, it was subsequently determined that the total length of cable required for the Feeder #5 work is greater than the amount of cable that was ordered. Given this, an additional length of cable will need to be spliced to the existing cable to extend the length of Feeder #5 as required. Three splices will be required (one for each strand of the three-strand cable).

The attached quote includes the cost for providing the splice materials and performing the splicing work. The District has enough cable available to provide to the Contractor to extend the length of Feeder #5 after the splices are performed, so no additional cable will be purchased as a part of this change order.

CONTRACTOR: Sequoia Construction Specialties

Adjustment of contract sum	
Original Contract Sum	\$2,448,063.00
Prior Adjustments	\$389,434.42
Contract Sum Prior to this Change	\$2,837,497.42
Adjustment for this Change	\$4,660.71
Revised Contract Sum	\$2,842,158.13

Adjustment of contract completion dates	
Original Contract Completion Date	Nov. 26, 2020
Prior Adjustments in Calendar Days	431
Adjustment in Calendar Days for this Change Order	150
Revised Contract Completion Date	June 30, 2022

**NOTE:** CONTRACTOR WAIVES ANY CLAIM FOR FURTHER ADJUSTMENTS FOR THE CONTRACT SUM RELATED TO THE ABOVE-DESCRIBED CHANGE IN THE WORK.

RECOMMENDED BY:

Engineer – Nathan Stevens

DATE: 2/2/2022

APPROVED BY:

Owner – John Friedenbach, General Manager

DATE: \_\_\_\_\_

ACCEPTED BY:

Contractor – Brian Pritchard, President

DATE: 2/2/2022



# Potential Change Order/Proposal

SEQUOIA CONSTRUCTION SPECIALTIES

PO Box 6061  
310 Redmond Rd  
Eureka, CA. 95503  
Phone: (707)442-3596 Fax: (707)442-0304

<b>Proposal Number:</b>	13
<b>Date:</b>	1/28/2022
<b>Requested by:</b>	

**Issued To:**

HBMWD

Project: 12kV Switchgear Relocation

Description	Amount
Install splices for Feeder #5	\$ -
Colburn Electric	\$ 4,438.77
	\$ -
	\$ -
<i>Sub Total</i>	\$ 4,438.77
5% O&P	\$ 221.94
Total Price	\$ 4,660.71

Additional working days required: TBD

---

Attachments: Colburn Proposal

---



---



---



---

Signed: Brian Pritchard

---

*Proposal*  
**ROBERT COLBURN ELECTRIC, INC.**  
*California Contractor License No. 750471*  
 PO Box 3667  
 Eureka, CA 95502  
 Phone: (707) 445-8474 Fax: (707) 445-8475  
 www.colburn-electric.com

To: <b>Sequoia Construction Co.</b>	Date: <b>1/27/2022</b>
Attn: <b>Brian</b>	Job Location: <b>HBMWD 12kv Switchgear Relocation</b>
Email	COR: <b>13</b>

We hereby propose to furnish all materials, equipment, and labor necessary to perform the following work:

**Furnish and install three medium voltage splices in vault V-4 for feeder #5 - per the attached:**

<b>Total Adder</b>	<b>\$ 4,438.77</b>
--------------------	--------------------

**Excludes: Permit/Inspection fees.**

You, the Customer (buyer) or tenant have the right to require the contractor to furnish you with a performance bond. You, the buyer, may cancel this transaction at any time prior to midnight of the third business day after the date of this transaction. Cancellation by the buyer after the right to rescind has passed, shall be deemed a material breach of this agreement and entitles the contractor to damages. Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four years of the date of alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within 10 years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, PO Box 26000, Sacramento, California 95826, or call the CSLB at 1-800-321-CLSB (2752) or visit the CSLB Internet Web site at www.cslb.ca.gov.

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance.

*Acceptance of Proposal--* The above prices, specifications and conditions are satisfactory to do the work as specified. Payment to be made as outlined above.

Authorized Signature Bob Colburn  
 Robert Colburn Electric, Inc.

Our workers are fully covered by Workmen's Compensation Insurance.

**This proposal may be withdrawn by us if not accepted within 30 days.**

ACCEPTED BY: \_\_\_\_\_

Signature \_\_\_\_\_

Date of Acceptance \_\_\_\_\_



ROBERT COLBURN ELECTRIC, INC.

Calif. Contractors License No. 750471  
 P.O. Box 3667 Eureka, California 95502

office phone (707) 445-8474 office fax (707) 445-8475

WORK SHEET

DATE: January 25, 2022

FOR JOB	HBMWD	email:	-
LOCATION	7270 West End Rd		
CITY	Arcata		
	Furnish and install three medium voltage splices in vault V-4 for feeder #5 - per the attached:		

Quantity	ARTICLE	Unit Price		TOTALS
3	3M Splice 5513A-4/0-CU	990.34	E/	2,971.02
1	blade for speed cutter	32.56	E/	32.56
3	4/0 copper barrel splices	12.56	E/	37.68
		Subtotal		3,041.26
		Tax 9.25%		281.32
6	Hours Labor	110/HR,	E/	660.00
	Materials OHP	15%		456.19
	<b>Total</b>			<b>4,438.77</b>

TO: **HBMWD** PROJECT: **HBMWD 12kV Switchgear Relocation** APPLICATION NO: **13**  
**828 7th St** PERIOD FROM: **01/01/22**  
**Eureka, CA 95501** PERIOD TO: **01/31/22**

FROM: **Sequoia Construction Specialties** ENGINEER: **GHD** FEMA NO.: **4240-DR-CA-PJ0017**  
**PO Box 6061**  
**Eureka, CA 95502-6061**

CONTRACT FOR: APPLICATION DATE: 01/31/22

**APPLICATION FOR PAYMENT**

Application is made for Payment, as shown below, in connection with the Contract.  
 Continuation Sheet is attached.

<b>1. Original Contract Sum</b>	2,448,063.00
<b>2. Net Change by Change Orders</b>	389,434.42
<b>3. Contract Sum to Date (Line 1 and 2)</b>	2,837,497.42
<b>4. Total Completed &amp; Stored to Date</b>	2,248,259.07
<b>5. Retainage:</b>	
a. 5% of Completed & Stored Work	112,412.95
<b>Total Retainage</b>	112,412.95
<b>6. Total Earned Less Retainage</b>	2,135,846.12
<b>7. Less Previous Certificates for Payment (Net amount)</b>	2,070,112.77
<b>8. Current Payment Due</b>	65,733.35
<b>9. Balance to Finish, Plus Retainage</b>	589,238.35

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months.	360,754	0
Total approved this Month	15,294	0
TOTALS	\$376,048	\$0
NET CHANGES BY Change Order		\$376,048

APPROVED BY

*North Star* 2/2/2022

ENGINEER: GHD

OWNER: HBMWD

The undersigned Contractor certifies that to the best of the contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is not due.

Contractor:

By: Brian Pritchard

1/31/2022





GAVIN NEWSOM  
GOVERNOR



MARK S. GHILARDUCCI  
DIRECTOR

1/13/2022

John Friedenbach  
General Manager  
Humboldt Bay Municipal Water District  
P.O. Box 95  
Eureka, CA 95502-0095

Subject: Time Extension Approval # 3  
FEMA-4240-DR-CA, Valley and Butte Fires  
Cal OES PJ0017, FEMA 024, HBMWD 12kV Switchgear Relocation  
Subrecipient: Humboldt Bay Municipal Water District, FIPS: 023-91000

Dear John Friedenbach:

The California Governor's Office of Emergency Services (Cal OES) received your letter on January 6, 2022, requesting a subaward Period of Performance (POP) time extension from March 22, 2022 to September 22, 2022 for completion of the project referenced above. Cal OES reviewed the project history and determined the time extension is warranted based on the factors listed in your letter.

The approved budget and scope of work remain unchanged for this project. A time extension is approved and all work must be completed by the new POP end date.

If you have any questions, please contact Michele Telfer, Regional Manager, at (916) 926-9876 or Michele.Telfer@CalOES.ca.gov.

Sincerely,

DocuSigned by:  
*Jennifer L Hogan*  
B87C1D9FC4CC492...

JENNIFER L. HOGAN  
State Hazard Mitigation Officer



3650 SCHRIEVER AVENUE • MATHER, CA 95655  
RECOVERY SECTION • HAZARD MITIGATION ASSISTANCE BRANCH  
PHONE: (916) 328-7450 • EMAIL: HMA@CALOES.CA.GOV  
www.CalOES.ca.gov



John Friedenbach  
1/13/2022  
Page 2

Enclosures:

cc: Robert McCord, Hazard Mitigation Branch Chief, FEMA Region IX  
Aaron Lim, Hazard Mitigation Assistance Specialist, FEMA Region IX



# 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

January 19, 2022

Sara Lynch, Hazard Mitigation Grants Specialist  
California Office of Emergency Services  
3650 Schriever Avenue  
Mather, CA 95655-4203

**Re: HMGP FEMA-4240-DR-CA, Project #PJ0017, FIPS #023-91000  
Scope of Work Revision and Budget Increase Request for Construction –  
January 2022  
Humboldt Bay Municipal Water District – 12 kV Switchgear Relocation**

Dear Ms. Lynch:

This letter includes two separate but related requests for the subject project: a scope of work (SOW) revision and a budget increase request. These two requests have been broken into two main sections of the letter. The budget increase request was provided previously in November 2021. However, it was determined that some of the items listed in the budget increase request necessitated a SOW revision as well. Given this, Cal OES staff recommended combining a SOW revision and budget increase request in one letter.

### Scope of Work Revision

The Humboldt Bay Municipal Water District (HBMWD or District) is requesting a Scope of Work Revision for the 12 kV Switchgear Relocation Project. The District has an existing 2-megawatt (2-MW) backup generator that provides power to the District's source water pumps if utility power from Pacific Gas & Electric PG&E is lost. The generator has an associated controller unit that controls startup and shutdown of the generator that needs to be upgraded, as described in more detail in the "explain and justify the need for the scope change" section below. The controller upgrade includes the physical controller itself, the development of drawings for integrating the new controller, new associated conduit and wiring, and programming the controller. A revised SOW has been attached that includes additions associated with the generator controller upgrade and other items.



**Demonstration that the change in scope is consistent with intent of HMGP program**

All of HBMWD's source water pumps are powered via a 12 kV PG&E service drop that is routed through the District's existing 12 kV switchgear. The existing switchgear is in the dam break inundation zone for R.W. Matthews Dam. If the dam were to fail, the existing switchgear would be inundated, and the District would be unable to produce water for its customers. The goal of the project is to provide 12 kV switchgear that is out of the dam break inundation zone so the District could continue to produce water in the event of a dam break. While the existing 2-MW generator was not part of the project and is generally not required on a regular basis for the District to produce water, it is essential that the District has backup power to provide water in the event of a power outage. As described in the following section, the new switchgear necessitated an upgrade to the generator controller, as the generator would be otherwise inoperable after the 12 kV Switchgear Relocation project. The existing generator controller is not compatible with the updated switchgear. Given this, there is a direct nexus between the 12 kV Switchgear Relocation project and the generator controller upgrade. Without the 12kV Switchgear Relocation project, the current generator controller is functioning and integrates with the existing switchgear. Consequently, the controller upgrade is an integral part of the overall project, and the project is consistent with the intent of the HMGP program.

**Explain and justify the need for the scope change**

PG&E has very specific requirements for how generators connect with the power grid. The controller allows the generator to function in a way so that it syncs with the utility. The synchronization of power transfers from utility to generator, and vice versa, prevent electrical and safety issues with the generator back feeding the grid. This is a complex process that requires intricate programming of the controller. To economize on the project, it was determined during the design phase that the existing controller is still functioning and could remain in place. However, during construction, it was determined that the existing controller software is not compatible with the new switchgear programming, and there is no programming upgrade for the existing controller. The generator controller needs to be programmed to integrate it with the new switchgear equipment to allow the generator to function as required by PG&E, which requires an upgrade of the existing controller. While the existing 2-MW generator was not part of the project and is generally not required on a regular basis for the District to produce water, it is essential that the District has backup power to provide water in the event of a power outage. The controller programming issues brought about by the 12 kV Switchgear Relocation project necessitated the controller upgrade, which makes the controller upgrade an integral part of the overall project.

**Address whether or not the change in scope changes the schedule**

The overall schedule is anticipated to remain unchanged from the extension that was recently granted to extend the completion date to September 22, 2022.

**Address whether or not the change in scope changes the budget**

The scope changes affect the budget as described in more detail in the "Budget Modification" section of this letter below.

**Address potential for additional Environmental and Historic Preservation (EHP) review**

Addition of the generator controller has no impacts with regard to EHP review. The new controller will be mounted on a wall within the existing generator building, which is not a historic structure. New conduit is within the area that was analyzed as being disturbed as a part of the original EHP process.

**Budget Modification**

The District respectfully requests an increase in the grant budget for construction and construction management of the 12 kV Switchgear Relocation Project in an amount of \$410,000 (75% share of the budget increase is \$307,500) for the reasons outlined below.

**Reasons for Increase**

An increase in the budget for construction of this project was approved in May of 2020 to account for construction bids being higher than was originally budgeted and additional PG&E costs that were not foreseen. This previous budget increase was sufficient to cover project costs that were known at the time. However, the construction process has resulted in change orders resulting from unanticipated modifications, and additional unforeseen challenges for the project have arisen that have caused the project budget to increase.

Multiple existing and pending construction change orders have been required for the project, including change orders for the following:

1. The addition of a new controller for the District's existing 2-megawatt (2-MW) generator that provides backup power to all the District's source water pumps and other equipment at the District's main operations facility. The controller performs many functions, including syncing and paralleling the backup generator with PG&E utility power during a transfer of power from the generator to the utility, which is a complicated process. The generator will not function without a controller. Moreover, the current controller is not compatible with the new switchgear, which renders the backup generator useless. If there were to be a power outage due to a seismic event or storm or PSPS (power safety shut off) and the generator controller failed, the District would be unable to provide water to its customers for drinking and firefighting services. More detail on the controller upgrade is provided in the "Scope of Work Revision" section of this letter above.
2. The addition of the new controller also requires new design, programming, drawings, and wiring to make the system function properly and integrate with the new switchgear. The new controller also requires an updated human-machine interface (HMI) to provide adequate functionality required for integration with the



District's SCADA system and minimize duplicating programming effort at the new switchgear when changes are made to the District's system.

3. The electrical power feeders for the new switchgear are controlled in part by protective relays, which control the opening and closing of the power circuit breakers. The relays need to be tested for proper functionality during commissioning of the project, as well as at regular intervals over the lifetime of the new switchgear. The addition of test switches, which were not included in the original project design, was required to allow for this testing.
4. The original plan was to splice into one of the existing electrical feeders to cut power over from the existing switchgear to the new switchgear. The original design was performed this way to save costs and minimize the amount of copper cable required. However, testing performed by the contractor showed that the existing cable has inadequate insulation resistance, meaning that changes need to be made and additional effort and materials are required of the contractor to provide proper functioning.

The costs for items #1-4 above have been incorporated into Line 24 (Construction Change Orders) of the attached revised cost estimate spreadsheet.

Additional construction management and engineering services have also been required during construction for the following reasons:

1. The project schedule has been extended due to equipment procurement challenges and lead times related to the COVID-19 pandemic. The California wildfire season in 2021 also caused significant delays in getting the new switchgear equipment to the project site, as it was an oversized load, and Caltrans suspended the permit for the load to travel from the manufacturer location to the project site during the wildfire season due to road closures and width restrictions, which caused a project delay of four months. The increase in schedule length has resulted in a corresponding increase in construction management time and effort. The original contractor schedule had a completion date of November 4, 2020. However, due to the challenges mentioned above, construction remains ongoing and is anticipated to continue into the spring of 2022.
2. Additional engineering services were required to support the generator controller upgrade, as described above.
3. Additional engineering services were required to accommodate the changes to eliminate the existing feeder cable with low test values, as described above.

### **Revised Cost Estimate Narrative**

A revised cost estimate that reflects the increase in project costs is attached. The only differences between this revised cost estimate and the previous version that was approved by Cal OES are as follows:

1. Line 24 (Construction Change Orders) is a new line in the cost estimate that reflects real project costs for existing and pending change orders with the contractor that are essential for the successful execution of the project. This line adds \$239,500 to the overall project cost.

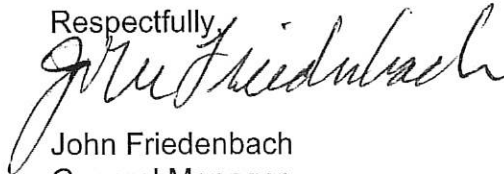
2. The budget for Line 28 (Construction Management) has been increased by \$170,500 from \$143,000 to \$313,500. This includes real costs for construction management and engineering services during construction, as well as a projection of required construction management costs to get to project completion based on average monthly construction management effort that has been required throughout the project to date.

Because these are the only changes to the cost estimate, a separate revised cost estimate narrative was not prepared, and the reasoning and justification behind the cost increases are provided within this letter. The overall increase in the project budget is \$410,000 from the previously approved budget of \$3,023,328, which brings the total project budget to \$3,433,328.

A revised Benefit Cost Analysis (BCA) that contains the updated cost estimate information was performed, which resulted in a Benefit Cost Ratio (BCR) of 2.06. A letter from Nathan Stevens with GHD dated December 20, 2021, addressing previous comments on the revised BCA has been attached. That letter also includes a revised BCA Justification of Damages document (revised 12/20/2021). A revised match commitment letter noting HBMWD's updated 25% match based on the revised cost estimate is attached.

We appreciate your assistance in this matter. Please do not hesitate to contact us if you have any questions or require any additional information.

Respectfully,



John Friedenbach  
General Manager

- Encl. Scope of Work – Revised 1/17/2022  
Cost Estimate Spreadsheet – Revised 11/12/2021  
BCA – Revised 11/23/2021  
BCA Report – Revised 11/23/2021  
Match Commitment Letter – Revised 11/12/2021  
BCA Justification Letter with revised Justification of Damages Document –  
12/20/2021



**CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES**

**GRANT SUBAWARD AMENDMENT**

**SUBAWARD #** 2020-342

FIPS# 023-91000 DUNS# N/A Amendment# 1  
 Project # N/A Performance Period 07/01/2020 to 12/31/2022

This amendment is between the California Governor's Office of Emergency Services, hereafter called Cal OES, and the Subrecipient: Humboldt Bay Municipal Water District

Amendment to Change End Date:

Grant Subaward 2020-342 is hereby amended to:

Change the end of Performance Period of the Subaward for the FY20 PSPS fund for Community Power Resiliency (CPR) Program from October 31, 2021 to December 31, 2022.

The FY20 PSPS funds in the amounts of \$215,000 (full award) must be expended by December 31, 2022.

All other provisions of this agreement shall remain as previously agreed upon.

Subrecipient (Certification and Signature of Authorized Agent)	
By (Authorized Signature)	Date
<i>[Signature]</i>	1-18-22
Printed Name	Title
JOHN FRIEDENBACH	GENERAL MANAGER
Address	
P.O. Box 95, Eureka, CA, 95502-0095	
Governor's Office of Emergency Services (For Cal OES use only)	
By Director or Designee	Date
Printed Name	Title
Amount Encumbered by this Document	Fund Source Labels
Prior Amount Encumbered	
Total Amount Encumbered to Date	
I hereby certify upon my own personal knowledge that budgeted funds are available for the period and purpose of the expenditure stated above.	
Signature of Cal OES Fiscal Officer	Date

# FINANCIALS



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



<u>BANK ACCOUNT BALANCES AT MONTH-END</u>	January 31, 2022	January 31, 2021
<b>GENERAL ACCOUNTS</b>		
1. US Bank - General Account	3,034,102.16	2,129,630.25
2. US Bank - Xpress BillPay/Electronic Payments Account	3,247.81	5,108.38
<i>Subtotal</i>	3,037,349.97	2,134,738.63
<b>INVESTMENT &amp; INTEREST BEARING ACCOUNTS</b>		
3. US Bank - DWR/SRF Money Markey Accnt	166,547.15	166,518.00
4. US Bank - DWR/SRF Reserve CD Account	547,336.94	547,336.94
5. US Bank - PARS Investment Account	1,064,196.52	933,119.66
<i>Contributions = \$800,000 Earnings = \$264,197</i>		
6. L. A. I. F Account - General Account	1,687.78	1,687.78
7. L. A. I. F Account - MSRA Reserve Account	442,707.28	441,335.20
8. CalTRUST - Restricted Inv. Account (Medium Term)	1,329,638.18	1,320,606.21
9. CalTRUST - Unrestricted Inv. Account (Medium Term)	400,827.41	431,987.92
10. CalTRUST - DWFP Reserve Account (FedFund)	240,722.91	240,658.62
11. CalTRUST - ReMat Account (LEAF Fund)	936,680.62	653,883.36
12. CalTRUST - General Reserve Account (Short-Term)	2,378,065.49	2,380,336.90
<i>Total CalTRUST Accounts</i>	5,285,934.61	5,027,473.01
13. Humboldt County - SRF Loan Payment Account	52,804.75	52,807.07
14. Humboldt County - 1% Tax Account	-	60,242.85
15. Principle Investment Account	39,014.04	26,310.18
<i>Subtotal</i>	7,600,229.07	7,256,830.69
<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)	-	26,559.74
19. Humboldt County - DWFP Reserve Account (clsd)	-	2,957.41
20. Humboldt County - MSRA Reserve Account (clsd)	-	1,884.65
21. Humboldt County - ReMat Account (clsd)	-	5,711.29
<i>Subtotal</i>	27,650.00	64,763.09
<b>TOTAL CASH</b>	<b>10,665,229.04</b>	<b>9,456,332.41</b>



**FUND BALANCES AT MONTH-END**

January 31, 2022

January 31, 2021

**RESTRICTED FUNDS - ENCUMBERED**

1. Prior-Year Price Factor 2 Rebate	(1,495.44)	(10,929.65)
2. Prior-Year Restricted AP Encumbrances	(337,314.00)	(132,638.00)
3. Advanced Charges - 12Kv Relocation	(513,866.67)	-
4. Advanced Charges - 18,000lb Excavator	-	(222,800.00)
5. Advanced Charges - 3x Tank Seismic Retrofit	(1,113,103.67)	(230,044.00)
6. Advanced Charges - Cathodic Protection Project	(114,583.31)	(58,331.00)
7. Advanced Charges - Collector 2 Rehabilitation	(729,848.49)	(682,688.00)
8. Advanced Charges - On-Site Generation of Chlorine	(827,580.44)	(462,862.00)
9. Advanced Charges - Redundant Pipeline	(187,562.31)	(129,169.00)
10. Advanced Charges - TRF Emergency Generator	(343,750.00)	(289,581.00)
10a. 3AC Collected Funds - TRF Emergency Generator	(307,466.32)	-
11. Advanced Funding - Community Power Resiliency	(215,000.00)	-
12. Advanced Charges - Assist. Spillway Seismic Grant	(14,583.31)	-
<i>Subtotal</i>	(4,706,153.96)	(2,219,042.65)

**RESTRICTED FUNDS - OTHER**

12. 1% Tax Credit to Muni's	-	(59,076.16)
13. DWR Reserve for SRF Payment	(166,547.15)	(166,518.00)
14. DWR Reserve for SRF Loan	(547,336.94)	(547,336.94)
15. Pension Trust Reserves	(1,064,196.52)	(933,119.66)
16. ReMat Deposit	(27,000.00)	(27,000.00)
17. HB Retail Capital Replacement Reserves	(106,172.75)	(77,499.08)
<i>Subtotal</i>	(1,911,253.36)	(1,810,549.84)

**UNRESTRICTED FUNDS**

**BOARD RESTRICTED**

18. MSRA Reserves	(444,395.06)	(443,022.98)
19. DWFP Reserves	(240,722.91)	(240,658.62)
20. ReMat Reserves	(936,680.62)	(656,748.64)
21. Paik-Nicely Development	(4,158.00)	(4,158.00)
22. Principle Investment Reserves	(39,014.04)	(26,310.18)
22a. Northern Mainline Extension Study Prepayment	(3,464.73)	-
<i>Subtotal</i>	(1,668,435.36)	(1,370,898.42)

**UNRESTRICTED RESERVES**

23. Accumulation for SRF Payment	(52,804.75)	(103,248.43)
24. Accumulation for Ranney/Techite Payment	36,593.55	(6,930.46)
25. General Fund Reserves	(2,363,175.16)	(3,951,295.05)
<i>Subtotal</i>	(2,379,386.36)	(4,055,841.50)
<b>TOTAL NET POSITION</b>	<b>(10,665,229.04)</b>	<b>(9,456,332.41)</b>



## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

## REVENUE REPORT

January 31, 2022

58%  
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>	649	158,527	180,193	375,000	42%
<b>General Revenue</b>					
Interest	0	0	0	0	0%
FCSO Contract (Maint. & Operations)	22,762	162,129	116,447	225,000	72%
Power Sales (Net ReMat)	19,261	70,693	37,374	125,000	57%
Tax Receipts (1% Taxes)	0	0	0	875,000	0%
<b>2. Miscellaneous Revenue*</b>	4,803	103,110	40,756	50,000	206%
<i>*Detail on following page</i>					
<b>TOTAL PF2 REVENUE CREDITS</b>	<b>47,474</b>	<b>494,459</b>	<b>374,770</b>	<b>1,650,000</b>	<b>30%</b>

**B. DISTRICT REVENUE**

	MTD RECEIPTS	YTD RECEIPTS	PRIOR YEAR	BUDGET	% OF BUDGET
<b>3. Industrial Water Revenue</b>					
Harbor District	0	207	293	0	0
<i>Subtotal Industrial Water Revenue</i>	0	207	293	0	0
<b>4. Municipal Water Revenue</b>					
City of Arcata	107,486	800,331	739,264	1,457,266	55%
City of Blue Lake	14,400	107,527	103,260	190,603	56%
City of Eureka	252,747	1,863,617	1,745,296	3,368,178	55%
Fieldbrook CSD	13,774	103,808	83,159	185,228	56%
Humboldt CSD	80,601	589,071	571,207	1,061,800	55%
Manila CSD	0	38,618	41,318	79,725	48%
McKinleyville CSD	87,043	651,761	603,441	1,188,443	55%
<i>Subtotal Municipal Water Revenue</i>	556,051	4,154,733	3,886,946	7,531,243	55%
<b>TOTAL INDUSTRIAL &amp; WHOLESALE REVENUE</b>	<b>556,051</b>	<b>4,154,940</b>	<b>3,887,240</b>	<b>7,531,243</b>	<b>55%</b>
<b>5. Power Sales</b>					
Power Sales (ReMat Revenue)	43,444	156,326	78,733	300,000	52%
Interest (ReMat Revenue)	0	0	5,620	0	
<b>TOTAL REMAT REVENUE</b>	<b>43,444</b>	<b>156,326</b>	<b>84,353</b>	<b>300,000</b>	<b>52%</b>
<b>6. Other Revenue and Grant Reimbursement</b>					
HB Retail Capital Replacement Rev.	0	22,954	23,124		
FCSO Contract (Admin & Overhead)	7,457	57,575	59,147		
FEMA/CalOES Grant Revenue	51,271	254,522	229,179		
SWRCB In-Stream Flow Grant Revenue	0	13,103	44,742		
Quagga Grant (Pass-Through)	0	3,700	0		
August Complex Fire Recovery	4,356	57,682	0		
Interest - Muni PF2 Retained	256	929	24,936		
Net Increase/(Decrease) Investment Accounts	7,850	(2,985)	126,467		
<b>TOTAL OTHER/GRANT REVENUE</b>	<b>71,190</b>	<b>407,479</b>	<b>507,596</b>		
<b>GRAND TOTAL REVENUE</b>	<b>718,159</b>	<b>5,213,204</b>	<b>4,853,959</b>	<b>9,481,243</b>	<b>55%</b>



HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 MISCELLANEOUS REVENUE - DETAIL REPORT  
 January 31, 2022

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

	MTD RECEIPTS	YTD RECEIPTS
<u>Miscellaneous Revenue</u>		
Dividend - Principal Life	-	678
Fees - Park Use	100	150
Rebate - CALCard	-	437
Refund - Diesel Fuel Tax	-	-
Refunds - Miscellaneous	-	-
Reimb - Blue Lake SCADA/Internet Monthly Fees	51	306
Reimb. - Copies & Postage	2	48
Reimb. - Gas	-	-
Reimb. - Telephone	-	3.23
UB - Water Processing Fees	30	180
UB - Hydrant Rental Deposit/Use	449	11,681
Sale of Scrap Metal/Equipment	-	4,512
Retirees' Health Ins./COBRA Reimb.	4,079	26,205
State Water Arrearages Administration Rev.	53	53
	-	-
<u>Ruth Area</u>		
Lease - Don Bridge	-	-
Rent - Ruth Cabin	40	1,170
August Complex Wildfire FEMA Reimbursement	-	57,687
<b>TOTAL MISCELLANEOUS REVENUE</b>	<b>4,803</b>	<b>103,110</b>



HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 ALL - MONTHLY EXPENDITURE REPORT - PAGE 1 OF 3  
 January 31, 2022

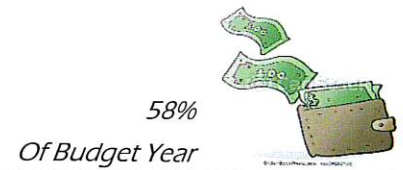


**SALARY AND EMPLOYEE BENEFIT EXPENDITURES (S. E. B.)**

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
<b>Compensation</b>					
1. Wages - Regular	186,603.21	1,286,912.37	1,159,327.05	2,345,318	62%
1a. COVID Essential Service Pay*	(8,905.86)	(45,991.96)	-	(83,700)	55%
2. Wages - Sick	5,505.05	41,918.66	27,568.10		
3. Wages - Vacation	34,021.77	129,959.70	98,771.45		
<i>Subtotal</i>	217,224.17	1,412,798.77	1,285,666.60	2,261,618	62%
4. Wages - Overtime	3,660.66	8,790.32	17,853.61	15,000	
5. Wages - Holiday (Worked)	2,909.30	7,393.42	6,901.89	15,000	
<i>Subtotal</i>	6,569.96	16,183.74	24,755.50	30,000	54%
6. Wages - Part-Time	1,236.26	8,539.35	19,991.78	97,557	9%
7. Wages - Shift Differential	782.80	5,956.25	6,097.28	11,000	54%
8. Wages - Standby	7,323.54	49,845.15	47,798.72	81,000	62%
9. Director Compensation	1,680.00	13,840.00	13,200.00	26,000	53%
10. Secretarial Fees	262.50	1,837.50	1,837.50	3,200	57%
11. Payroll Tax Expenses	21,451.36	119,275.92	109,029.37	198,150	60%
11a. COVID Ess. P/R Tax*	(681.30)	(3,518.38)	-	(7,100)	50%
<i>Subtotal</i>	32,055.16	195,775.79	197,954.65	409,807	48%
<b>Employee Benefits</b>					
12. Health, Life, & LTD Ins.	67,717.12	406,363.59	390,724.60	720,570	56%
13. Air Medical Insurance	260.00	2,279.00	1,755.00	2,210	103%
14. Retiree Medical Insurance	8,059.02	72,078.53	86,092.46	92,323	78%
15. Employee Dental Insurance	2,981.68	19,961.03	19,021.92	40,839	49%
16. Employee Vision Insurance	631.04	4,247.97	4,175.75	7,572	56%
17. Employee EAP	81.30	545.13	573.88	1,116	49%
18. 457b District Contribution	2,750.00	18,725.00	17,650.00	30,600	61%
19. CalPERS Expenses	27,232.09	439,033.42	388,990.87	581,759	75%
20. Workers Comp Insurance	30,968.12	80,776.29	63,122.49	109,557	74%
<i>Subtotal</i>	140,680.37	1,044,009.96	972,106.97	1,586,546	66%
<b>TOTAL S.E.B</b>	<b>396,529.66</b>	<b>2,668,768.26</b>	<b>2,480,483.72</b>	<b>4,287,971</b>	<b>62%</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  
January 31, 2022



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

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
<b>Operations &amp; Maintenance</b>					
1. Auto Maintenance	3,428.30	31,825.62	20,812.54	39,700	80%
2. Engineering	5,128.75	22,950.00	14,622.49	75,000	31%
3. Lab Expenses	1,960.00	7,333.00	9,402.80	13,000	56%
4. Maintenance & Repairs					
General	1,158.45	15,796.81	15,563.13	47,000	34%
TRF	366.09	9,157.79	4,196.08	17,000	54%
<i>Subtotal</i>	<i>1,524.54</i>	<i>24,954.60</i>	<i>19,759.21</i>	<i>64,000</i>	<i>39%</i>
5. Materials & Supplies					
General	6,468.61	34,683.14	26,989.05	42,000	83%
TRF	4,154.50	23,083.19	6,648.41	35,000	66%
<i>Subtotal</i>	<i>10,623.11</i>	<i>57,766.33</i>	<i>33,637.46</i>	<i>77,000</i>	<i>75%</i>
6. Radio Maintenance	1,591.31	5,613.91	4,784.41	8,500	66%
7. Ruth Lake License	-	1,500.00	1,500.00	1,500	100%
8. Safety Equip./Training					
General	921.92	11,825.12	11,139.12	22,000	54%
TRF	-	377.98	675.55	2,000	19%
<i>Subtotal</i>	<i>921.92</i>	<i>12,203.10</i>	<i>11,814.67</i>	<i>24,000</i>	<i>51%</i>
9. Tools & Equipment	132.45	2,461.10	2,350.90	5,000	49%
10. USGS Meter Station	-	-	15,430.00	8,500	0%
<i>Operations Subtotal</i>	<i>25,310.38</i>	<i>166,607.66</i>	<i>134,114.48</i>	<i>316,200</i>	<i>53%</i>

**General & Administration**

11. Accounting Services	3,332.50	18,000.00	1,800.00	18,000	100%
12. Bad Debt Expense	-	-	-	-	0
13. Dues & Subscriptions	108.00	36,884.98	30,756.14	33,000	112%
14. General Manager Training	99.00	586.52	47.00	3,000	20%
15. IT & Software Maintenance	1,715.54	14,525.31	14,801.13	31,000	47%
16. Insurance	-	85,684.62	86,792.90	111,000	77%
17. Internet	893.90	6,794.18	5,819.72	10,000	68%
18. Legal Services	496.00	9,219.00	20,507.00	35,000	26%
19. Miscellaneous	-	1,717.74	2,321.14	11,500	15%
20. Office Building Maint.	1,099.27	8,594.00	10,316.42	16,000	54%
21. Office Expense	3,286.16	21,220.73	27,057.84	40,500	52%
22. Professional Services	2,216.30	6,462.30	3,165.72	20,000	32%
23. Property Tax	-	2,006.00	945.00	1,000	201%



HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
MONTHLY EXPENDITURE REPORT - PAGE 3 OF 3  
January 31, 2022



**SERVICE & SUPPLY EXPENDITURES (con't)**

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
24. Regulatory Agency Fees	30,032.92	123,198.04	77,947.89	179,500	69%
25. Ruth Lake Programs	-	-	-	5,000	0%
26. Safety Apparel	2,237.67	2,206.67	2,925.68	3,000	74%
27. Technical Training	57.00	1,586.36	953.00	14,500	11%
28. Telephone	4,156.77	22,745.11	22,275.86	40,000	57%
29. Travel & Conference	1,243.61	2,729.01	(344.00)	25,000	11%
<i>Gen. &amp; Admin. Subtotal</i>	<i>50,974.64</i>	<i>364,160.57</i>	<i>308,088.44</i>	<i>597,001</i>	<i>61%</i>
<b>Power</b>					
30. Essex - PG & E	57,965.02	478,253.45	367,860.49		
31. 2Mw Generator Fuel	-	2,274.57	3,358.48		
<i>Subtotal Essex Pumping</i>	<i>57,965.02</i>	<i>480,528.02</i>	<i>371,218.97</i>		
32. All other PG & E	9,759.31	52,026.83	107,210.58		
<i>Subtotal All Power</i>	<i>67,724.33</i>	<i>532,554.85</i>	<i>478,429.55</i>	<i>787,500</i>	<i>68%</i>
<b>Total Service and Supplies incl. Power</b>	<b>144,009.35</b>	<b>1,063,323.08</b>	<b>920,632.47</b>	<b>1,700,701</b>	<b>63%</b>

**PROJECTS, FIXED ASSETS & CONSULTING SERVICES**

	Month-to-Date	Year-to-Date	Budget	% of Budget
	145,421.00	2,467,760.00	14,298,086	17%

<b>GRAND TOTAL EXPENSES</b>	<b>685,960.01</b>	<b>6,199,851.34</b>	<b>3,401,116.19</b>	<b>20,286,758</b>	<b>31%</b>
-----------------------------	-------------------	---------------------	---------------------	-------------------	------------

33. Debt Service - SRF Loan	-	273,668.58	273,668.58	547,337	50%
-----------------------------	---	------------	------------	---------	-----

34. Debt Service - US Bank	-	81,399.90	81,399.90	81,100	100%
----------------------------	---	-----------	-----------	--------	------

**TOTAL EXPENSES WITH DEBT SERVICE**

	<b>690,986.41</b>	<b>6,566,593.62</b>	<b>3,756,184.67</b>	<b>20,915,194</b>	
--	-------------------	---------------------	---------------------	-------------------	--

**OTHER EXPENSES**

35. ReMat Consultant Exp.	5,026.40	11,673.80	9,246.06		
---------------------------	----------	-----------	----------	--	--

36. Capital Replacement Exp.	-	-	157.88		
------------------------------	---	---	--------	--	--

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**  
**PROJECT PROGRESS REPORT**  
 January 31, 2022

58% Of Budget Year

**A. CAPITAL PROJECTS**

	MTD	YTD		% OF
<b>ACTIVE GRANT FUNDED CAPITAL PROJECTS</b>	<b>EXPENSES</b>	<b>TOTAL</b>	<b>BUDGET</b>	<b>BUDGET</b>
1 Grant - 12kV Switchgear Relocation <i>(\$3M - FEMA, Approved)</i>	80,401	1,607,376	2,533,041	63%
2 Grant - Collector 2 Rehabilitation <i>(\$1.6M - NCRP Prop 1, Approved)</i>	1,659	60,673	1,487,835	4%
3 Grant - 3x Tank Seismic Retro <i>(\$3.5M - FEMA, Phase 1 Approved)</i>	0	66,887	3,424,817	2%
4 Grant - Community Power Resiliency <i>(\$215k CalOES, Approved)</i>	0	0	215,000	0%
5 Grant - Collector Mainline Redundancy Pipeline <i>(Treatment/Base Facility Project, \$3.1M - FEMA, In Process)</i>	0	12,071	0	0
6 Grant - TRF Generator <i>(Treatment Facility Project, \$1.9M - FEMA, In Process)</i>	4,000	6,158	0	0
<b>NON-GRANT FUNDED CAPITAL PROJECTS</b>				
7 On-Site Generation of Chlorine <i>(\$850k - FY22, Treatment Facility Project)</i>	0	0	850,000	0%
8 Prof. Services for New Capital Debt	0	0	81,100	0%
9 Power and Fiber Optic Link to Collector 2, Phase 2	0	0	44,000	0%
10 Line Shed #8	0	0	61,750	0%
11 TRF Filter Building, Mezzanine EOC <i>(Treatment Facility Project)</i>	979	10,630	10,750	99%
12 TRF Line Shed 5 Ramp and Concrete Work <i>(Treatment Facility Project)</i>	0	1,144	2,000	57%
13 Solar at Eureka Main Office	0	0	30,000	0%
14 CalFire Fuel Reduction Contract	0	16	50,000	0%
<b>TOTAL CAPITAL PROJECTS</b>	<b>87,039</b>	<b>1,764,953</b>	<b>8,790,293</b>	<b>20%</b>

**B. EQUIPMENT AND FIXED ASSET PROJECTS**

	MTD	YTD		% OF
	<b>EXPENSES</b>	<b>TOTAL</b>	<b>BUDGET</b>	<b>BUDGET</b>
15 FY22 Replace ESSEX Administrative Computers	0	2,236	6,300	35%
16 Replace 1 of 3 Essex Admin Servers	0	0	11,000	0%
17 Collector Lube Oil Detection System	965	1,035	8,250	13%
18 Replace Unit 9	0	0	82,000	0%
19 Hydraulic Oil Filtering Cart	3,195	3,323	3,750	89%
20 Tools and Storage For Elec/Maint Shops & Trucks	990	4,441	5,000	89%
21 Backflow Test Kit	0	1,340	1,500	89%
22 Unit 5 Truck Upgrades	0	578	2,250	26%
23 Portable Chlorination Dosing Skid	0	0	11,750	0%
24 Drum Handling Equipment <i>(Treatment Facility Project)</i>	0	0	2,000	0%



HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
PROJECT PROGRESS REPORT - PAGE 2 OF 5  
January 31, 2022

58% Of Budget Year



**B. EQUIPMENT AND FIXED ASSET PROJECTS (cont)**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
25 TRF Chemical Building PLC Module Expansion <i>(Treatment Facility Project)</i>	0	0	3,250	0%
26 Replace Alum Pumps <i>(Treatment Facility Project)</i>	0	0	17,250	0%
27 FY22 Replace EUREKA Administrative Computers	0	0	3,500	0%
28 Replace Ruth HQ UV Water Treatment System	0	0	2,500	0%
29 Purchase Portable Radios for Ruth	0	2,098	2,250	93%
30 Penstock Ventilation System	0	0	4,250	0%
31 Utility Work, Inspection and Response Boat	0	41,024	81,750	50%
31A Collector 2-4 Power Feed Replacement	0	30,479	50,000	61%
<b>TOTAL EQUIPMENT &amp; FIXED ASSET PROJECTS</b>	<b>5,150</b>	<b>86,554</b>	<b>248,550</b>	<b>35%</b>

**C. MAINTENANCE PROJECTS**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
32 FY22 Pipeline Maintenance	0	1,477	14,000	11%
33 FY22 12kV Electric System Maintenance	0	0	4,200	0%
34 FY22 Main Line Meter Flow Calibration	0	0	14,000	0%
35 FY22 Technical Support & Software Updates	78	18,025	29,000	62%
36 FY22 Generator Services	0	1,722	3,500	49%
37 FY22 Hazard & Diseased Tree Removal	0	0	8,000	0%
38 FY22 Cathodic Protection	0	0	6,500	0%
39 FY22 Maintenance Emergency Repairs	0	10,254	50,000	21%
40 FY22 Fleet Paint Repairs	0	0	5,000	0%
41 Partical Counter Calibration	0	2,194	1,250	176%
42 Replace Collector 4 Cable	0	0	8,250	0%
43 Cyber Assessment	0	0	19,250	0%
44 Power Pole/Line Inspection/Maintenance	0	0	17,500	0%
45 Collector MCC Breaker & Door Switch Replacement	0	0	73,000	0%
46 Upgrade Microsoft Office - Essex	0	72	1,250	6%
47 Security Fencing Replacement - Essex & Samoa BPS	0	0	93,000	0%
48 Lighting Upgrades for Shop/Collectors/Line Sheds	0	227	9,750	2%
49 Collector 1 Interior Painting	0	0	41,750	0%
50 FY22 TRF Generator Service <i>(Treatment Facility Project)</i>	0	88	500	18%
51 FY22 TRF Limitorque Valve Retrofit Supplies <i>(Treatment Facility Project)</i>	0	0	14,500	0%
52 Replace One WWR Pump P551 VFD <i>(Treatment Facility Project)</i>	0	0	5,750	0%
53 TRF Sludge Bed Gutter Replacement <i>(Treatment Facility Project)</i>	0	0	10,000	0%
54 TRF Process Pumps <i>(Treatment Facility Project)</i>	0	2,039	3,000	68%

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
PROJECT PROGRESS REPORT - PAGE 3 OF 5  
January 31, 2022

58% Of Budget Year

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

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
55 TRF Instrumentation Replacement <i>(Treatment Facility Project)</i>	0	6,029	15,750	38%
56 TRF Valve Network Upgrade (Phase 1 of 5) <i>(Treatment Facility Project)</i>	0	0	15,750	0%
57 FY22 Brush Abatement Ruth Hydro	0	0	6,500	0%
58 FY22 Howell Bunger Valve Inspection	0	0	1,000	0%
59 FY22 LTO Insurance	0	0	5,000	0%
60 FY22 Log Boom Inspection	0	651	1,500	43%
61 FY22 Spillway Repairs	0	5,257	15,000	35%
62 Ruth Logboom Interconnection Plates	0	0	16,500	0%
63 Woody Debris Removal	0	0	30,000	0%
64 Lease Lots Surveys	0	0	25,000	0%
64A TRF Sump Pump Project	0	6,507	7,000	93%
65 FEMA - Fire Disaster Recovery	38	2,591	0	0
66 Grant - FEMA - COVID-19 Pandemic	0	503	0	0
<b>TOTAL MAINTENANCE PROJECTS</b>	<b>116</b>	<b>57,637</b>	<b>571,950</b>	<b>10%</b>

**D. PROFESSIONAL & CONSULTING SERVICES**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
67 FY22 Crane Testing/Certification	0	10,000	10,000	100%
68 FY22 Chlorine System Maintenance	0	6,925	16,750	41%
69 FY22 Backflow Tester Training	0	350	3,000	12%
70 FY22 Hydro Plant Annual Electrical and Maintenance	0	0	4,000	0%
71 CAISO Meter Inspection Calibration	0	0	4,000	0%
72 FY22 Crane Operator Re-Certification	0	7	21,250	0%
73 ATS Pro-IT Support	1,430	9,020	23,500	38%
74 Essex Mad River Cross-Sectional Survey	2,334	14,411	12,000	120%
75 FY22 Technical Training	0	0	23,250	0%
76 FY22 O & M Training	165	165	20,000	1%
77 Public Education Funds	0	0	5,000	0%
78 Water Quality Monitoring Plan	0	373	30,000	1%
79 GIS / FIS Ruth Area, Including Internship	0	0	5,000	0%
80 Collector Arc Flash Study Update/Breaker Test	0	0	20,000	0%
81 CalFire Forest Health Grant	3,808	3,808	20,000	19%
82 FY22 Mad River Regulatory Compliance Assistance	0	0	50,000	0%
83 Annual Section 115 Pension Trust Contribution	0	50,000	50,000	100%
84 Grant Applications Assistance	0	0	20,000	0%
85 Inundation Mapping	0	0	50,000	0%
86 Collector 4 Restoration	0	0	5,000	0%



HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
PROJECT PROGRESS REPORT - PAGE 4 OF 5  
January 31, 2022

58% Of Budget Year

**D. PROFESSIONAL & CONSULTING SERVICES (CONT)**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
87 FERC Part 12 - Independent Consultant & Engineer	842	64,050	110,000	58%
88 FERC Dam Safety Surveillance and Monitoring Report	0	223	5,000	4%
89 FERC Chief Dam Safety Engineer	0	307	12,000	3%
90 Dam Spillway Wall Monument Survey	0	15,400	16,000	96%
91 Spillway Repair, Dam Inspection & Reporting Assist	0	4,982	5,000	100%
92 Assessments of Spillway Drains/Floor/Flip Bucket	0	0	120,000	0%
<b>TOTAL PROF/CONSULTING SERVICES</b>	<b>8,578</b>	<b>180,019</b>	<b>660,750</b>	<b>27%</b>

**E. INDUSTRIAL SYSTEM PROJECTS**

93 Maintain Water Supply to Industrial Pump Station 6	0	0	13,250	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**

94 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
95 Streambed Flow Enhancement Grant <i>(DWR Grant)</i>	7,526	14,931	449,902	3%
96 Refurbish PS-6 (Phase 1) <i>(EDA Grant &amp; Reserves)</i>	0	0	3,500,000	0%
97 I/W System Evaluation Memo <i>(Reserves)</i>	0	0	26,000	0%
98 PS6 Gravel Bar Work <i>(Reserves)</i>	0	0	76,100	0%
99 Industrial System Assistance <i>(Reserves)</i>	0	0	10,000	0%
100 I/W Reservoir Overflow Dissipator Maint/Hardening <i>(Reserves)</i>	0	0	9,500	0%
101 Clean-Out Industrial Water Tank <i>(Reserves)</i>	0	0	25,000	0%
102 Domestic Water for Nordic <i>(Reserves/Nordic)</i>	0	278	5,000	6%
103 Industrial and Domestic System Intertie <i>(Reserves)</i>	0	0	32,000	0%
<b>TOTAL NOT CHARGED TO CUSTOMERS</b>	<b>7,526</b>	<b>15,209</b>	<b>4,133,502</b>	<b>0%</b>

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
PROJECT PROGRESS REPORT - PAGE 5 OF 5  
January 31, 2022

58% Of Budget Year



**H. ADVANCED CHARGES & DEBIT SERVICE FUNDS COLLECTED - FY22**

	MTD	YTD	BUDGET	% BUDGET
104 Grant - Collector Mainline Redundancy Pipeline <i>(Treatment/Base Facility Project, \$3.1M - FEMA, In Process)</i>	3,333	23,333	40,000	58%
105 Cathodic Protection Project <i>(\$405k, FY22)</i>	2,083	14,583	25,000	58%
106 On-Site Generation of Chlorine <i>(\$850k - FY22, Treatment Facility Project)</i>	4,484	31,387	53,807	58%
107 Grant - TRF Generator <i>(Treatment Facility Project, \$1.9M - FEMA, In Process)</i>	6,250	43,750	75,000	58%
108 Grant - Adv. Assistance Spillway Seismic <i>(\$1.9M - FEMA, In Process)</i>	2,083	14,583	25,000	58%
109 Ranney Collector 3/Techite Debit Service Funds	7,373	51,609	81,100	64%
<b>TOTAL ADVANCED CHARGES COLLECTED - FY21</b>	<b>25,607</b>	<b>179,247</b>	<b>299,907</b>	<b>60%</b>

**PROJECT PROGRESS REPORT SUMMARY OF ALL ACTIVITY**

CUSTOMER CHARGES	MTD	YTD	BUDGET	% BUDGET
TOTAL NON-GRANT FUNDED CAPITAL PROJECTS*	4,979	30,018	279,600	11%
TOTAL EQUIPMENT & FIXED ASSET PROJECTS	5,150	86,554	248,550	35%
TOTAL MAINTENANCE PROJECTS	116	57,637	571,950	10%
TOTAL PROF/CONSULTING SERVICES	8,578	180,019	660,750	27%
TOTAL INDUSTRIAL SYSTEM PROJECTS	0	0	13,250	0%
TOTAL CARRYOVER PROJECTS	0	0	7,500	0%
TOTAL ADVANCED CHARGES/DEBIT SERVICE - FY21	25,607	179,247	299,907	60%
<b>TOTAL CUSTOMER CHARGES</b>	<b>\$44,429</b>	<b>\$533,475</b>	<b>\$2,081,507</b>	<b>26%</b>

\*EXCLUDES ON-SITE GENERATION OF CHLORINE

NON-CUSTOMER CHARGES (CURRENT FY)	MTD	YTD	BUDGET	% BUDGET
TOTAL GRANT FUNDED CAPITAL PROJECTS	82,060	1,734,935	7,660,693	23%
TOTAL NON-CUSTOMER CHARGES	7,526	15,209	4,133,502	0%
TOTAL USE OF ENCUMBERED FUNDS	5,703	92,070	429,384	21%
<b>TOTAL NON-CUSTOMER CHARGES</b>	<b>\$95,289</b>	<b>\$1,842,215</b>	<b>\$12,223,579</b>	<b>15%</b>
<b>GRAND TOTAL PROJECT BUDGET ACTIVITY</b>	<b>\$139,718</b>	<b>\$2,375,690</b>	<b>\$14,305,086</b>	<b>17%</b>



HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
ENCUMBERED FUNDS RECONCILIATION REPORT  
January 31, 2022



	MTD EXPENSES	YTD TOTAL	AMOUNT ENCUMBERED	REMAINING
<b>A. CAPITAL PROJECTS</b>				
1 Tesla Battery Project - ESSEX	0	0	5,000	5,000
2 Tesla Battery Project - TRF	5,703	18,463	12,500	(5,963)
3 Replacement Server Rack - Eureka Office	0	2,391	5,500	3,109
4 Fiber Optic Link - Collector 2 (Phase 1)	0	0	28,500	28,500
5 Techite Intertie Location Abandonment	0	0	5,000	5,000
6 Headquarters Remodel	0	5,610	120,000	114,390
<b>B. EQUIPMENT &amp; FIXED ASSET PROJECTS</b>				
7 Transformer at Hydro Plant	0	0	100,000	100,000
8 Headquarters & Bunkhouse Generator	0	931	1,500	569
9 Curbing on Mad River Road	0	0	5,600	5,600
10 18,000 Lb. Excavator	0	1,259	1,500	241
11 Tractor	0	0	600	600
12 Front Office Doors	0	4,910	6,000	1,090
<b>C. MAINTENANCE PROJECTS</b>				
13 FY21 Cathodic Protection	0	0	6,500	6,500
14 Surge Tank Refurbishments	0	860	1,000	140
15 FY21 TRF Limitorque Valve Retrofit Supplies	0	13,434	13,300	(134)
16 FY21 Chemical Pump Spare Parts Inventory	0	805	5,250	4,445
17 Hydro Plant Annual Elect. & Maintenance Inspection	0	0	2,050	2,050
18 FY21 Chlorine System Maintenance	0	2,217	2,800	583
<b>D. PROFESSIONAL &amp; CONSULTING SERVICES</b>				
19 404 Permit Assistance	0	0	30,000	30,000
20 FY21 Hazard/Diseased Tree Removal	0	700	700	0
21 FY21 Essex Mad River Cross-Sectional Survey	0	0	1,075	1,075
22 FERC Part 12 - Plunge Pool Underwater Inspection	0	8,300	8,300	0
23 FERC Part 12 - Ind. Consultant Insp. (FY22)	0	12,700	12,700	(0)
24 FERC - Dam Safety Engineer	0	3,258	2,000	(1,258)
25 Col. 2 Underground 12Kv Power/Fiber Optic	0	3,886	8,680	4,794
26 Spillway Inundation Map	0	0	20,000	20,000
<b>E. FY20 SERVICE &amp; SUPPLY BUDGET</b>				
27 AUTO EXPENSE/MAINTENANCE	0	7628	7,628	0
28 MAINTENANCE & REPAIRS	0	218	6,684	6,466
29 MATERIALS & SUPPLIES	0	4500	5,000	500
30 TOOLS & EQUIPMENT	0	0	1,036	1,036
31 PROFESSIONAL SERVICES	0	0	2,981	2,981

ENCUMBERED FUNDS TOTAL	5,703	92,070	429,384	337,314
------------------------	-------	--------	---------	---------

Humboldt Bay Municipal Water District

--Monthly Overtime Report--  
Pay period dates: 1/1/2022 - 1/31/2022Page: 1  
Feb 02, 2022 04:31PM

Position Title	2-01 Overtime Emp Hrs	2-01 Overtime Emp Amt	2-02 Doubletime Emp Hrs	2-02 Doubletime Emp Amt
Customer Srvc	4.50	\$156	.00	\$0
Actg/HR Spec	.50	\$38	.00	\$0
Total ADMIN:	5.00	\$194	.00	\$0
Operations Spec	4.00	\$268	.00	\$0
Maint Worker	.50	\$17	.00	\$0
Oper & Mnt Tech	4.00	\$195	.00	\$0
Oper & Mnt Tech	4.50	\$231	.00	\$0
Total ESSEX:	13.00	\$710	.00	\$0
Hydro Oper Ruth	2.00	\$118	.00	\$0
Total RUTH:	2.00	\$118	.00	\$0
Grand Totals:	20.00	\$1,022	.00	\$0



Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 1/1/2022-1/31/2022Page: 1  
Feb 02, 2022 04:30PM

Vendor Name	Date Paid	Description	Amount Paid
<b>101 NETLINK</b>			
101 NETLINK	01/03/2022	Ruth Data Link/Internet	180.00
Total 101 NETLINK:			180.00
<b>ACWA/JPIA</b>			
ACWA/JPIA	01/26/2022	Workers Compensation October - December 2021	30,968.12
ACWA/JPIA	01/20/2022	RETIREE MEDICAL	7,975.26
ACWA/JPIA	01/20/2022	COBRA Dental	65.20
ACWA/JPIA	01/20/2022	COBRA Vision	18.56
Total ACWA/JPIA:			39,027.14
<b>Advanced Security Systems</b>			
Advanced Security Systems	01/07/2022	Essex office Quarterly Alarm System Monitoring	196.50
Total Advanced Security Systems:			196.50
<b>AirGas NCN</b>			
AirGas NCN	01/26/2022	safety Supplies	230.36
Total AirGas NCN:			230.36
<b>Analytical Services, Inc</b>			
Analytical Services, Inc	01/26/2022	Micro Biological Testing	1,960.00
Total Analytical Services, Inc:			1,960.00
<b>AT &amp; T</b>			
AT & T	01/21/2022	Eureka/Essex Land Line	35.84
AT & T	01/21/2022	Arcata/Essex Land Line	35.84
AT & T	01/21/2022	Samoa/Essex Land Line	240.28
AT & T	01/21/2022	Eureka office/modem	208.18
AT & T	01/21/2022	Eureka Office Alarm Line	203.75
AT & T	01/21/2022	Samoa Booster Pump Station	206.29
AT & T	01/21/2022	Valve Building - Samoa	208.18
AT & T	01/21/2022	Eureka Office	820.81
AT & T	01/21/2022	TRF	201.85
AT & T	01/21/2022	Ruth Hydro Data Line	203.74
AT & T	01/21/2022	Essex office/Modem/Essex Alarm System	203.44
AT & T	01/21/2022	SIMS Service	311.42
Total AT & T:			2,879.62
<b>AT&amp;T Advertising Solutions</b>			
AT&T Advertising Solutions	01/26/2022	white page listing	21.00
AT&T Advertising Solutions	01/03/2022	white page listing	21.00
Total AT&T Advertising Solutions:			42.00
<b>AT&amp;T Long Distance</b>			
AT&T Long Distance	01/12/2022	Valve Building-Samoa Long Distance	120.13
AT&T Long Distance	01/12/2022	Essex Office Long Distance	20.29
AT&T Long Distance	01/12/2022	Eureka Office Long Distance	7.01
AT&T Long Distance	01/12/2022	TRF Long Distance	14.64
AT&T Long Distance	01/12/2022	Ruth Hydro/Dataline Long Distance	71.60
AT&T Long Distance	01/07/2022	Eureka Office Long Distance	105.06

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 1/1/2022-1/31/2022Page: 2  
Feb 02, 2022 04:30PM

Vendor Name	Date Paid	Description	Amount Paid
Total AT&T Long Distance:			338.73
<b>ATS Communications</b>			
ATS Communications	01/26/2022	Essex Control and Admin Computers Support	1,430.00
Total ATS Communications:			1,430.00
<b>Cal Fire</b>			
Cal Fire	01/21/2022	Cal Fire Health Grant	665.91
Total Cal Fire:			665.91
<b>Cal Forest Nurseries</b>			
Cal Forest Nurseries	01/07/2022	Seedlings - Healthy Forest Grant	3,142.40
Total Cal Forest Nurseries:			3,142.40
<b>City of Eureka</b>			
City of Eureka	01/03/2022	Eureka office water/sewer	89.53
Total City of Eureka:			89.53
<b>Coastal Business Systems Inc.</b>			
Coastal Business Systems Inc.	01/07/2022	Essex copy/fax machine	244.83
Coastal Business Systems Inc.	01/07/2022	Eureka office copy and fax machine	685.80
Total Coastal Business Systems Inc.:			930.63
<b>Corey Borghino</b>			
Corey Borghino	01/26/2022	auto mileage reimbursement	30.74
Total Corey Borghino:			30.74
<b>Dave Perkins</b>			
Dave Perkins	01/03/2022	auto mileage reimbursement	146.66
Total Dave Perkins:			146.66
<b>Dept of Toxic Substances Control</b>			
Dept of Toxic Substances Control	01/26/2022	Haz Mat Ruth Hydro Facility FA5000187	1,311.00
Dept of Toxic Substances Control	01/26/2022	HazMat Ruth HQ Facility FA5000188 Regulatory Agency Fees	814.00
Total Dept of Toxic Substances Control:			2,125.00
<b>Enterprise-Record</b>			
Enterprise-Record	01/24/2022	Legal Notice -Notice of Public Hearing-Ordinance 23	740.30
Enterprise-Record	01/24/2022	Advertisement for Bild - Collector 2 Rehabilitation	1,658.53
Total Enterprise-Record:			2,398.83
<b>Eureka Oxygen</b>			
Eureka Oxygen	01/25/2022	cylinder rental	121.08
Total Eureka Oxygen:			121.08



Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 1/1/2022-1/31/2022Page: 3  
Feb 02, 2022 04:30PM

Vendor Name	Date Paid	Description	Amount Paid
<b>Fastenal Company</b>			
Fastenal Company	01/26/2022	<i>Samoa Pacific 6" Meter upgrade</i>	36.39
Fastenal Company	01/26/2022	<i>safety supplies</i>	75.30
Total Fastenal Company:			111.69
<b>Flo-Line Technology, Inc</b>			
Flo-Line Technology, Inc	01/26/2022	<i>TRF Filtered Water Sample Pump</i>	73.43
Flo-Line Technology, Inc	01/26/2022	<i>TRF Filtered Water Sample Pump</i>	292.66
Total Flo-Line Technology, Inc:			366.09
<b>Frontier Communications</b>			
Frontier Communications	01/26/2022	<i>Ruth HQ Phone</i>	55.51
Frontier Communications	01/26/2022	<i>Ruth Hydro/Ruth Dataline</i>	180.00
Total Frontier Communications:			235.51
<b>GEI Consultants, Inc</b>			
GEI Consultants, Inc	01/26/2022	<i>Ruth Hydro FERC Part 12 Inspection</i>	688.50
GEI Consultants, Inc	01/26/2022	<i>Ruth Hydro FERC Part 12 Inspection</i>	153.50
Total GEI Consultants, Inc:			842.00
<b>GHD</b>			
GHD	01/26/2022	<i>12 KV Replacement- Grant</i>	615.62
GHD	01/26/2022	<i>General Engineering - Eureka</i>	612.50
GHD	01/26/2022	<i>TRF Emergency Generator Study</i>	204.00
GHD	01/26/2022	<i>Essex Mad River Cross Sections Survey</i>	2,333.63
GHD	01/26/2022	<i>Director Division Boundaries</i>	4,516.25
GHD	01/26/2022	<i>TRF Emergency Generator Study</i>	1,382.63
Total GHD:			9,664.63
<b>Grainger</b>			
Grainger	01/26/2022	<i>TRF Filter Building, Mezzanine EOC</i>	420.35
Grainger	01/26/2022	<i>TRF Filter Building, Mezzanine EOC</i>	285.04
Total Grainger:			705.39
<b>H.T. Harvey &amp; Associates</b>			
H.T. Harvey & Associates	01/26/2022	<i>Assistance with Streambed Flow Enhancement - Grant</i>	2,154.75
Total H.T. Harvey & Associates:			2,154.75
<b>Health Equity Inc</b>			
Health Equity Inc	01/05/2022	<i>District HSA Contributions - 5 employees</i>	2,500.00
Health Equity Inc	01/05/2022	<i>District HSA Contributions - 8 employees</i>	4,000.00
Health Equity Inc	01/20/2022	<i>District HSA Contributions- 5 employees</i>	5,221.43
Health Equity Inc	01/20/2022	<i>District HSA Contributions - 8 employees</i>	5,464.08
Health Equity Inc	01/21/2022	<i>HSA Admin Fee 8 employees</i>	26.55
Health Equity Inc	01/21/2022	<i>HSA Admin Fee - 5 employees</i>	14.75
Total Health Equity Inc:			17,226.81
<b>Hensel Hardware</b>			
Hensel Hardware	01/21/2022	<i>Humboldt Bay Retail Customer Service tool</i>	4.79

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 1/1/2022-1/31/2022Page: 4  
Feb 02, 2022 04:30PM

Vendor Name	Date Paid	Description	Amount Paid
Hensel Hardware	01/21/2022	Fieldbrook-Glendale CSD customer service tool	13.64
Hensel Hardware	01/26/2022	Essex maintenance shop supplies]	7.58
Hensel Hardware	01/26/2022	Essex maintenance tools	17.35
Hensel Hardware	01/26/2022	TRF Filter Building Mezzanine EOC	32.48
Hensel Hardware	01/26/2022	Essex maintenance shop supplies]	73.93
Hensel Hardware	01/26/2022	Line Shed 6 vandalism repair	10.41
Hensel Hardware	01/26/2022	Essex maintenance shop supplies]	68.30
Hensel Hardware	01/21/2022	TRF Filter Building Mezzanine EOC	112.50
Total Hensel Hardware:			340.98
<b>Henwood Associates, Inc</b>			
Henwood Associates, Inc	01/07/2022	Consultant Services Agreement- November 2021	2,513.20
Total Henwood Associates, Inc:			2,513.20
<b>Humboldt County Treasurer</b>			
Humboldt County Treasurer	01/26/2022	Fund No 3876 Account 800870	45,611.43
Total Humboldt County Treasurer:			45,611.43
<b>Humboldt Redwood Company, LLC</b>			
Humboldt Redwood Company, LLC	01/21/2022	Mt Pierce Lease site	308.26
Total Humboldt Redwood Company, LLC:			308.26
<b>Imperial Supplies LLC</b>			
Imperial Supplies LLC	01/26/2022	Hydraulic Oil Filter Cart	22.23-
Imperial Supplies LLC	01/26/2022	Hydraulic Oil Filter Cart	3,216.74
Total Imperial Supplies LLC:			3,194.51
<b>Industrial Electric</b>			
Industrial Electric	01/26/2022	Chlorine Building Lighting	19.76
Industrial Electric	01/26/2022	Samoa Pacific 6" meter upgrade	42.59
Industrial Electric	01/26/2022	Samoa Pacific 6" meter upgrade	53.32
Industrial Electric	01/26/2022	Essex UPS maintenance	93.83
Total Industrial Electric:			209.50
<b>Johnson's Mobile Rentals LLC</b>			
Johnson's Mobile Rentals LLC	01/24/2022	Temporary Fencing -TRF Tesla Battery Bank Project	116.37
Johnson's Mobile Rentals LLC	01/24/2022	Temporary Fencing - Eureka Office Sewer Line Project	78.66
Total Johnson's Mobile Rentals LLC:			195.03
<b>JTN Energy, LLC</b>			
JTN Energy, LLC	01/07/2022	Consultant Services Agreement - November 2021	2,513.20
Total JTN Energy, LLC:			2,513.20
<b>Kernen Construction</b>			
Kernen Construction	01/26/2022	Fieldbrook-Glendale CSD Leak Repair	294.86
Total Kernen Construction:			294.86



Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 1/1/2022-1/31/2022Page: 5  
Feb 02, 2022 04:30PM

Vendor Name	Date Paid	Description	Amount Paid
<b>Mad River Union</b>			
Mad River Union	01/07/2022	annual subscription	40.00
Total Mad River Union:			40.00
<b>Mission Linen</b>			
Mission Linen	01/07/2022	Uniform Rental	102.46
Mission Linen	01/07/2022	maintenance supplies	44.37
Mission Linen	01/07/2022	Uniform Rental	129.27
Mission Linen	01/07/2022	Uniform Rental	102.46
Mission Linen	01/07/2022	maintenance supplies	27.99
Mission Linen	01/07/2022	Uniform Rental	129.27
Mission Linen	01/07/2022	maintenance supplies	55.99
Total Mission Linen:			591.81
<b>Mitchell, Brisso, Delaney &amp; Vrieze</b>			
Mitchell, Brisso, Delaney & Vrieze	01/12/2022	Legal Services - November North Mainline Extension Study	713.00
Mitchell, Brisso, Delaney & Vrieze	01/12/2022	Legal Services- December 2021	496.00
Total Mitchell, Brisso, Delaney & Vrieze:			1,209.00
<b>Napa Auto Parts</b>			
Napa Auto Parts	01/26/2022	Unit 6 service	56.02
Napa Auto Parts	01/26/2022	Unit 6 service	56.01
Napa Auto Parts	01/26/2022	Unit 6 service	9.03
Napa Auto Parts	01/26/2022	Unit 6 service	9.04
Total Napa Auto Parts:			130.10
<b>Northern California Safety Consortium</b>			
Northern California Safety Consortium	01/07/2022	membership fee	75.00
Total Northern California Safety Consortium:			75.00
<b>NTU Technologies, Inc</b>			
NTU Technologies, Inc	01/26/2022	TRF chemical supplies	4,154.50
Total NTU Technologies, Inc:			4,154.50
<b>Occupational Health Service of Mad River</b>			
Occupational Health Service of Mad River	01/07/2022	DMV physical and Rapid Drug Screen	105.00
Total Occupational Health Service of Mad River:			105.00
<b>Pacific Gas &amp; Electric Co.</b>			
Pacific Gas & Electric Co.	01/24/2022	Eureka Office	574.75
Pacific Gas & Electric Co.	01/24/2022	Jackson Ranch Rectifier	15.12
Pacific Gas & Electric Co.	01/24/2022	299 Rectifier	121.06
Pacific Gas & Electric Co.	01/24/2022	West End Road Rectifier	120.08
Pacific Gas & Electric Co.	01/24/2022	TRF	7,783.19
Pacific Gas & Electric Co.	01/24/2022	Ruth Hydro Valve Control	27.11
Pacific Gas & Electric Co.	01/24/2022	Ruth Hydro	577.57
Pacific Gas & Electric Co.	01/24/2022	Samoa Booster Pump Station	345.14
Pacific Gas & Electric Co.	01/24/2022	Samoa Dial Station	31.57
Pacific Gas & Electric Co.	01/24/2022	Essex Pumping December 2021	57,965.02
Pacific Gas & Electric Co.	01/07/2022	Ruth Bunkhouse	93.44

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 1/1/2022-1/31/2022Page: 6  
Feb 02, 2022 04:30PM

Vendor Name	Date Paid	Description	Amount Paid
Pacific Gas & Electric Co.	01/07/2022	<i>Ruth HQ</i>	70.28
Total Pacific Gas & Electric Co.:			67,724.33
<b>Picky, Picky, Picky, Inc</b> Picky, Picky, Picky, Inc	01/26/2022	<i>Safety Boots - Justin Natividad</i>	251.26
Total Picky, Picky, Picky, Inc:			251.26
<b>Pitney Bowes</b> Pitney Bowes Pitney Bowes	01/21/2022 01/12/2022	<i>refill postage</i> <i>postage meter lease</i>	552.07 240.33
Total Pitney Bowes:			792.40
<b>PitStop Cleaning`</b> PitStop Cleaning`	01/07/2022	<i>Eureka office cleaning</i>	160.00
Total PitStop Cleaning`:			160.00
<b>Power Industries, Inc</b> Power Industries, Inc	01/26/2022	<i>Equipment repair</i>	86.40
Total Power Industries, Inc:			86.40
<b>Price Paige &amp; Company</b> Price Paige & Company	01/26/2022	<i>GASB 68 Calculations and Supplementary Information</i>	2,750.00
Total Price Paige & Company:			2,750.00
<b>R.J. Ricciardi, Inc, CPAs</b> R.J. Ricciardi, Inc, CPAs	01/26/2022	<i>Annual Financial Audit</i>	582.50
Total R.J. Ricciardi, Inc, CPAs:			582.50
<b>Recology Arcata</b> Recology Arcata	01/25/2022	<i>Essex Garbage/Recycling Service</i>	647.25
Total Recology Arcata:			647.25
<b>Recology Humboldt County</b> Recology Humboldt County	01/12/2022	<i>Eureka office garbage/recycling service</i>	93.21
Total Recology Humboldt County:			93.21
<b>Rogers Machinery Company, Inc</b> Rogers Machinery Company, Inc	01/24/2022	<i>Essex Maintenance Shop Compressor Repair</i>	127.98
Total Rogers Machinery Company, Inc:			127.98
<b>Security Lock &amp; Alarm</b> Security Lock & Alarm	01/26/2022	<i>Line Shed 6 vandalism repair</i>	49.11
Total Security Lock & Alarm:			49.11
<b>Sequoia Construction Specialties</b> Sequoia Construction Specialties	01/21/2022	<i>12KV Upgrade-Progress Payment 12</i>	79,785.82



Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 1/1/2022-1/31/2022Page: 7  
Feb 02, 2022 04:30PM

Vendor Name	Date Paid	Description	Amount Paid
Total Sequoia Construction Specialties:			79,785.82
<b>Sequoia Gas</b>			
Sequoia Gas	01/07/2022	Refill Ruth Bunkhouse propane	245.10
Total Sequoia Gas:			245.10
<b>Sitestar Nationwide Internet</b>			
Sitestar Nationwide Internet	01/21/2022	Essex Internet	57.90
Total Sitestar Nationwide Internet:			57.90
<b>Six Rivers Communications</b>			
Six Rivers Communications	01/26/2022	New radio Unit 5	1,025.55
Total Six Rivers Communications:			1,025.55
<b>Solo Sports</b>			
Solo Sports	01/26/2022	Safety Apparel	2,838.36
Total Solo Sports:			2,838.36
<b>Staples</b>			
Staples	01/03/2022	Essex office supplies	43.09
Staples	01/03/2022	Essex office supplies	3.01
Total Staples:			46.10
<b>Steve Morris Logging &amp; Contracting</b>			
Steve Morris Logging & Contracting	01/26/2022	3-Acre Conversion TRF Tesla Battery/TRF Emergency Generato	5,907.74
Steve Morris Logging & Contracting	01/26/2022	Stump Removal Access Road to TRF Tesla Battery	4,000.00
Steve Morris Logging & Contracting	01/26/2022	Stemp Removal Access Road TRF Emergency Generator	4,000.00
Total Steve Morris Logging & Contracting:			13,907.74
<b>Stillwater Sciences</b>			
Stillwater Sciences	01/26/2022	professional assistance -Streambed Flow Enhancement Grant	5,371.00
Stillwater Sciences	01/26/2022	professional assistance - Fish habitat/biologist consultation US	1,476.00
Total Stillwater Sciences:			6,847.00
<b>Streamline</b>			
Streamline	01/03/2022	Website maintenance membership fee	450.00
Total Streamline:			450.00
<b>Sudden Link</b>			
Sudden Link	01/12/2022	TRF Internet	25.27
Sudden Link	01/12/2022	TRF Internet - Blue Lake SCADA Monitoring	50.55
Sudden Link	01/12/2022	TRF Internet - Fieldbrook-Glendale CSD	50.55
Sudden Link	01/13/2022	Eureka Internet	208.45
Sudden Link	01/07/2022	Fieldbrook-Glendale CSD Internet	334.11
Sudden Link	01/12/2022	Essex internet	195.52
Sudden Link	01/12/2022	Essex Phones	106.63

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 1/1/2022-1/31/2022Page: 8  
Feb 02, 2022 04:30PM

Vendor Name	Date Paid	Description	Amount Paid
Total Sudden Link:			971.08
<b>SWRCB Accounting Office</b>			
SWRCB Accounting Office	01/21/2022	NPDES Drinking Water Perveyors Annual Permit Fee	3,146.00
SWRCB Accounting Office	01/21/2022	Essex Annual Permit Fee	322.00
SWRCB Accounting Office	01/21/2022	Ruth Lake Annual Permit Fee	322.00
Total SWRCB Accounting Office:			3,790.00
<b>SWRCB-DWOCP</b>			
SWRCB-DWOCP	01/12/2022	Water Distribution Renewal D4- Chris Mez	105.00
Total SWRCB-DWOCP:			105.00
<b>Thatcher Company, Inc</b>			
Thatcher Company, Inc	01/24/2022	replenish chlorine	5,877.34
Thatcher Company, Inc	01/24/2022	replenish chlorine - container credit	2,000.00-
Total Thatcher Company, Inc:			3,877.34
<b>The Mill Yard</b>			
The Mill Yard	01/24/2022	TRF Filter Building Mezzanine EOC	81.62
The Mill Yard	01/26/2022	Essex Maintenance Tool	40.13
The Mill Yard	01/26/2022	TRF Filter Building Mezzanine EOC	30.34
The Mill Yard	01/26/2022	TRF Filter Building Mezzanine EOC	16.26
The Mill Yard	01/26/2022	MPA sampling	184.43
Total The Mill Yard:			352.78
<b>Thrifty Supply</b>			
Thrifty Supply	01/26/2022	Samoa Pacific 6" Meter Upgrade	7.23
Thrifty Supply	01/26/2022	Humboldt Bay retail customer service supplies	240.87
Thrifty Supply	01/26/2022	Fieldbrook-Glendale CSD customer service supplies	240.86
Thrifty Supply	01/26/2022	Samoa Pacific 6" Meter Upgrade	81.12
Thrifty Supply	01/26/2022	Humboldt Bay retail customer service supplies	190.13
Thrifty Supply	01/26/2022	Fieldbrook-Glendale CSD customer service supplies	190.13
Total Thrifty Supply:			950.34
<b>Trinity County General Services</b>			
Trinity County General Services	01/26/2022	Pickett Peak site lease	257.50
Total Trinity County General Services:			257.50
<b>Trinity County Solid Waste</b>			
Trinity County Solid Waste	01/21/2022	Ruth HQ dump fees	8.43
Trinity County Solid Waste	01/21/2022	Ruth Hydro dump fees	8.43
Total Trinity County Solid Waste:			16.86
<b>U.S. Bank Corporate Payment System</b>			
U.S. Bank Corporate Payment System	01/13/2022	ACWA Conference Travel	25.00
U.S. Bank Corporate Payment System	01/13/2022	Checks	505.80
U.S. Bank Corporate Payment System	01/13/2022	ACWA Conference Hotel	1,218.61
U.S. Bank Corporate Payment System	01/13/2022	Stream Management for Dam Constrauction - Webinar	99.00
U.S. Bank Corporate Payment System	01/13/2022	Board Secretary Training - Roberts Rules of Order - Webinar	57.00



Vendor Name	Date Paid	Description	Amount Paid
U.S. Bank Corporate Payment System	01/13/2022	Collector Lube Oil Detection System	965.44
U.S. Bank Corporate Payment System	01/13/2022	Essex Tools and Storage for Electrical/Maintenance Shops/Servi	354.18
U.S. Bank Corporate Payment System	01/13/2022	Essex Tools and Storage for Electrical/Maintenance Shops/Servi	82.44
U.S. Bank Corporate Payment System	01/13/2022	Technical Support and Software Updates(includes Control Syste	78.26
U.S. Bank Corporate Payment System	01/13/2022	Collector Bug Zappers Maintenance	136.60
U.S. Bank Corporate Payment System	01/13/2022	AWWA Membership - Dale Davidsen	108.00
U.S. Bank Corporate Payment System	01/13/2022	Essex Maintenance Supplies	86.78
U.S. Bank Corporate Payment System	01/13/2022	Essex Office Supplies	167.50
U.S. Bank Corporate Payment System	01/13/2022	Purchase Order Software subscription	79.70
U.S. Bank Corporate Payment System	01/13/2022	Eureka Office supplies	138.63
U.S. Bank Corporate Payment System	01/13/2022	AirMediInsurance Employees/Director	260.00
U.S. Bank Corporate Payment System	01/13/2022	Essex Office Supplies	18.31
U.S. Bank Corporate Payment System	01/13/2022	Essex Tools and Storage for Electrical/Maintenance Shops/Servi	439.92
U.S. Bank Corporate Payment System	01/13/2022	Maintenance Shop tools	74.97
U.S. Bank Corporate Payment System	01/13/2022	Tools and Storage for Electrical and Maintenance Shops and Ser	113.22
U.S. Bank Corporate Payment System	01/13/2022	Water Operator Training	164.53
U.S. Bank Corporate Payment System	01/13/2022	Maintance Supplies	29.26
U.S. Bank Corporate Payment System	01/13/2022	Ruth HQ office supplies	45.61
U.S. Bank Corporate Payment System	01/13/2022	Ruth Hydro office supplies	45.61
Total U.S. Bank Corporate Payment System:			5,294.37
<b>USA Blue Book</b>			
USA Blue Book	01/26/2022	Samoa Pacific By-Pass Improvement	146.84
USA Blue Book	01/26/2022	Water testing supplies	485.68
Total USA Blue Book:			632.52
<b>USDA-Forest Service</b>			
USDA-Forest Service	01/21/2022	US Forest Service Special Use Permit	12,058.96
USDA-Forest Service	01/21/2022	US Forest Service Special Use Permit	12,058.96
Total USDA-Forest Service:			24,117.92
<b>VALEO Networks</b>			
VALEO Networks	01/26/2022	Eureka Office Essential Care Computer Assistance	1,057.09
Total VALEO Networks:			1,057.09
<b>Valley Pacific Petroleum Servi, Inc</b>			
Valley Pacific Petroleum Servi, Inc	01/21/2022	cardlock pumping & control	473.53
Valley Pacific Petroleum Servi, Inc	01/21/2022	cardlock water quality	473.53
Valley Pacific Petroleum Servi, Inc	01/21/2022	cardlock maintenance	473.53
Valley Pacific Petroleum Servi, Inc	01/21/2022	cardlock - Humboldt Bay Retail	123.12
Valley Pacific Petroleum Servi, Inc	01/21/2022	cardlock fuel - Fieldbrook Glendale CSD	350.41
Valley Pacific Petroleum Servi, Inc	01/26/2022	bulk fuel Ruth HQ	556.44
Valley Pacific Petroleum Servi, Inc	01/26/2022	bulk fuel Ruth Hydro	556.45
Total Valley Pacific Petroleum Servi, Inc:			3,007.01
<b>Verizon Wireless</b>			
Verizon Wireless	01/12/2022	General Manager	39.27
Verizon Wireless	01/12/2022	Ruth Area Fire Recovery	37.76
Verizon Wireless	01/12/2022	Customer Service - Humboldt Bay	13.81
Verizon Wireless	01/12/2022	Customer Service - Fieldbrook-Glendale CSD	39.31
Verizon Wireless	01/12/2022	Operations I	.17
Verizon Wireless	01/12/2022	Customer Service IPad-Humboldt Bay	9.88

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 1/1/2022-1/31/2022Page: 10  
Feb 02, 2022 04:30PM

Vendor Name	Date Paid	Description	Amount Paid
Verizon Wireless	01/12/2022	Customer Service - Fieldbrook-Glendale CSD	28.13
Verizon Wireless	01/12/2022	Ruth Area	27.42
Verizon Wireless	01/12/2022	Ruth Hydro	27.41
Total Verizon Wireless:			223.16
<b>Wienhoff &amp; Associates Inc</b>			
Wienhoff & Associates Inc	01/26/2022	Pre-Employment Exam	80.00
Total Wienhoff & Associates Inc:			80.00
Grand Totals:			371,929.36



**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: Chris Harris  
Date: February 10, 2022  
Re: Property Insurance and Medical Insurance Premiums

**Background**

Staff was requested to provide information regarding the projected 15% *increase* in Property Insurance premiums (FY23) in comparison to the *decrease* in Medical PPO Insurance premiums (CY22).

**Explanation**

The Property Insurance program operates on a fiscal-year billing cycle (July-June), with the projected increase impacting the July 2022 invoice. Changes to medical insurance premiums go into effect January of each year and bill based on a calendar year basis (January -December).

**The total estimated increase in expense for Property Insurance is estimated to be +/- \$5,800 (15%).**

The savings from the decrease in PPO premium rates is more complicated to quantify. The maximum District out-of-pocket for medical insurance coverage per month/per employee decreased in 2022 due to the PPO Insurance premium decrease. This difference was <\$125.34>/month/employee (from \$2,506.89/employee in 2021 to \$2,381.55/employee in 2022). However, since the PPO premium *decreased* and the HMO premium *increased*, during open-enrollment (October/November of each year), there were multiple employees that changed their insurance coverage option from the more expensive HMO to a PPO option. Thus, the **total** PPO Insurance premium cost also includes changes in the number of employees insured.

**Overall, considering all the changes in medical insurance premiums, the District is anticipating a decrease in medical insurance premium expense of +/- \$28,600 for CY2022.**

On the following pages staff has provided data from 2020-2022 (est.) for Property Insurance and Medical Insurance. Staff has also included the current enrollment in medical insurance changes.

**Conclusion**

Although there is a projected increase in Property Insurance costs, the decrease in Medical Insurance costs will offset the additional expense.

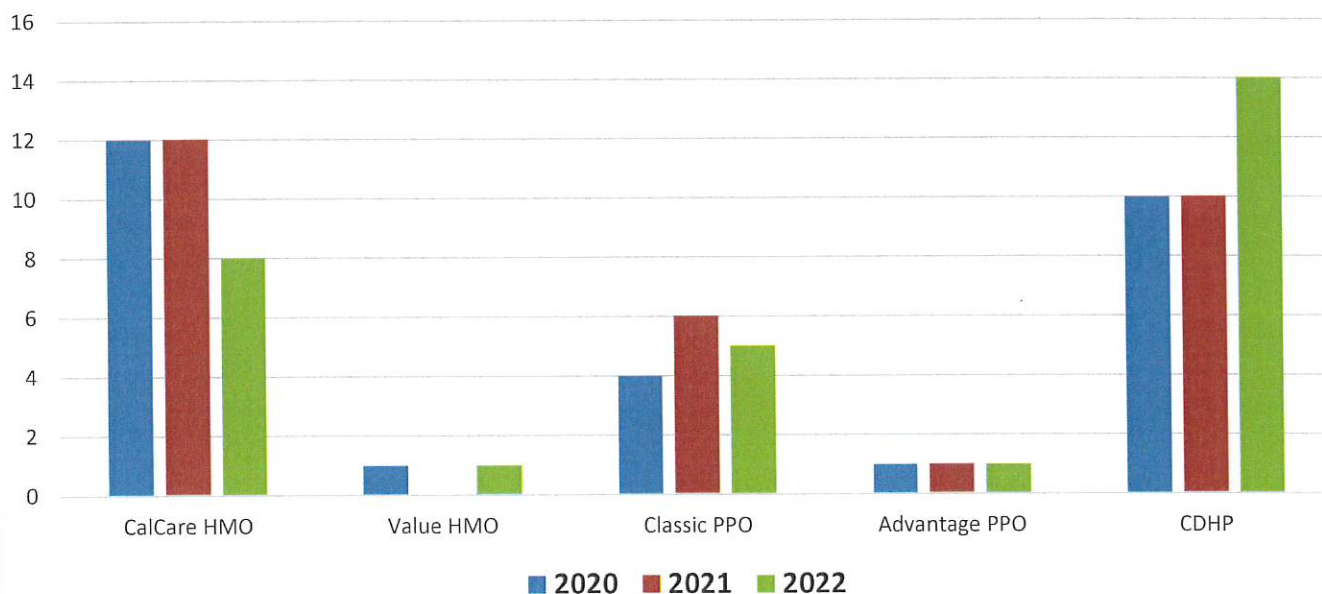
*Property Insurance Premiums*

	2020	2021	2022 (est.)
<i>General Property Insurance</i>	\$17,886	\$21,399	\$24,609
<i>Ruth/Hydro Insurance</i>	\$3,593	\$4,244	\$4,881
<i>TRF Property Insurance</i>	\$11,096	\$12,893	\$14,827
<b>Total Premium (Annual)</b>	<b>\$32,575</b>	<b>\$38,536</b>	<b>\$44,317</b>
<b>Change From Prior Year</b>	<b>+\$3,200</b>	<b>+\$5,961</b>	<b>+\$5,781</b>

*Health Insurance Premiums*

	2020	2021	2022 (est.)
<i>CalCare HMO</i>	\$318,667	\$328,656	\$208,675
<i>Value HMO</i>	\$30,144	\$0.00	\$28,579
<i>Classic PPO</i>	\$83,038	\$135,656	\$96,520
<i>Advantage PPO</i>	\$25,924	\$26,473	\$25,149
<i>CDHP*</i>	\$230,376	\$225,984	\$306,551
<b>Total Premium (Annual)</b>	<b>\$688,149</b>	<b>\$694,065</b>	<b>\$665,474</b>
<b>Change From Prior Year</b>	<b>+\$11,552</b>	<b>+\$5,916</b>	<b>&lt;\$28,591&gt;</b>

\*Includes District incentive contribution.

**Health Insurance by Participation**



<i>Insurance Type</i>	<b>2020 Premium Cost (Annual)</b>	<b># of Employees Enrolled</b>	<b>Average Cost Per Employee (Annual)</b>
<i>CalCare HMO</i>	\$318,667	12	\$26,556
<i>Value HMO</i>	\$30,144	1	\$30,144
<i>Classic PPO</i>	\$83,038	4	\$20,760
<i>Advantage PPO</i>	\$25,924	1	\$25,924
<i>CDHP*</i>	\$230,376	10	\$23,038
<b>Total</b>	<b>\$688,149</b>	<b>28</b>	<b>\$24,577</b>
<b>Change from Prior</b>	<b>+\$11,552</b>	<b>-1</b>	<b>+\$1,246</b>

\*Includes District incentive contribution.

<i>Insurance Type</i>	<b>2021 Premium Cost (Annual)</b>	<b># of Employees Enrolled</b>	<b>Average Cost Per Employee (Annual)</b>
<i>CalCare HMO</i>	\$328,656	12	\$27,388
<i>Value HMO</i>	\$0.00	0	\$0.00
<i>Classic PPO</i>	\$135,656	6	\$22,609
<i>Advantage PPO</i>	\$26,473	1	\$26,473
<i>CDHP*</i>	\$225,984	10	\$22,598
<b>Total</b>	<b>\$694,065</b>	<b>29</b>	<b>\$23,933</b>
<b>Change from Prior</b>	<b>+\$5,916</b>	<b>+1</b>	<b>&lt;\$644&gt;</b>

\*Includes District incentive contribution.

<i>Insurance Type</i>	<b>2022 Premium Cost (Annual)</b>	<b># of Employees Enrolled</b>	<b>Average Cost Per Employee (Annual)</b>
<i>CalCare HMO</i>	\$208,675	8	\$26,084
<i>Value HMO</i>	\$28,579	1	\$28,579
<i>Classic PPO</i>	\$96,520	5	\$19,304
<i>Advantage PPO</i>	\$25,149	1	\$25,149
<i>CDHP*</i>	\$306,551	14	\$21,896
<b>Total</b>	<b>\$665,474</b>	<b>29</b>	<b>\$22,947</b>
<b>Change from Prior</b>	<b>&lt;\$28,591&gt;</b>	<b>-0-</b>	<b>&lt;\$986&gt;</b>

\*Includes District incentive contribution.

**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: Chris Harris  
Date: February 10, 2022  
Re: COVID-19 and the Economy, Round II

**Background**

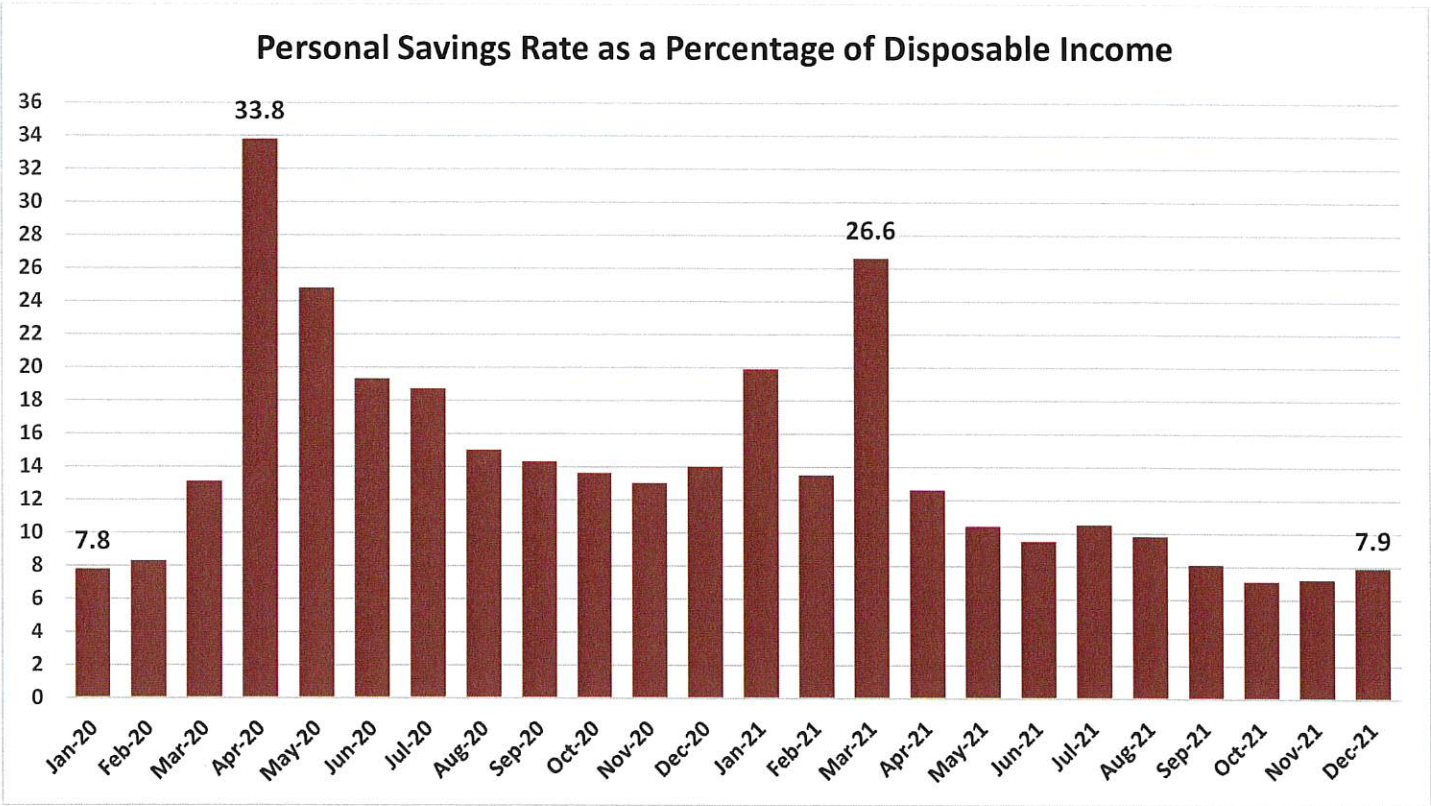
At the January Board Meeting, staff presented information regarding the changes in the Consumer Price Index (CPI) over the past 12-months, the estimated cost of the recommended mid-year Cost-of-Living-Allowance (COLA) for District employees, the current Reserve balance as well as the amount of funds that have been withdrawn from Reserves over the past 18-months. Staff also provided data regarding the past 20-years of CPI and COLA rates. This information has been provided again for reference along with the following requested data:

1. Savings rate for US consumers since the impact of COVID
2. Cost of housing in Humboldt County as compared to the rest of California
  - a. Staff has also included average wages in Humboldt County as compared to the rest of California
3. Comparison of the past five years of District salaries and benefits expenses
4. Employee survey - What is important to District employees
5. Previously provided information

**Current****1. Savings Rate**

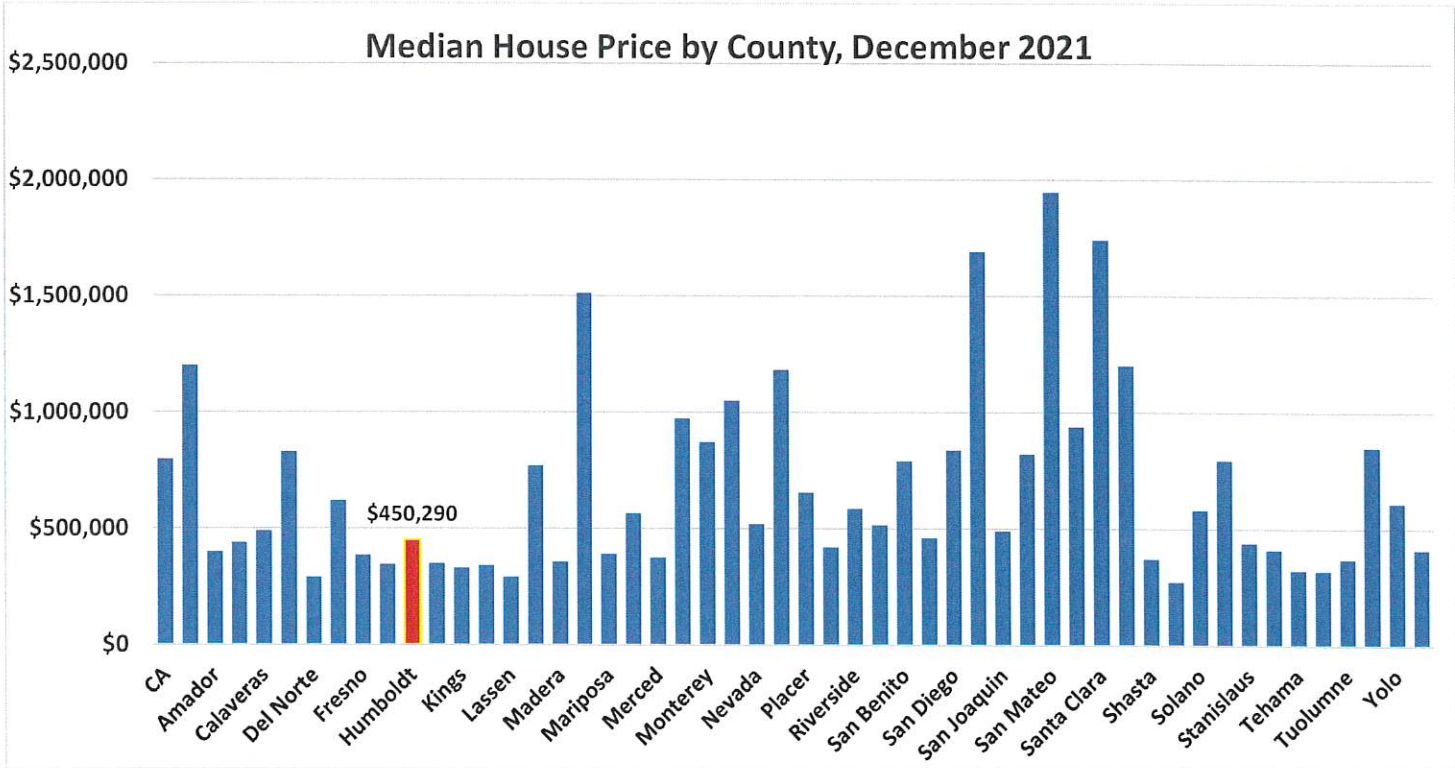
The chart below is From the *Bureau of Economic Analysis/U.S. Department of Commerce*. This graph provides the personal savings rates as a percentage of disposable income from January 2020-December 2021. April 2020 saw a drastic increase in personal savings rates (33.8%), March 2021 was another large peak (26.6%). Most recent data (December 2021) shows a personal savings rate of 7.9%, which is similar to pre-pandemic rates. Included in the attachments is an additional graph from *Statista.com* providing personal savings rate data from June 2015. Since the savings rate is very complicated and impacted by many factors, staff has also provided several articles in the attachments expressing various opinions regarding the savings rate. It is unknown how the savings rate has/has not impacted each District employee.



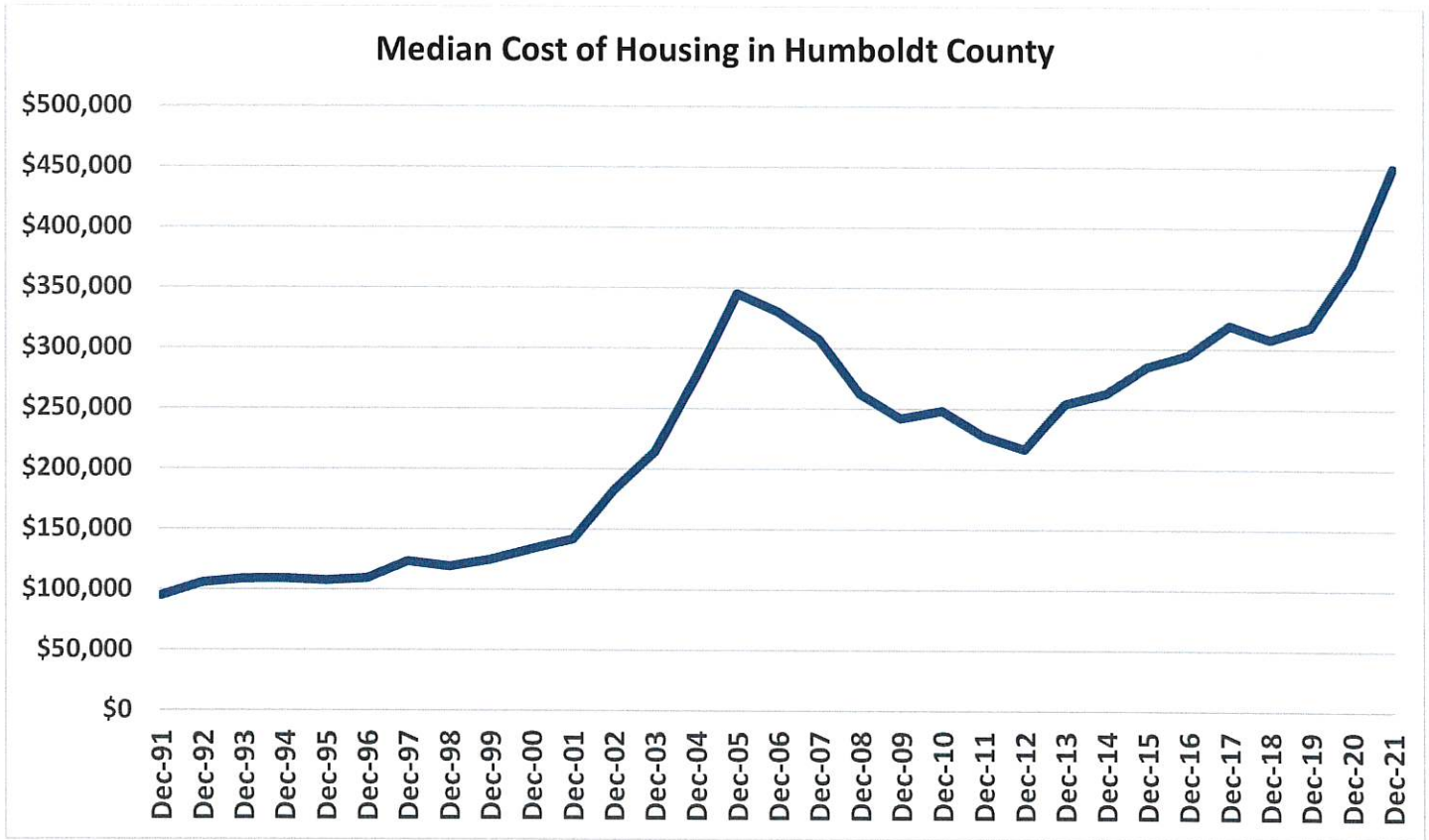


**2. Cost of Housing in Humboldt County compared to all of California**

The chart below is from the *California Association of Realtors* and includes 51 of the 58 counties in California as of December 2021. Of the 51 included in this chart, Humboldt County has the 22<sup>nd</sup> lowest median house price (\$450,290), with 29 California counties being more expensive. (Staff has also provided this chart full-size in the attachments).

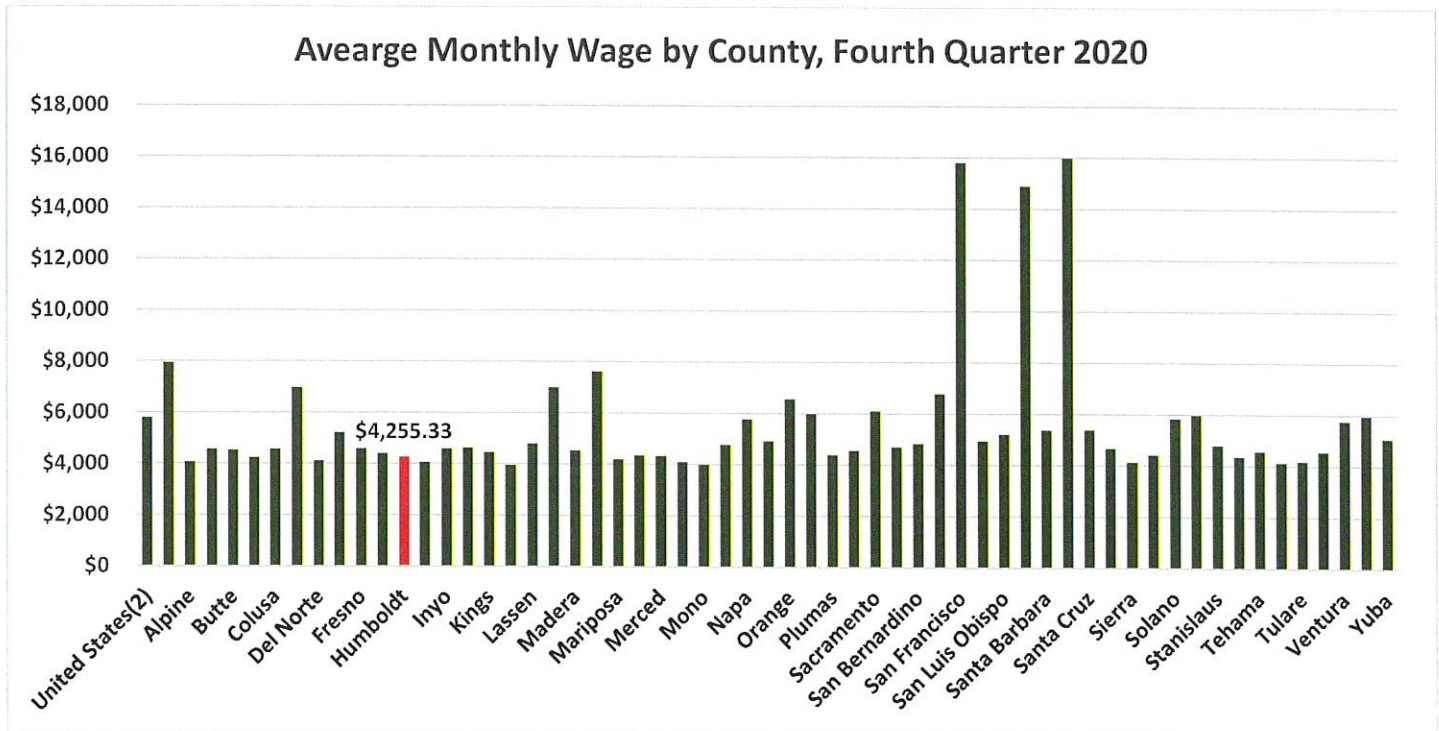


The following chart is from *Realtor.com* and provides a snapshot of the Median Cost of Housing in Humboldt County from December 1991-December 2021



**2a. Average monthly wages in Humboldt County compared to all of California**

The chart below was adapted from *U.S. Bureau of Labor Statistics* (weekly wages converted to monthly). (Staff has also provided this chart full-size in the attachments).





**3. Comparison of prior 5-years of District Benefit and Salary Expenses**

Year	Benefit Expenses	\$ Change	% Change	Comments
FY15/16 Actual	\$1,290,456	\$59,380	4.8%	+1 PT moved to FT
FY16/17 Actual	\$1,393,236	\$102,780	7.9%	+1FT Position
FY17/18 Actual	\$1,479,042	\$85,806	6.1%	+Electrician Trainee, +2.7% Medical. +1.2% CalPERS
FY18/19 Actual	\$1,537,517	\$58,475	3.9%	+1 FT Position
FY19/20 Actual	\$1,634,995	\$97,478	6.3%	+0.75% W. Comp, +3% Medical
FY20/21 Actual	\$1,686,179	\$51,184	3.1%	0.75% W. Comp, +1% Medical, +1.5% CalPERS, +\$25k UAL Funding
FY21/22 Estimated	\$1,932,914	\$103,250	6.0%	+1% W. Comp, +6% HMO, <5%> PPO, +3-mo Training Position, +\$45k UAL Funding

Year	Salary Expenses	\$ Change	% Change	Comments
FY15/16 Actual	\$1,961,340	\$18,961	1.0%	1 PT moved to FT
FY16/17 Actual	\$2,065,039	\$103,699	5.2%	+1FT Position
FY17/18 Actual	\$2,178,885	\$113,846	5.5%	+Electrician Trainee +2.7% Medical. +1.2% CalPERS
FY18/19 Actual	\$2,203,364	\$24,479	1.1%	+1 FT Position
FY19/20 Actual	\$2,236,846	\$33,482	1.5%	+0.75% W. Comp, +3% Medical
FY20/21 Actual	\$2,437,951	\$201,105	8.9%	Perm PT moved to 5-step, COVID Essential Pay 4-months
FY21/22 Estimated	\$2,530,031	\$92,080	3.7%	+3-mo Training Position, COVID Essential Pay 8-months

**4. District Employee Survey**

Following, is a copy of the original survey as provided to all District staff with their January 20<sup>th</sup> paystubs. Essex staff, Office Staff and Ruth Staff are all represented in the survey responses. Based on the variety and breadth of the responses, rather than summarize the replies, staff has included the direct responses from individual employees.

# HUMBOLDT BAY MUNICIPAL WATER DISTRICT

## EMPLOYEE SURVEY

Dear HBMWD Employees,

During the January 2022 Board Meeting, the Board of Directors requested a survey be conducted to help gauge staff job satisfaction. Your responses will be confidential. Please do not include your name on your completed survey. Thank you in advance for your participation in this survey! **YOUR FEEDBACK IS IMPORTANT – PLEASE COMPLETE THE SURVEY!** Please ensure your responses are returned to the Eureka office by **January 31<sup>st</sup>** so that all responses may be factored into the staff report to the Board in February.

1. Is there anything the Board could provide that would convey appreciation for the work that you do?
  
2. Is there anything the Board could provide that would improve your job satisfaction and/or job performance?
  
3. Other than pay, is there a benefit that you wish you had?
  
4. How has the COVID pandemic impacted your life both inside and outside work?

5. Please rank the following benefits (1-7) in order of importance to you:
- |  |   |
|--|---|
| <input type="checkbox"/> Health Insurance            | <input type="checkbox"/> Dental Insurance |
| <input type="checkbox"/> Vision Insurance            | <input type="checkbox"/> Paid Holidays    |
| <input type="checkbox"/> Paid Vacation               | <input type="checkbox"/> Sick Leave       |
| <input type="checkbox"/> Retirement Plan (457b Plan) |   |

6. Taken as a whole package, how would you rate the suite of benefits offered by the District?
- a.  Excellent
  - b.  Good
  - c.  Fair
  - d.  Needs Improvement
    - i. If you selected "Needs Improvement," what would you suggest?

7. Do you have any additional thoughts/comments:
- a. For the Board?
  
  - b. For management?



## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

## JANUARY 2022 EMPLOYEE SURVEY - RESPONSES

1. **Is there anything the Board could provide that would convey appreciation for the work that you do?**
  - a. Certificates of appreciation are nice but ultimately, financial recognition is most appreciated. Numerous long-term employees have all been at the top salary step for their position for over a decade. Long term employees receive longevity increases as well as COLAs (when board approved) but there is no other way to increase one's pay other than hoping for a promotion in an organization that has very low turnover. Adding additional salary pay increases based on merit would be appreciated.
  - b. Competitive Wages
  - c. Continue Covid Special Pay
  - d. Take into consideration cost of living is rising during covid times.
  - e. Pay increase. Money talks.
  - f. The whole staff wants to do a good job and move the District in a positive direction. Occasionally it seems that the Board isn't aligned with us in achieving these goals. (Sincere honesty & an occasional thank you)
  - g. The letters that are sent saying thank you for the work done, are nice.
  - h. Plz continue covid 5% help
  - i. More pay steps, pay more towards our insurance so we pay less out of pocket. Mid-year raises.
  - j. I would appreciate it if the board did not refuse COLA adjustments that are tied to the current reality of the economy.
  - k. A raise. We don't get merit raises. When we are at the top step, that's all we make. COLA's don't cover increased costs.
  - l. Keep up with the cost-of-living increase
  - m. I think the board does a good job with that
  - n. Bonus
  - o. I think the Board does a great job letting the employees know they are appreciated.
  - p. Conduct a salary survey among staff positions. I believe we are falling behind & having a hard time attracting & retaining employees. Maintain COLAs to reflect the times.
  - q. Maybe small token of appreciation around the holidays.
  - r. The Board has recognized the staff many times verbally and in writing. They have answered us when we have had needs or wants, and have always been receptive. Thank you. I would like to recognize the board for their support of the staff. They have given us verbal and written acknowledgment about our efforts to keep water quality and public confidence high. I have appreciated all of the instances. The thanks are welcome. Our real motivation is being part of a strong supportive team which exists to get through complex tasks with challenges that occur on a frequent basis. This team isn't an accident – the members are first rate and highly motivated because that is what we have sought as a baseline. You draw these kinds of individuals by having a solid reputation as an employer, and then you keep them by ensuring that they are well compensated for their skills.
  - s. I like money
  - t. Recognition for outstanding performance for employee month/year
  - u. Yes, a regularly scheduled bonus or raise, flex schedule, student loan repayment assistance, gas allowance
  - v. –No Response—
  - w. Annual spa treatment?
  
2. **Is there anything the Board could provide that would improve your job satisfaction and/or job performance?**
  - a. I do not know the history or why the District limits the amount of sick leave that can be accrued but possibly consider increasing the amount of sick leave that an employee can accrue.
  - b. C.O.L.A Adjustments
  - c. Update pay scale to current market conditions.
  - d. –No Response—
  - e. Pay increase. Continue COVID pay.

## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

## JANUARY 2022 EMPLOYEE SURVEY - RESPONSES

- f. There are some District policies that disincentivize job training/growth. I occasionally feel stagnant/unappreciated because of these policies.
- g. –No Response—
- h. –No Response—
- i. 4-Day work weeks or ½ days on Fridays.
- j. I would feel more satisfied if the board did a survey of water districts statewide to see if our salaries are comparable to others. We get job bulletins regularly that show major differences in pay for certified operators.
- k. More pay steps, ability to work a 4-10 week
- l. –No Response—
- m. –No Response—
- n. District already does great job for safety. I believe a survey to bring wage ranges in line with other water districts around the state
- o. Continue to provide equitable wages and benefits
- p. More incentive programs/policies. Adding a longevity pay increase at 15yrs for example. Reward people & give them gratitude. The interface between the Board and staff lately has been pretty weak!
- q. If the District continues to use Aramark for safety apparel allow us to get work pants as well from their site.
- r. Folks who have levels of licensing above what their required amount should be given bonus pay per level above the minimum required. For example, our operators need only a grade 3 distribution or water treatment licenses to work for the District, however, most have gone beyond this level to better understand the industry and to make themselves more valuable overall. We have a situation where all of our new employees are being penalized in their pocketbooks simply because they hired on after a certain date; re. PEPRA – CALPERS. It is untenable that they should be de-incentivized simply because they are under a different guideline than others.
- s. I like money
- t. Under staffing makes it difficult to complete my tasks in a timely efficient manner.
- u. Yes, a regularly scheduled bonus or raise, flex schedule, student loan repayment assistance, gas allowance  
(Response was “Yes, See Above”)
- v. –No Response—
- w. Not necessary

### 3. Other than pay, is there a benefit that you wish you had?

- a. The benefits are good, although I would like to see if there is an alternative to Delta Dental. Many dentists refuse to take it any longer.
- b. –No Response—
- c. No, we have a very complete benefits package.
- d. Stop paying into Social Security
- e. Health insurance options currently available are good. Costs keep rising however and it feels that these increases negate any COLA received. With the economy going the way it is, costs are increasing and yet, nothing here is. Increased Health Insurance coverage would be a great benefit.
- f. I wish I made as much as my coworkers, but due to PEPRA, I loose ~\$200 a check, that’s ~\$190,000 in a career!
- g. –No Response—
- h. –No Response—
- i. Not really. Pay right now is what is needed for all the rising costs of everything: food, gas.
- j. No.
- k. Pay is more important
- l. No
- m. Better dental insurance
- n. Due to masking rules and testing & vaccinations, the stress level has gone thru the roof for everything that involves people & the workplace is even more so.
- o. –No Response—



## JANUARY 2022 EMPLOYEE SURVEY - RESPONSES

- p. Fully paid medical after retirement – gym membership – go to a higher level of PERS 2.5% - contribute more to 457 plan – more floating holidays
- q. CalPERS 2.5% @ 55
- r. Bottom line. We are here for the money. Benefits are well and good, and I appreciate the package that has been put together. However, my cost for fuel to get to this fantastic job has gone up by more than 25% compared to recent years. My cost of food, housing, utilities, etc., have all gone up while my wages are not tracking anywhere near that rate of change. So, a fuel allotment, a rent voucher? I don't know what the board is trying to convey with the "other than pay" statement.
- s. –No Response–
- t. Matched contributions to retirement
- u. No. 1 - Flex schedule, No. 2 – Loan Repayment Assistance, No. 3 – Gas Allowance
- v. Would like to see a change to the cap on sick leave. It stops being an equal benefit if you are at max hours.
- w. Transportation subsidy

#### 4. How has the COVID pandemic impacted your life both inside and outside work?

- a. Financially. All employees continue to work as we always have. Unfortunately, due to shortages of products on store shelves, supply chain issues, and the doubling and tripling of the cost of building materials, all the at-home time has meant that we are stuck at home with no where to go and now our money does not go anywhere near as far as it did before. One would think we'd have saved money from not taking vacation. Just the opposite. Staying at home has been very expensive.
- b. Long term effects of illness contacted at work
- c. Inside work – decreased worker efficiencies not being able to work in large groups. Decreased moral – no picnic, no Christmas gathering.
- d. Cost of living is my biggest impact
- e. Staff has consistently worked through the ongoing pandemic. Not much has changed here. Outside of work, the economic impact has been difficult. Costs are increasing everywhere. Just driving to work now costs much more money. Food and pharmaceutical costs have skyrocketed and are severely impacting our budget. Forget travel, now need to pay extra for the basics.
- f. More personal stress, frustration, financial hardship.
- g. Outside of work, I have to be careful who I am in contact with.
- h. Government ineffective overreach bankrupted CalCourts gym on Clark St. (was my gym); the threat of vax mandate was unpleasant (thnx for not allowing that)
- i. We have an awesome team that has helped us navigate thru work. Outside is just a little harder with prices of things and school schedules.
- j. 2 elementary school age children; wife working 100% remotely since March 2020. Highly politicized work environment since pandemic began. To say there have been major challenges is a gross understatement.
- k. Increased stress – everywhere. Impossible to relax.
- l. Complete loss of trust in government, medical world, main stream media, social media. If a person has an opinion different than is being pushed you are censored and told it is misinformation.
- m. It really hasn't impacted life much [here]. I try to limit my trips to town.
- n. Stress, isolation, dealing with more confrontational people.
- o. COVID has been a major disruption both at work and outside of work. Work has been a little easier to deal with because clear direction has been provided by management at every outbreak or change of circumstance. Outside of work has been much more disruptive. Getting together with friends and family requires careful consideration. Especially if a gathering includes older, or immune compromised or frail individuals. I have not attended several gatherings because of concerns for myself and/or others.
- p. Very Stressful! Have a young family at home that are struggling to build social skills. Work has been complicated & less efficient due to crews being separated.
- q. Challenging with family at home trying not to get Covid and same for work environment to stay healthy.

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

JANUARY 2022 EMPLOYEE SURVEY - RESPONSES

- r. Covid has disrupted nearly EVERYTHING in our lives and jobs, removed our freedoms and our respect for fellow man. We are diminished by the way that many have taken it upon themselves to mandate or dictate how and what others do. The mere idea that some would force others to bend to their will, however they manage to justify their position, is appalling. I would leave rather than subject myself to armchair dictators who would make me be a guinea pig in some macabre social experiment. My confidence in fellow man is diminished. My confidence in nearly all levels of media, academia, and government is tarnished. I frankly am appalled at what our otherwise highly developed society has become. If the board made the decision to mandate anything other than individual choice and freedom, I would leave.
- s. A lot less connectivity at work, and more difficult due to separated crews. Harder to keep tools accounted for.
- t. Higher cost of living; ie: fuel, groceries, supplies
- u. Negatively
- v. It has been very damaging to both of my son's schooling and socialization as teenagers.
- w. Inside Work: Social Distancing, Outside: Travel restrictions

5. Please rank the following benefits (1-7) in order of importance to you:

- Health Insurance
- Dental Insurance
- Vision Insurance
- Paid Holidays
- Paid Vacation
- Sick Leave
- Retirement Plan (457b Plan)

District Provided Benefit	Ranking Based on Survey Results	Survey Score
Health Insurance	1	30
Paid Vacation	2	79
Retirement Plan (457k Plan)	3	92
Dental Insurance	4	93
Vision Insurance	5	102
Sick Leave	6	104
Paid Holidays	7	114
Pay (Write-In)	Two employees listed "Pay" as their #1 Benefit from the District	

Results by Ranking							
	1	2	3	4	5	6	7
Health Insurance	77%	9%	14%	0%	0%	0%	0%
Vision Insurance	0%	0%	23%	5%	18%	32%	14%
Paid Vacation	5%	32%	9%	27%	14%	9%	5%
Retirement Plan (457k Plan)	5%	18%	27%	9%	9%	9%	23%
Dental Insurance	0%	36%	5%	5%	23%	18%	14%
Paid Holidays	5%	0%	9%	23%	18%	14%	32%
Sick Leave	0%	5%	14%	32%	18%	18%	14%
Pay (write-in)	9%	0%	0%	0%	0%	0%	0%



# HUMBOLDT BAY MUNICIPAL WATER DISTRICT

## JANUARY 2022 EMPLOYEE SURVEY - RESPONSES

### 6. Taken as a whole package, how would you rate the suite of benefits offered by the District?

- a.  Excellent
- b.  Good
- c.  Fair
- d.  Needs Improvement

#### i. If you selected "Needs Improvement," what would you suggest?

Of twenty-seven responses (several respondents marked multiple boxes):

Excellent:	43%
Good:	52%
Fair:	9%
Needs Improvement:	13%

#### Comments:

- a. [Excellent] With the exception of Delta Dental
- b. [Goods/Needs Improvement] Elimination of differences between compensation for newer employees
- e. [Good] Prior to COVID, would have been Excellent, now just good due to economics.
- f. [Good] But being quickly diminished by the state due to insane taxes and regulations. Benefits went farther 20 years ago than they do now.
- i. [Good] Just wish our out of packet didn't have to be so much. Maybe District could increase coverage amount.
- j. [Good] The benefits – everything on top of the monthly salary is excellent. No complaints there.
- r. [Good/Needs Improvement] In this order: I would like to see a transition to much higher district contribution to the retirement plan; perhaps a larger percentage match would be nice. I am fearful of how the CalPers system is going down the path of social security, and I wonder how either of them will help when I actually do retire. I am very happy with the districts support with the HSA plan (Health Ins.). I am thankful for the vacation, leave, and the holidays that are afforded us. Vision and dental are good enough to me. I would rate our benefits package pretty good overall.
- u. [Good/Needs Improvement] Could be improved. Flex Schedule, student loan repayment assistance, gas allowance. Other Union Orgs negotiate [and] schedule raises a few years out. Would be nice to know what to expect/budget.

### 7. Do you have any additional thoughts/comments:

#### For the Board?

- a. Your management team is awesome!
- b. I believe that perceived unequal compensation has effected retention of vital staff.
- c. Provide funding for additional staff.
- d. Stay healthy

## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

## JANUARY 2022 EMPLOYEE SURVEY - RESPONSES

- e. Please consider updating the salary step system. Perhaps adding more steps or adjusting wages. Not updated in the past ten years at least. Outdated. It would be nice if the Board acknowledged when the maintenance crew has to work throughout the night, sometimes days, to repair leaks. Not just with words at a Board Meeting.
- f. A pat on the back is great, and I still believe in duty to serve, but it's hard to stay positive and satisfied when your buying power and income keep getting diminished.
- g. —No Response—
- h. Thnx for great admin
- i. I am thankful to work with such amazing people
- j. Thank you for consistently providing us with excellent health insurance benefits.
- k. —No Response—
- l. Thank you for not supporting the vaccine mandate
- m. It would be great if the permanent part-time employees at Ruth would get Holiday Pay.
- n. Covid adjustment was [for] 2020 covid issues. Now the problem has last[ed] all of 2021 and 2022 doesn't look much better.
- o. I worry about out new employees and the young families. COVID has disrupted their lives and made everything more expensive.
- p. Covid pay was a great way to make the past year a little easier to handle. Thank you very much! Don't forget we are all here to make this mission successful.
- q. Thank you for all your hard work.
- r. I appreciate that the board has been willing to support input from the workers and staff of HBMWD. I think that this has been one of the better places that I've worked, and I plan on staying with the District for as long as they will allow me too.
- s. —No Response—
- t. Probably by design but it seems there is a big disconnect between the Essex staff and the board although it makes decisions that effect our daily lives.
- u. I appreciate that the board wants my input. Thank you for your consideration.
- v. —No Response—
- w. —No Response--

**7. Do you have any additional thoughts/comments:****For management?**

- a. Hang in there – we got your back! 😊
- b. —No Response—
- c. —No Response—
- d. —No Response—
- e. I feel that management is supportive of employees. I receive feedback on my job performance which is greatly appreciated. Keep up the good work.
- f. Some managers know how to effectively delegate, others not so much. I appreciate working with the former dread working for the latter. Sometimes it's downright toxic.
- g. —No Response—
- h. Thnx for great admin
- i. I am thankful to work with such amazing people.
- j. Thank you!
- k. Management team is effective & gets things done
- l. Thank you for not supporting the vaccine mandate
- m. —No Response—
- n. I believe management is strong point for the District.
- o. Thank you for all you do for us. You are AWESOME!!



## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

## JANUARY 2022 EMPLOYEE SURVEY - RESPONSES

- p. I believe that our management staff is strong & supportive! Keep up the great work & please keep sticking around.
- q. Thank you for all your hard work.
- r. The management of HBMWD has put a premium on fostering a group of highly skilled tradesmen. To this end they have brought some folks into our organization who wear many hats and are asked to use these hats more and more. If the District had to hire out each and every skillset that was being utilized on a continuous basis, they would instantly see how much value they are getting from each and every one of the employees. There are many of us who could be employed fulltime in just one of our multitude of skills, but we choose to be here. So, money seems like a rather decent way to keep that level of expertise around.
- s. —No Response—
- t. Great management and culture! Thanks
- u. I appreciate that Management wants my input. Thanks for your consideration.
- v. —No Response—
- w. —No Response--

## 5. Previously Provided Data - CPI

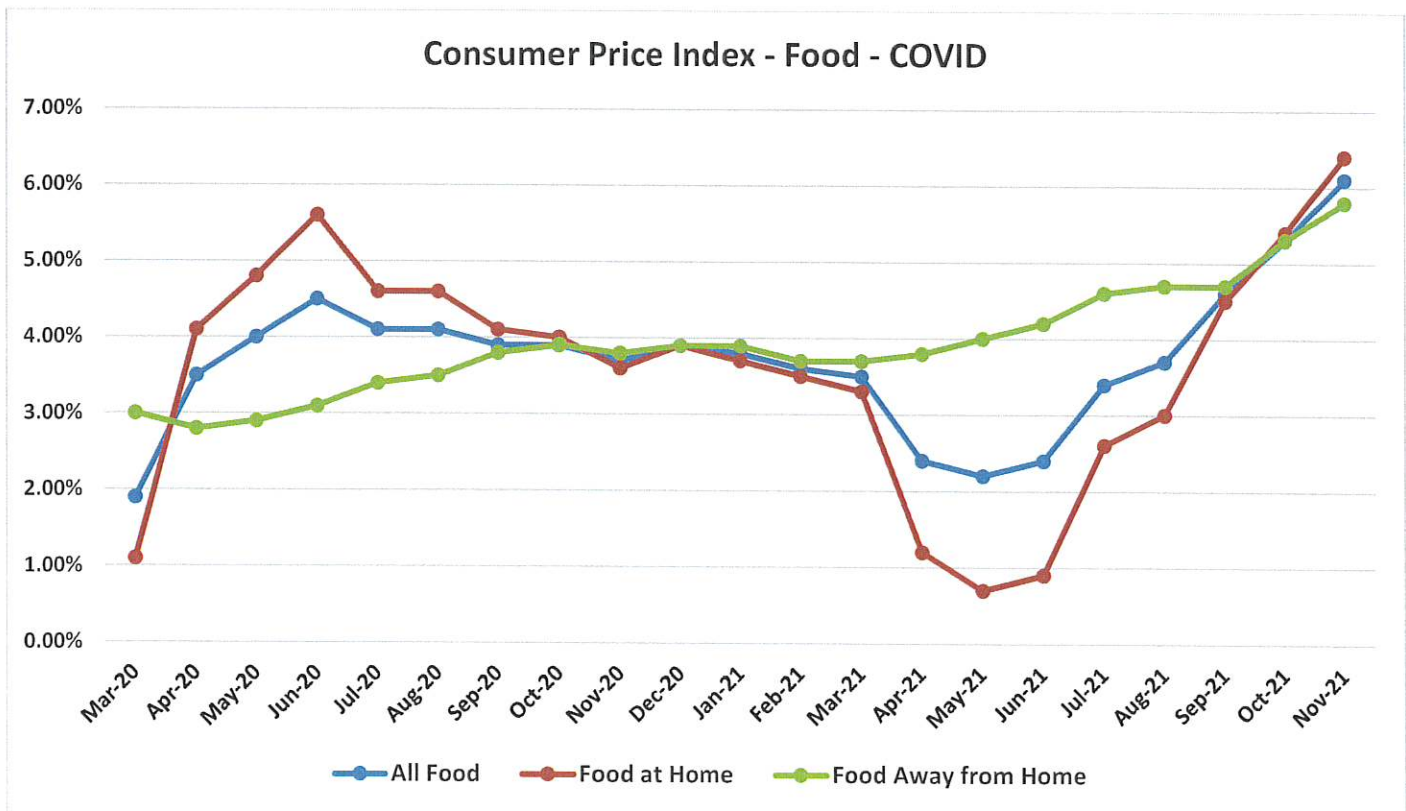
When the US Bureau of Labor Statistics released the most recent research regarding the status of the economy and the Consumer Price Index, it was of little surprise that the cost of nearly everything has continued to rise (motor vehicle insurance, recreation, and communication did show decreases for November).

The simplified impact of the continued increase in the CPI Rate is that the dollar does not buy as much as it did—as much as it did last year, or even as much as it did last month. While there are always fluctuations in the markets (for example, a bad hurricane season may cause the prices of oranges to skyrocket), when repeated increases are seen in nearly all markets, the effect on individual consumers pocketbooks is substantial.

The Consumer Price Index tracks the cost of approximately 80,000 items each month. Staff has provided specific details and graphs for the “COVID” timeframe (March 2020-current) for the Food Index, Energy Index, the Other Items Index, and the All Items Index (the CPI Rate). This data is from the U.S. Bureau of Labor Statistics, Economic News Release-Consumer Price Index Summary December 10, 2021, the full report with additional details is included in the attachments, as are additional graphs for the same indexes for the prior 20-years.

### The Food Index

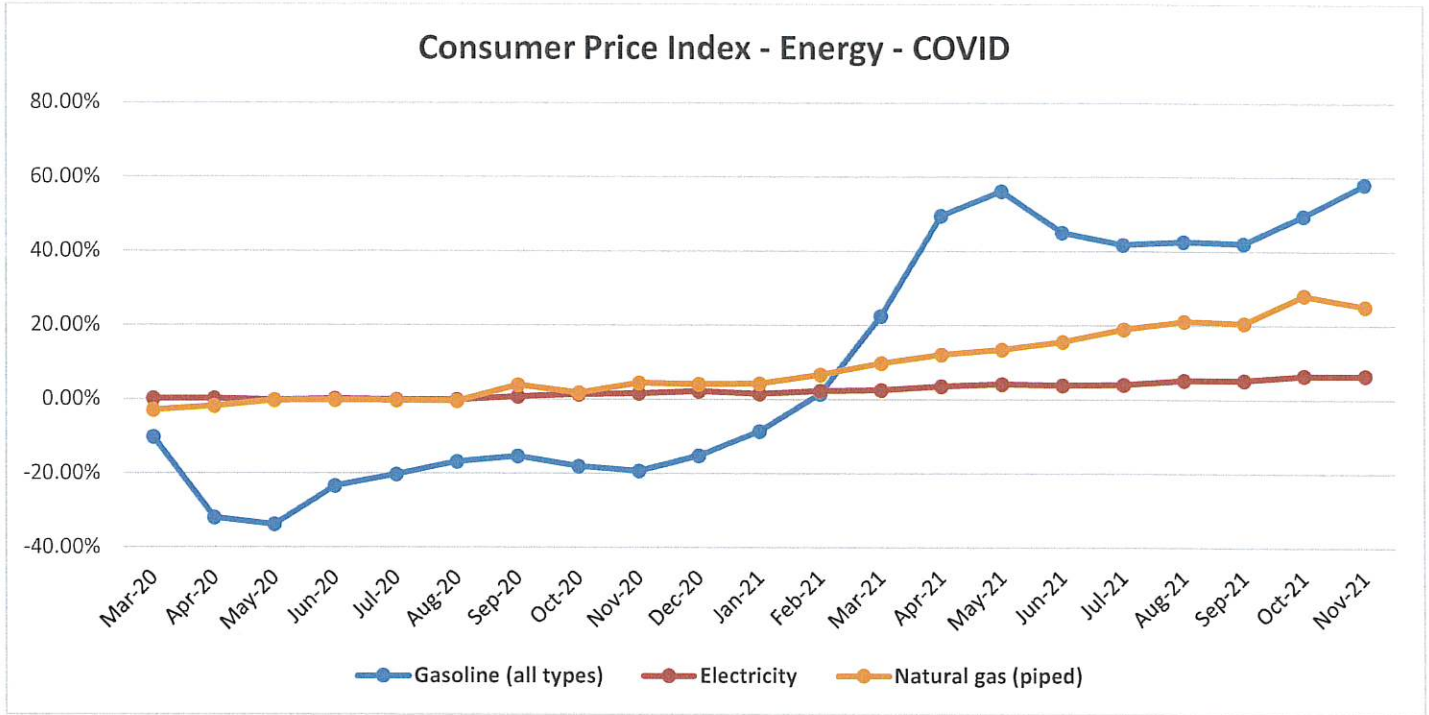
“The food index increased by 0.7 percent in November, after rising 0.9 percent in both September and October...all six major grocery store food group indexes rose; this was the third consecutive month that all six increased...The food-at-home index rose 6.4 percent over the last 12-months, the largest increase since December 2008...The food-away-from-home has risen 5.8 percent over the last 12-months, the largest increase since January 1982.”





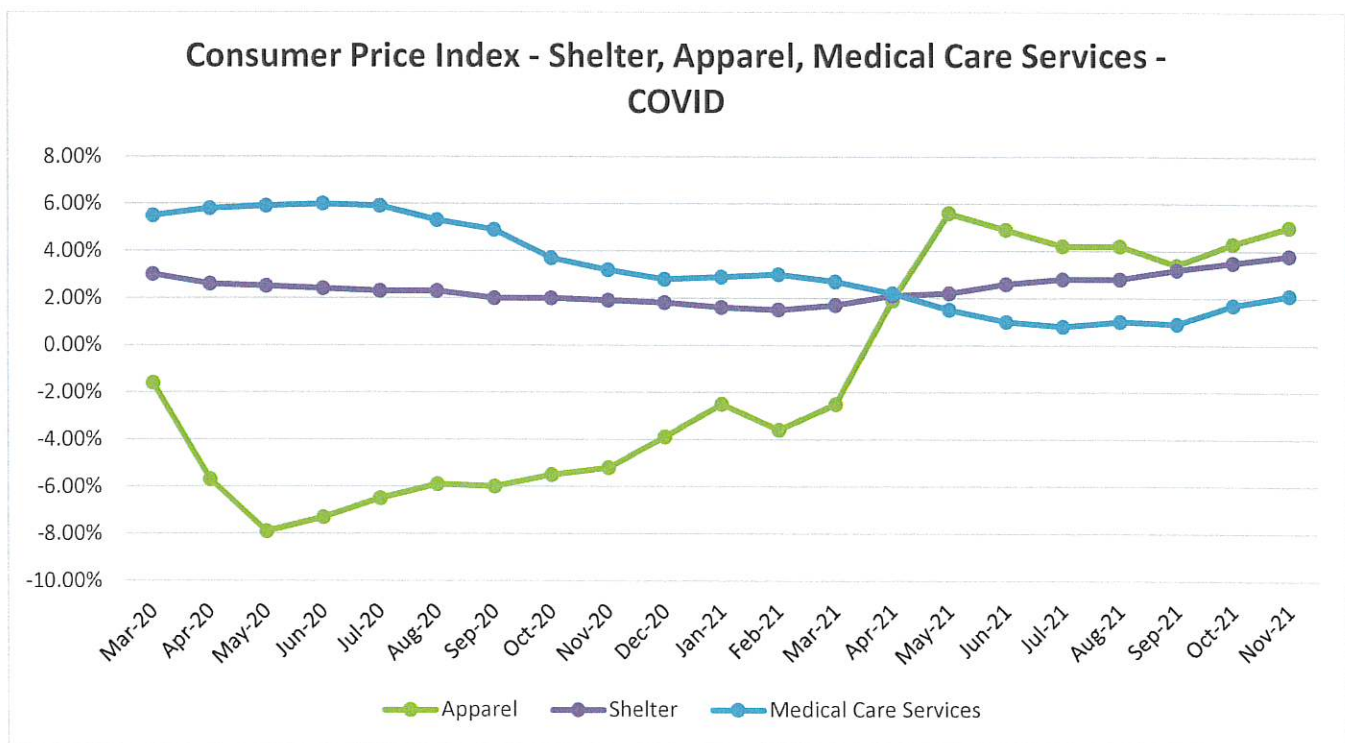
**The Energy Index**

*"The Energy index rose 3.5 percent in November after rising 4.8 percent in October...The energy index rose 33.3 percent over the past 12-months with all major energy component indexes increasing sharply...The gasoline index rose 58.1 percent over the last year, the largest 12-month increase since April 1980."*



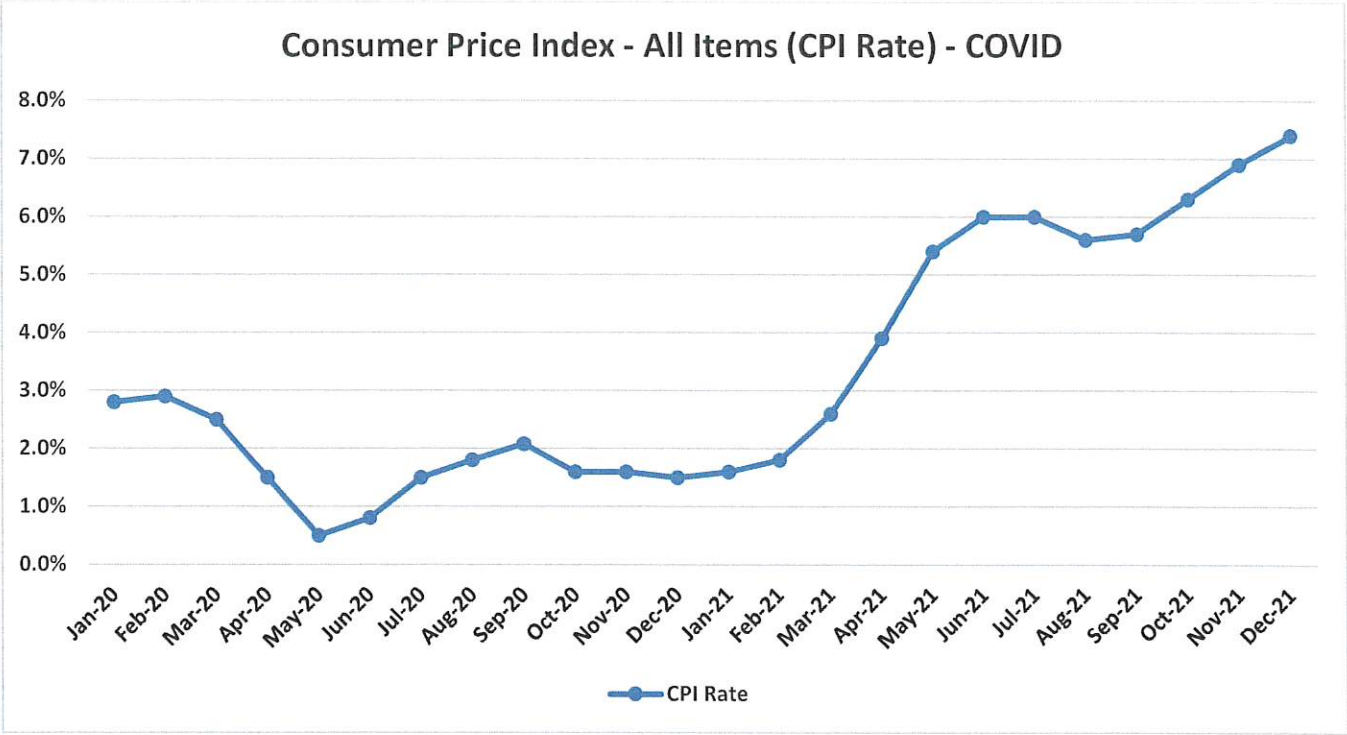
**Other Items**

*"The index for all items less food and energy rose 4.9 percent over the past twelve months, its largest 12-month increase since June 1991"*



**The Consumer Price Index, All Items**

*"The all items index rose 6.8 percent for the 12 months ending November [2021], the largest 12-month increase since the period ending June 1982" (Staff has updated this chart to include December 2021)*



**Discussion**

Based on the current economic circumstances, staff is recommending a mid-year review of current pay rates and a possible extension of the COVID-19 Essential Pay or a COLA increase be approved. This expense would be funded out of General Reserves.

Historically, the District has incorporated any Director approved COLA increases once a year (July) as part of the new budget. Unfortunately, by the time the employees receive any COLA increase on their paycheck, the CPI increases are already in the past and the employee has already endured the higher cost of living. The intent of this mid-year request is for the District to continue to proactively assist staff with the ongoing COVID-19 impacts, including the increases in cost of living expenses being incurred right now.

**Status of the Unrestricted General Reserves**

Staff has previously requested funds for other purposes from the General Reserves. Fortunately, the District has been able to use other sources for much of those approved funds. These include:



Request Date	Reserve Funding Purpose	Amount Requested	Actual Reserve Funds Spent	Comment
October 2020	August Complex Wildfire- Erosion Control, Debris Removal	\$100,000	\$0.00	Expenses covered by FEMA.
October 2020	August Complex Wildfire – Recovery, Revegetation	\$100,000	\$0.00	Expenses to be covered by CalFire Healthy Forest Grant Funding
December 2020	USDA/NRCS – Emergency Watershed Recovery Grant, Match Funds	\$323,143	\$0.00	Expenses covered by FEMA. District will not be utilizing these funds.
March 2021	COVID-19 Essential Service Pay Increase*	\$131,500	\$123,500 estimated through 2/28/2022	For March 2020-March 2021
October 2021	Repairs to Collector 2-4 Power Feed	\$50,000	<\$30,129>	Funds will be covered via Project Budget Reallocation in June/July 2022
October 2021	TRF Sump Pump Replacement	\$7,000	<\$6,507>	Funds will be covered via Project Budget Reallocation in June/July 2022
<b>Total Funding Requested/Approved from General Reserves</b>		<b>\$711,643</b>		
<b>Total Funding Actually used from General Reserves</b>			<b>\$123,500</b>	

\*In March of 2021, the Directors approved an Essential Service Pay Increase “to acknowledge the past 365-days [March 2020-March 2021]...a temporary 365-day (12-months) increase for permanent District employees as a means to compensate them for working through on-going COVID-19 challenges and as a means to combat the pandemic fatigue resulting from the prior 365 days.” The Essential Service Pay Increase ends February 28, 2022.

#### The Current and Future Estimated Balance of the General Reserves

Current Unrestricted General Reserve Fund Balance		
January Balance	\$2,363,175	
Outstanding Grant Reimbursements	\$990,442	Expected February 2022
<b>Estimated Unrestricted General Reserve Fund Balance March 2022</b>	<b>\$3,353,617</b>	
Additional known Unrestricted General Reserve Funds Outstanding		
Outstanding Grant Retainage	\$241,665	Received as Projects Complete



**Possible COVID-19 Essential Pay Extension**

The board awarded COVID-19 Essential Pay increase of 5% will expire at the end of February 2022. The cost to extend this pay:

March 2022-June 2022	March 2022-August 2022*	March 2022-February 2023*
4-months	6-months	12-months
\$41,200	\$61,800	\$123,600
*Could potentially be partially funded in the FY23 Budget		

**Possible Mid-Year COLA Increase**

While the District has not typically utilized a mid-year COLA increase in the past (at least as far back as 1998), it is not unprecedented. Both the Cities of Eureka and Arcata have repeatedly used a "split" methodology in the past (most recently, City of Eureka +2% July of 2021 and +3% January 2022).

The District (and most agencies) uses the CPI as a basis for COLA requests. The past 12-months of the CPI is shown in the table below. The impact of COVID and the resulting economic challenges have created increases that have not been seen over a 12-month period for nearly 40-years. Additional CPI history as well as COLA history is included in the attachments for reference.

Consumer Price Index – All Items 2021											
Jan. 2021	Feb. 2021	March 2021	April 2021	May 2021	June 2021	July 2021	Aug. 2021	Sept. 2021	Oct. 2021	Nov. 2021	Dec. 2021
1.6%	1.8%	2.6%	3.9%	5.4%	6.0%	6.0%	5.6%	5.7%	6.3%	6.9%	7.4%

When the January staff report was initially presented, the December CPI rates had not yet been released. Staff has included the December rates as reference, but all **"average" calculations are still calculated through November 2021.**

A mid-year COLA increase of 4.7% (the average CPI change January-November 2021) would factor in the lowest months of the year (January 2021 = 1.6%) as well as the highest (initially November 2021 = 6.9%). The estimated cost for this COLA from January 1, 2022-June 30, 2022 is \$71,100. If approved, this COLA percentage increase would be factored into and reduce any COLA percentage increase request presented in May for the FY22/23 Budget.

	Estimated Salary & Wage Expense	Related Taxes & Benefit Expenses	Total Estimated Cost to General Reserves
3.45% COLA	\$42,100	\$10,100	\$52,200
<b>4.7% COLA</b>	<b>\$57,300</b>	<b>\$13,800</b>	<b>\$71,100</b>
6.9% COLA	\$84,200	\$20,300	\$104,500



**Staff Recommendation**

Based on the incredibly unique and challenging circumstances continuing to be brought about by the COVID-19 pandemic, staff recommends approval of a mid-year COLA increase for District employees of 4.7%, to be paid using District General Reserve Funds or continuation of the COVID Essential Pay.

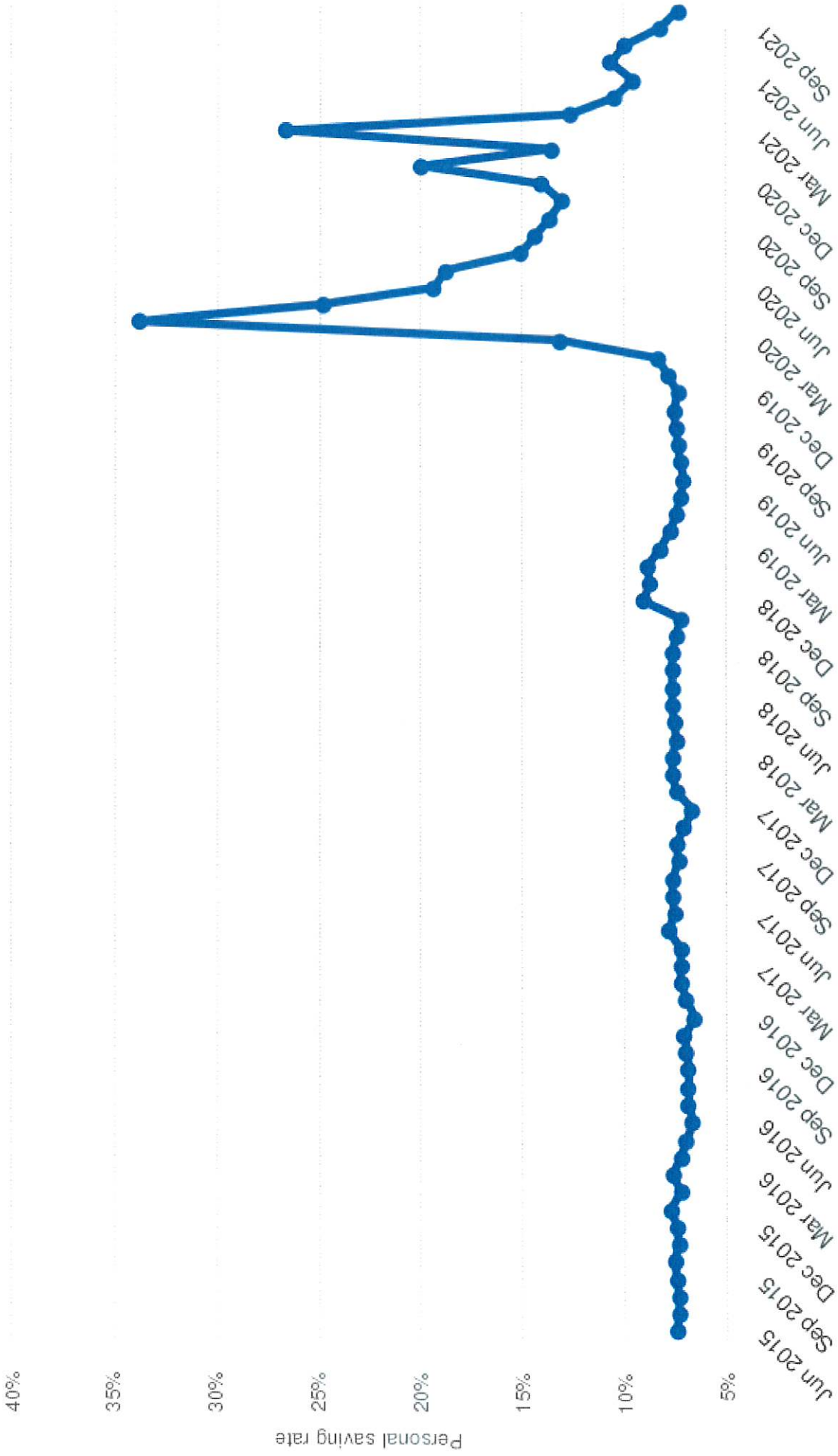
**Attachments**

- Personal Savings Rate June 2015-June 2021
- *"How COVID-19 Changed Our Saving and Spending Habits"* Investopedia, September 28, 2021
- *"Study shows surge in savings during the pandemic"* Kansas City Fed, April 29, 2021
- *"Americans' Pandemic-Era 'Excess Savings' Are Dwindling For Many"* The New York Times, December 7, 2021
- Median Home Price By County, December 2021
- *"Humboldt County's Housing Market is Still White-Hot, Ranking No. 1 in the Western U.S. for October"* Lost Coast Outpost, November 24, 2021
- Average Monthly Wage by County, Fourth Quarter 2020
- U.S. Bureau of Labor Statistics, Economic News Release – Consumer Price Index Summary for December 2021, January 12, 2022
- *"Prices and ire, rising"* The New York Times, February 1, 2022
- Supplemental Graphs – Prior 20-Years: Food, Energy, Other Items, All Items (CPI Rate)
- CPI Rates 1998 - Present
- COLA and CPI Comparison 1998 - Present

# Savings



# Personal saving rate in the United States from June 2015 to June 2021



**Sources**  
 St. Louis Fed; BEA  
 © Statista 2021

**Additional Information:**  
 United States; BEA; June 2015 to June 2021

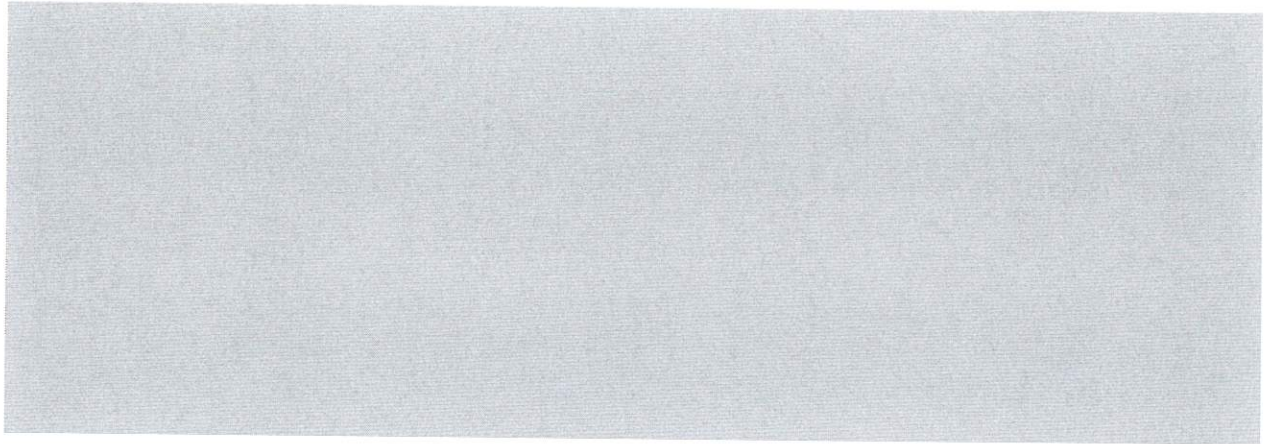
# INVESTOPDIA

## How COVID-19 Changed Our Saving and Spending Habits

The pandemic led to a tale of two economies

By

CATHERINE TYMKIW



Updated September 28, 2021

Reviewed by

EBONY HOWARD

As the U.S. economy begins to recover and reopen, many consumers are still scrambling to regain their financial footing. While the conventional wisdom is to sock away six to 12 months worth of savings, that became an impossibility for many during the COVID-19 pandemic, as millions of people lost their jobs, small businesses were forced to shutter, and day-to-day living expenses piled up. The stimulus checks helped, but not necessarily enough.

There is some good news on the horizon. As more Americans get vaccinated and infection rates ease, the U.S. economy is slowly reemerging. Businesses are reopening, hiring is on the rise, and that eventually should ease some of the financial strain felt by many.

In March 2021, the personal savings rate—which reflects the ratio of total personal saving minus disposable income—surged to 26.6%.<sup>1</sup>

While saving is up, that figure also indicates a short-term slowdown in consumer spending, as people hold onto more of their money.<sup>2</sup> The last time the savings rate was this high was April 2020, when it hit



33%. While it has slowly eased during the past 12 months, it has remained above 12%, compared with pre-pandemic levels that were below 10%.<sup>3</sup>

Nonetheless, an increase in savings doesn't mean that everyone is sitting on piles of cash. "What someone should do with their personal savings is entirely circumstantial, however, as some industries have been hit harder than others," says Ryan Detrick, vice president and market strategist with LPL Financial Research. "If you've been one of the lucky ones who hasn't had a major disruption in life because of the pandemic, now can be a good idea to assess any outstanding debt and either refinance while interest rates are low or consider paying off some of this debt. For those who are barely making ends meet, it's a complicated subject to provide advice to."

## KEY TAKEAWAYS

- The COVID-19 pandemic created a tale of two economies: those who were able to save, and those who struggled to make ends meet.
- Financial advice remains the same, pre- and post-pandemic: It's important to build up an emergency savings fund and create a financial plan.
- COVID-19 also highlighted the need to have a budget, however small it may be.
- Financial advisors are available to help. Ask for referrals, and take it one step at a time.
- Many racked up debt during the pandemic, while others were able to save.
- Savers are ready to spend, but advisors caution about reining in the urge to splurge.
- Sixty-four percent of Americans called themselves savers in 2020, and 80% said they planned to continue to save more than they spend in 2021.<sup>4</sup>

## The COVID-19 Financial Hit

While the longer-term outlook is looking a bit brighter, the near term remains unsettled. Consider this: Half of Americans in a recent survey by Investopedia sister site The Balance said they have less than \$250 left over each month after expenses, and some 12% said they have nothing left over. Debt is also weighing people down, with 29% saying their credit card debt had increased during the pandemic. According to a Charles Schwab survey, 53% of Americans have been financially impacted by the pandemic.<sup>5</sup>

A separate survey by T. Rowe Price painted an even bleaker picture, with nearly 70% of respondents saying their financial well-being had been negatively impacted by COVID-19, citing layoffs, reduced work hours/salary cuts, and overall less income as the top three reasons. Prior to the pandemic, 71% said they had a sufficient emergency fund. Now, 42% say they need to replenish their emergency fund, with 44% saying they need to increase the size of it.<sup>6</sup>

"The pandemic has reminded us of the importance of having a budget," says James Boyd, education coach at TD Ameritrade. "When you know where your money is going, it can make it easier to isolate needs and wants and shift more toward necessities."

For some, that may be much easier said than done. "The pandemic impacted people very differently," says Brian O'Leary, wealth advisor and senior analyst at Aline Wealth. "The key lesson is circumstances can change very rapidly."

Only 33% surveyed by T. Rowe Price (and 30% surveyed by The Balance) said their finances had improved during the pandemic, mostly due to less spending—a luxury that not everyone had.<sup>7</sup>

While there was a lot more saving going on over the past year, "I have a concern that people will feel a sense of relief coming out of the pandemic and overspend to make up for lost time," says Michael Resnick, senior wealth management advisor at GCG Financial. Nearly a quarter of Americans said they are ready to splurge for that exact reason, according to the Schwab survey, while 47% just want to get back to living and spending like they were pre-pandemic.<sup>8</sup>

"We encourage it, as long as it's done responsibly," says O'Leary, adding that giving in to that urge should be done as part of a solid financial plan "that includes a buffer." A recent survey from McKinsey & Company shows that more than 50% of U.S. consumers plan on splurging this year, with half of those respondents citing pandemic fatigue, while the other half said they're willing to wait until the pandemic is over before breaking out their wallets.<sup>9</sup>

### **Spending Makes a Comeback**

As more people get vaccinated, the urge to get out and spend will likely continue to increase.<sup>10</sup> "While COVID-19 upended nearly every corner of American life, many are starting to see the light at the end of the tunnel and are ready for a reset," Jonathan Craig, Charles Schwab senior executive vice president and head of Investor Services, said in a statement.<sup>11</sup> The Schwab survey showed that 64% of Americans called themselves savers in 2020, and 80% said they planned to continue to save more than they spend in 2021.<sup>12</sup> More good news: According to the McKinsey survey, 86% of those who are vaccinated either expect their finances to return to normal by the end of the year (52%) or their finances are already back to normal (34%).<sup>13</sup>

All the same, the National Retail Federation (NRF) expects a pickup in spending. The NRF is predicting that retail spending will top \$4.3 trillion in 2021 as more people get vaccinated. That's up from \$4 trillion in 2020 and \$3.8 trillion in 2019.<sup>14</sup>

While all of those figures are good news for the economy, that doesn't mean consumers should spend with abandon. "The basic tenet of financial planning, of thinking long term and spending less than you earn while keeping an emergency fund, has proven to be the saving grace for many of my clients throughout this past year," says Resnick.

Detrick agrees: "The age-old rule of thumb to aim to have six to 12 months of expenses saved in the event that you lose your job still applies, but perhaps the pandemic caused many to reevaluate the importance of this buffer and the likelihood that they may need to use it at some point." It seems some are heeding that advice. Nearly one-third of those surveyed by The Balance said they were saving more now than before the pandemic, and one-fifth even managed to invest more.



## Steps for Those Barely Getting By

Those in a more financially precarious position will need to proceed with more caution. “We expect the economy will rebound sharply—and it has so far—but it may not feel that way for everyone,” says Detrick. “While many types of debt received forbearance during the pandemic, it’s likely that these protections will eventually be lifted, so being prepared for any debt obligations will be critical as we begin to see the light at the end of the tunnel of the pandemic.”

Some of it comes down to planning, yet only about one-third of Americans actually have a financial plan in writing. Of those without a plan, 42% say it’s because they don’t have enough money to make it worthwhile.<sup>15</sup> “From a fiscal standpoint, it’s going to require a massive intervention on their part,” says O’Leary.

Among the things to consider are:

- What are the prospects of your income returning? If the answer is “not good,” then you may be forced into thinking about a career change, which comes with its own set of challenges and stressors.
- If you can’t do anything to improve your income, then look at your expenses. Is there any wiggle room to negotiate payment plans or cut anything out?
- If you’ve received COVID-19 mortgage forbearance, rent relief, or student loan relief, then look carefully at the rules about when it ends and what happens next.

“There is a whole spectrum of actions you can take, and you have to be creative,” says O’Leary, adding that while some people may face some very hard choices, “it’s better than being forced into not having any choices later.”

The pandemic has been a scary wake-up call about how lives can be overturned with very little warning. “For many, this will be an experience they don’t want to relive,” says O’Leary.

As the economy regains its footing, having to dig out of debt makes it even more crucial to start thinking about the future and set manageable short- and long-term goals. “What we really need to do is be honest about your debt and desire to address those issues,” O’Leary says. He acknowledges that it may seem like a lofty goal for those who are barely making ends meet, but there is help out there.

Among the things you can do are:

- Talk to your friends and find out what works (or doesn’t work) for them.
- Ask friends to recommend a financial advisor. Many will give a free initial consultation, while some, such as the Foundation for Financial Planning, offer pro bono services.<sup>16</sup>
- Most important: Take it one step at a time.

The ultimate goal is to work toward building an emergency fund. That advice has been true pre- and post-pandemic. How that is achieved will vary depending on your circumstances.

“A lot of people learned some tough lessons,” says O’Leary, but what’s important is to “start somewhere.”





# Federal Reserve Bank of Kansas City

## Study shows surge in savings during the pandemic

Research found a significant increase in savings as a percentage of personal income amid COVID-19

April 29, 2021

By RICK BABSON

How much to put into savings—long a subject of kitchen-table discussions— was a question of renewed interest among Americans as the country encountered the coronavirus pandemic.

Entering the second quarter of 2020, Americans' fears of the pandemic were ramping up amid record job losses and the worst economy since the Great Depression. Those without jobs wondered how they would pay bills, while those with jobs either stopped spending or, at

least, found fewer places to spend.

In response, the country went on an unprecedented saving spree. And while the response to the economic downturn was similar to what occurred in other recessions, the magnitude was sharply different. A. Lee Smith, a research and policy advisor in the Economic Research Department of the Federal Reserve Bank of Kansas City, analyzed savings rates in the United States in a December 2020 *Economic Bulletin* titled "Why Are Americans Saving So Much of Their Income?"

Smith documented a sharp increase in savings as a percentage of disposable personal income, from 7.2% in December 2019 to a record high of 33.7% in April 2020. From March to April of 2020 alone, the savings rate nearly quadrupled.

"That means that for every \$100 of disposable income, consumers saved \$7 in December," Smith said, "and by April consumers were saving almost \$34 of every \$100 of disposable income."

Since reaching its historic high in April the savings rate has slipped a bit but remains elevated at about 14% or nearly twice as high as it was prior to the pandemic and higher than its peak in any recent recession. Perhaps unsurprisingly, personal savings rates tend

to increase when the economy is in a downturn, causing consumers to be more reluctant to spend. Smith documents rates from past recessions, including the Great Recession of 2007-09 and the current pandemic-induced recession.

“The desire to save during recessions reflects a natural response to the fact that employment opportunities are scarcer in recessions and the value of investments like stocks and housing tend to fall in recessions,” he said. “This leads households to desire greater savings buffers to lean against should they find themselves unemployed.”

### **A different recession**

Smith said the pandemic has caused a recession unlike any others, and the difference might help explain the sharp rise in savings. He examined two key factors that contributed to the increase:

- Large fiscal transfers, including stimulus checks and unemployment benefits, which boosted incomes at a time when much of the economy was closed.
- An increase in precautionary motives as consumers became more reluctant to spend amid heightened uncertainty.

Stimulus checks of \$1,200 per person were part of the Coronavirus Aid, Relief, and Economic Security Act, known as CARES, that was signed into law in March 2020. A second relief package in December included stimulus checks of up to \$600 a person. CARES also included an extra \$600 a month in unemployment benefits between April and July.

These transfers allowed many households, primarily ones that lost jobs or income, to meet basic necessities. On the other hand, for households fortunate enough to remain employed, the transfers may have facilitated a desire to build a savings buffer.

“The generosity of transfers has been such that some households have been able to both spend a bit more and save a bit more than they otherwise might absent fiscal support,” Smith said.

As for precautionary savings, Smith said they broadly refer to an increased desire to save today to guard against a future risk or uncertainty.

“In the present context, it’s not hard to imagine what risks and uncertainties might be prompting this type of savings,” he said. “There is a great deal of uncertainty surrounding the economic outlook due to the many unknowns around the evolution of the virus. Moreover, the imposition of economic restrictions last spring exposed many households to a level of income risk that was previously unimaginable as many workplaces were closed.”

Another factor driving savings rates, he said, is that the ongoing nature of the pandemic has caused households to conclude they may need to set aside even more than ever for a rainy day. Financial advisors have been building upon the former recommendation of having at



least three months of income in savings as a buffer, increasing that recommendation to six or even 12 months of income in savings.

“In the face of this unsettling situation, saving more seems a perfectly reasonable response,” he said. That, of course, assumes that all things are equal, and in the pandemic recession that’s far from the case. And while Smith’s research looked at the U.S. population as a whole and didn’t explore effects of different demographic groups, his findings overall are illustrative of individual trends.

His look at aggregate numbers for the whole population show that over 2020, excess savings, or savings above what might be normal, totaled almost \$2 trillion.

“This money is, however, not divided equally among the population,” he said. “While many Americans may want to save more these days, only those who were fortunate enough to maintain their livelihoods have actually been able to save more.”

### **The flip side**

Meanwhile, as consumers were setting records for savings, their spending patterns were experiencing a roller-coaster ride of sharp ups and downs amid dramatic shifts in the mix of goods and services Americans were willing or able to purchase.

In an *Economic Bulletin* published in February titled “Consumer Spending Declines, Shifts in Response to the Pandemic,” Alison Felix, a senior policy advisor at the Bank, and Research Associate Samantha Shampine, documented how consumer spending fell sharply early in the pandemic, then rallied somewhat in following months, but still remained below year-ago levels through 2020.

Felix found that some of the same factors that affected savings rates, such as unemployment, changes in income and restrictions on activities, also affected consumer spending, and ultimately the economy overall. Early on, consumer spending fell more than 10% before bouncing back in the second half of 2020. Despite the uptick, overall spending remained below year-ago levels.

Felix found that some of the same factors that affected savings rates, such as unemployment, changes in income and restrictions on activities, also affected consumer spending, and ultimately the economy overall. Early on, consumer spending fell more than 10% before bouncing back in the second half of 2020. Despite the uptick, overall spending remained below year-ago levels.

The pandemic also resulted in a significant shift in what consumers were willing or able to spend on, especially within the services sector. Unsurprisingly, Felix found the largest declines were in services with heavy COVID-19 restrictions, such as foreign travel and movie theaters. Also, spending on transportation, hotels and motels, and hairdressing salons and personal grooming services, declined sharply.

**Spend it or save it?**

Smith said the "\$2 trillion question" is what are Americans going to do with their increased savings when the economy regains a more normal footing. He adds that Americans who saved based on precautionary motives may be hesitant to tap savings in the future for consumer spending, choosing instead to continue to save for a rainy day.

Conversely, those fortunate enough to continue working during the pandemic may essentially have been forced to save more since many parts of the economy remain closed. Some of this forced savings, he added, could be earmarked for future vacations, for example.

Smith cautioned that estimates of which motive is driving consumers to save is "imperfect." His analysis suggests that historical patterns of government transfers, savings and consumption indicate much of the recent increase in savings is due to precautionary motives.

"Therefore, this analysis cautions against the thought that all of this savings will be drawn down once the pandemic ends," he said. "The lasting effects of this pandemic on consumer behavior remain largely unknown at this point."

One possible silver lining in the current downturn, is that its effects may be much different from recent downturns, particularly the most recent, the 2007-09 Great Recession. One of the major effects of the global financial crisis and the Great Recession was the loss of household wealth amid a crash in housing prices.

"This pandemic has been very different, as household wealth has actually increased," Smith said. "That's one reason to be optimistic: that even if the stock of accumulated savings isn't drawn down, the savings rate will move back to pre-pandemic levels once this crisis ends."



## *Americans' Pandemic-Era 'Excess Savings' Are Dwindling for Many*

**The drop in cash reserves has vast implications for the working class and could dampen consumer spending, a large share of economic activity.**

By Talmon Joseph Smith *The New York Times* Dec. 7, 2021 Updated Dec. 8, 2021

Infusions of government cash that warded off an economic calamity have left millions of households with bigger bank balances than before the pandemic — savings that have driven a torrent of consumer spending, helped pay off debts and, at times, reduced the urgency of job hunts.

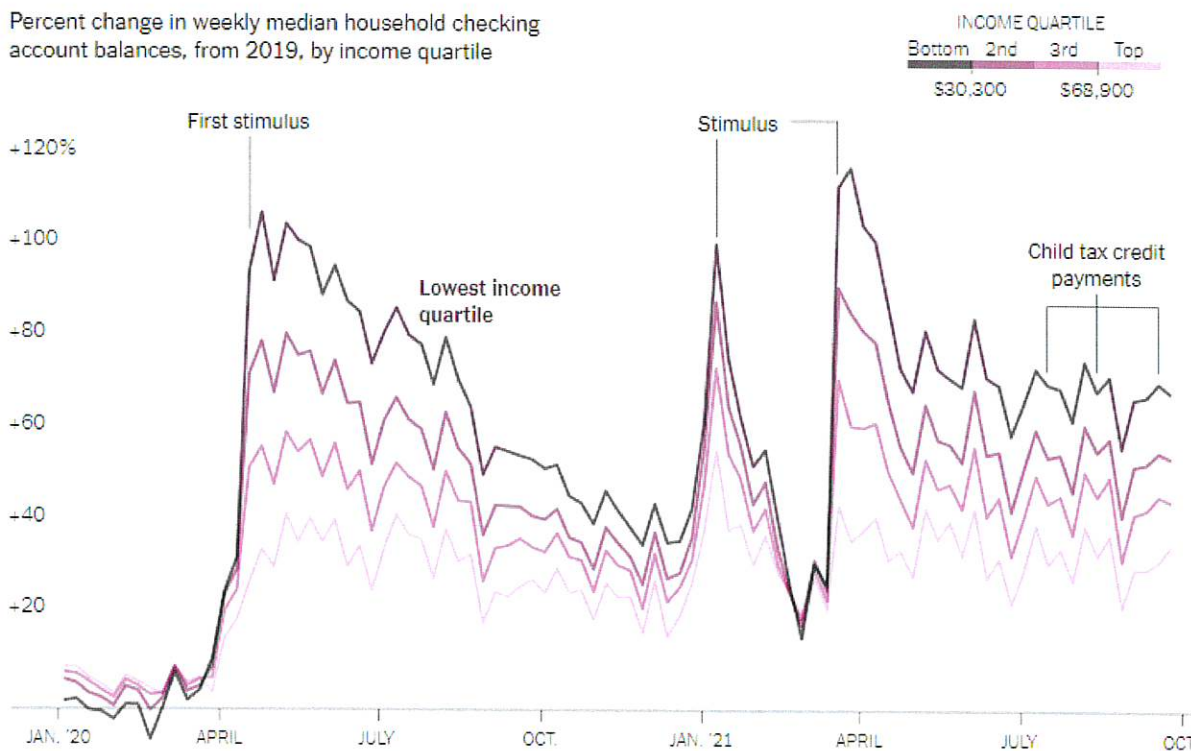
But many low-income Americans find their savings dwindling or even depleted. And for them, the economic recovery is looking less buoyant.

Over the past 18 months or so, experts have been closely tracking the multitrillion-dollar increase in what economists call “excess savings,” generally defined as the amount by which people’s cash reserves during the Covid-19 crisis exceeded what they would have normally saved.

### **The poorest households saw the greatest impact from stimulus.**

But spikes in savings faded quickly.

Percent change in weekly median household checking account balances, from 2019, by income quartile



Income quartiles are based on 2019 household income, after taxes and withholdings. Quartile benchmarks shown are rounded to the nearest \$100. Source: J.P. Morgan Chase Institute By Ella Koeze

According to Moody's Analytics, an economic research firm, these excess savings among many working- and middle-class households could be exhausted as soon as early next year — not only reducing their financial cushions but also potentially affecting the economy, since consumer spending is such a large share of activity. Multiple pandemic-era federal aid programs expired in September, including the federal supplement to unemployment benefits.

In April 2020, after the pandemic's outset, the nation's [personal saving rate](#) — the percentage of overall disposable income that goes into savings each month — jumped fourfold from its February 2020 level to 34 percent. Some of that spike in savings resulted from government checks of up to \$1,200 sent to most Americans; some simply stemmed from reduced spending by firmly middle-class or affluent households during lockdowns.

The rate peaked again at 26 percent this past spring after another round of direct federal payments. But the personal saving rate doesn't account for how those savings are distributed. Wealthy households, for instance, have saved the most.

“We do tend to see these broad-brush-stroke economic figures and assume that they apply to the broadest part of the populace,” said Mark Hamrick, the senior economic analyst at Bankrate, a personal finance company. “There's a significant cross-section of the American public which is financially fragile.”

New [research](#) by the JPMorgan Chase Institute, which assesses the bank accounts of 1.6 million families, found that low-income families experienced the “greatest percent gains” during each round of stimulus, yet also exhausted their balances faster. That's in part because those households went into the crisis with the thinnest financial buffers.

The median balance among higher-income families (defined as those earning more than \$68,896) was roughly 40 percent higher in September than two years earlier. The typical low-income family (those earning less than \$30,296) experienced a much larger increase in relative terms — 70 percent — but that represented a total cash balance of only about \$1,000.

And households making \$30,296 to \$44,955 also made significant gains compared with 2019, yet typically had less than about \$1,300 in cash on hand. In a silver lining, the report found that the cash balances of families with children appear to have been helped by the three rounds of monthly child tax credit payments that began in July, which provided up to \$300 per child under 6 and up to \$250 per child 6 to 17. For now, those advance payments aren't set to continue into 2022.

“I've been trying to ask myself this question: Is this a lot or is this a little?” said Fiona Greig, a co-president of the JPMorgan Chase Institute. Ms. Greig said that when reviewing the data, she was torn between hope — when seeing that “families had a doubling of balances in some cases when they received their stimulus checks” — and disappointment knowing “there are some families for whom this is really all they have.”

By October, the U.S. personal saving rate, which had peaked above 30 percent, had reverted to its December 2019 level of 7.3 percent.



## Low-income households' balances are still up, but not by much.

Income quartile	Median checking account balance, week ending Sept. 25, 2021	Change from same week in 2019
Top quarter <small>More than \$68,896</small>	\$4,219	+\$1,119
2nd highest <small>\$44,955-\$68,896</small>	\$2,138	+\$669
2nd lowest <small>\$30,296-\$44,955</small>	\$1,382	+\$490
<b>Bottom</b> <small>\$12,000-\$30,296</small>	<b>\$961</b>	<b>+\$393</b>

Income quartiles are based on 2019 household income, after taxes and withholdings. Source: J.P. Morgan Chase Institute By Ella Koeze

Technically, most households are financially better off now than before the crisis [by several measures](#), an anomaly after a recession. Still, the fading impact of pandemic aid is quickly being felt. In July, [one in three Americans](#) reported having less money to fall back on in an emergency than before the pandemic, according to a Bankrate survey. Only one in six reported having more.

In a commentary published on a Federal Reserve Bank of New York blog in April, four economists argued that “although large by historical standards, the savings accumulated by U.S. households during the pandemic do not appear to be ‘excessive’ when set against the extraordinary need of many American families.”

Millions of Americans could be buffeted by financial volatility again with little safeguard as new variants of the virus emerge. For some, that reality has already begun.

“It was hard even before the pandemic hit,” said Maria Patton, a 57-year-old former real estate agent whose finances were ruined by a recent divorce. “And when the pandemic hit, it became impossible, almost.”

Ms. Patton, who has a teenage son, had just been hired at Nordstrom in Los Angeles when the virus surged and she was laid off. Despite immediately applying for unemployment insurance in March 2020, she went more than two months without receiving benefits. She tried to find work as a nanny — which had been her most recent employment — but wound up moving home to Tennessee, where she figured the cost of living was more affordable.

As she was moving in the middle of last year, she received back payments for all the weeks she was eligible for Pandemic Unemployment Assistance — an emergency federal program to help

freelancers and others who do not ordinarily qualify for state benefits — which amounted to a lump sum of \$15,000. Much of that cash, Ms. Patton says, went to paying down debt, as well as “paying for medical insurance out of my pocket” because she can’t afford health care coverage, and living in a hotel because landlords in Nashville didn’t like her credit situation.

Ms. Patton used more of her savings in January to move the two of them to Denver for a \$25-an-hour nanny job she found online, which went well until she got Covid-19 and had to quit. Now she and her son work for Amazon Fresh, the grocery delivery service, making \$15 an hour. Her savings dried up in September.

“Now, I’m right back where I was,” she said. “I feel like a loser. I feel like a failure.” Making too much to qualify for assistance but too little to afford stable housing, she fears she and her son will be living out of her car soon after the holidays.

The drawing down of households’ cash will test competing theories about the extent to which those savings have increased worker power and wages and how much they contributed to labor shortages, inflation and even supply chain snags.

There has been wide agreement among business leaders and economists that after decades of wage and income stagnation, the burst in savings has eased poverty while giving employees and job seekers more leverage. But there is less agreement about whether this development has had unintended, negative consequences.

The cash buffer “gives people some discretion over whether they take the first job that’s available or if they want to leave the work force altogether for a time,” said James K. Galbraith, a progressive economist at the University of Texas at Austin.

“There may well be long-term lasting benefits,” Dr. Galbraith argued. “If in the short run, in order to bring people back into the work force, employers raise the low wages that they’re offering, then they’re probably not going to be in a position to cut them” down the road.

Wages were up 4.8 percent overall in November from a year earlier and were much higher in sectors like leisure and hospitality.

Many investors and business owners are wary of these wage gains continuing, contending that companies may pass more of their labor costs on to customers and that they may threaten companies’ profitability — or even their viability. With job openings at record levels, a large share of business groups remain hopeful that more people will accept wages at their current levels as their savings diminish.

A crop of high-profile economists in both major political parties contend that measures like the aid package from the spring, while well intentioned and effective in warding off some impoverishment, have caused consumer spending to outstrip supply this year as the economy reopened, worsening inflation and straining supply chains.

“From a macroeconomic perspective, it would certainly be helpful if consumer demand were to cool off,” said Michael R. Strain, an economist at the American Enterprise Institute, a right-



leaning think tank. “Rooting for low-income households to have less savings is not great, but I think it’s important to remember low-income households are the ones who are hurt the most by inflation. It doesn’t sit well thinking, ‘Boy, it’d be great if households burned through their excess savings.’ But we’re not in a normal period.”

### **Inflation F.A.Q.**

**What is inflation?** Inflation is a [loss of purchasing power over time](#), meaning your dollar will not go as far tomorrow as it did today. It is typically expressed as the annual change in prices for everyday goods and services such as food, furniture, apparel, transportation and toys.

**What causes inflation?** It can be the result of rising consumer demand. But inflation can also rise and fall based on developments that have little to do with economic conditions, such as [limited oil production](#) and [supply chain problems](#).

**Where is inflation headed?** Officials say they do not yet see evidence that rapid inflation is turning into a permanent feature of the economic landscape, [even as prices rise very quickly](#). There are plenty of reasons to believe that the inflationary burst will fade, [but some concerning signs suggest it may last](#).

**Is inflation bad?** It depends on the circumstances. Fast price increases spell trouble, but moderate price gains can lead to [higher wages](#) and job growth.

**How does inflation affect the poor?** Inflation can be especially hard to shoulder for poor households because they [spend a bigger chunk of their budgets on necessities](#) like food, housing and gas.

**Can inflation affect the stock market?** Rapid inflation typically spells trouble for stocks. Financial assets in general have [historically fared badly during inflation booms](#), while tangible assets like houses have held their value better.

A Bank of America report in November noted that price increases for some goods, especially in food and energy categories, were “cutting the spending power of less-educated households by 4.6 percent on an annualized basis, compared to 3 percent for more-educated households.”

Still, a [report from J.P. Morgan](#) points out that consumers are likely to “eat into their accumulated excess savings to offset rising prices,” suggesting that vulnerable households could potentially face an even greater inflation challenge if those savings were absent.

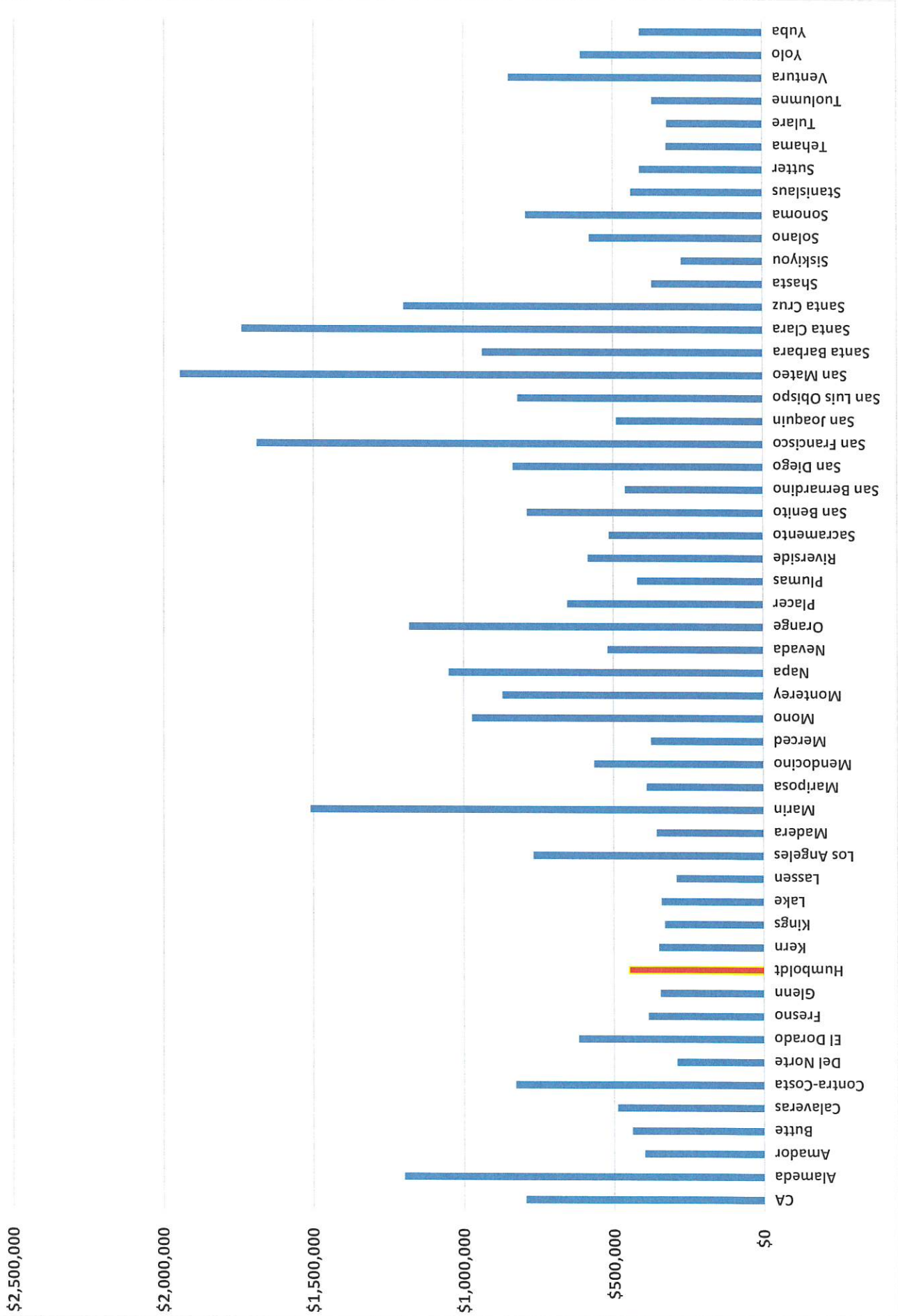
Moody’s Analytics estimated that there was still \$2.5 trillion left in overall excess savings as of October and that the total would decrease by \$50 billion a month on average through the end of next year — with the fastest declines among those with the lowest incomes.

That mathematical modeling, by its nature, renders in statistics what many are feeling in more palpable ways. “The people looking at the data aren’t the people trying to put food on the table,” said Ms. Patton, the real estate agent turned Amazon Fresh worker. “The people that are writing this and thinking this have never struggled right now.”

# Housing



Median House Price by County, December 2021



« Suspected Humboldt Fentanyl Traffickers Arrested During Traffic Stop in SoHum (/2021/nov/24/suspected-humboldt-fentanyl-traffickers-arrested-d/)

'NO THANKS'-Giving': Northcoast Co-op Issues Recall for 'Rancid' Sourdough Stuffing Mix » (/2021/nov/24/northcoast-co-op-issues-recall-rancid-sourdough-st/)

RYAN BURNS (/AUTHOR/RYAN-BURNS) / WEDNESDAY, NOV. 24 (/2021/NOV/24/) @ 1:23 P.M. / HOUSING (/CATEGORIES/HOUSING/)

## Humboldt County's Housing Market is Still White-Hot, Ranking No. 1 in the Western U.S. for October



Photo by Tierra Mallorca ([https://unsplash.com/@tierramallorca?utm\\_source=unsplash&utm\\_medium=referral&utm\\_content=creditCopyText](https://unsplash.com/@tierramallorca?utm_source=unsplash&utm_medium=referral&utm_content=creditCopyText)) on Unsplash ([https://unsplash.com/s/photos/home-for-sale?utm\\_source=unsplash&utm\\_medium=referral&utm\\_content=creditCopyText](https://unsplash.com/s/photos/home-for-sale?utm_source=unsplash&utm_medium=referral&utm_content=creditCopyText)).

Humboldt County's housing market continues to be white hot six months after the *Wall Street Journal*

(<https://lostcoastoutpost.com/2021/apr/30/humboldts-million-dollar-homes-how-local-housing-m/>) and realtor.com ranked the Eureka-Arcata-Fortuna area at No. 13

(<https://lostcoastoutpost.com/2021/apr/30/humboldts-million-dollar-homes-how-local-housing-m/>) on its inaugural list of emerging housing markets — that is, areas that are expected to see home prices rise and that offer “attractive lifestyle amenities.” (Looking at you, natural beauty and clean air.)

In fact, the northern Humboldt housing market has moved up that list. Realtor.com, an online real estate listing agency, now has the Eureka-Arcata-Fortuna area third in its October 2021 “Hotness Rank,”



(<https://www.realtor.com/research/october-2021-hottest-housing-markets/>) deeming it the hottest market in California and the only market in the western United States to crack the top 20.

The median listing price for homes in and around those three cities was a whopping \$489,000 last month, according to the website.

Jill Hansen-Rice, president of the Humboldt Association of Realtors, says that even at these inflated prices, homes are selling quickly, often for well above the asking price. Asked if this fierce demand is being driven in part by people moving here from out of the area, Hansen-Rice responded, "Oh my gosh, yes."

High prices are good news for sellers, obviously, but Hansen-Rice said the current market conditions make her feel bad for folks trying to break into the home market.

"A lot of local people — or people who are younger who moved here — are absolutely priced out of the market," she said. "Those who are moving here can pay cash or a lot more than young people and first-time home buyers can."

Some prospective buyers she's been working with have been house-hunting for more than a year.

"They made the mistake of wanting [to save up] a bigger down payment," Hansen-Rice said. "Now they're realizing that was a big mistake." Homes they could have afforded a year ago are now well out of their range.

These folks recently offered \$486,000 on a home listed at \$449,000 — "just a subdivision house, not fancy-schmancy," Hansen-Rice said — and still didn't get it. "They've put in five offers and been outbid every time."

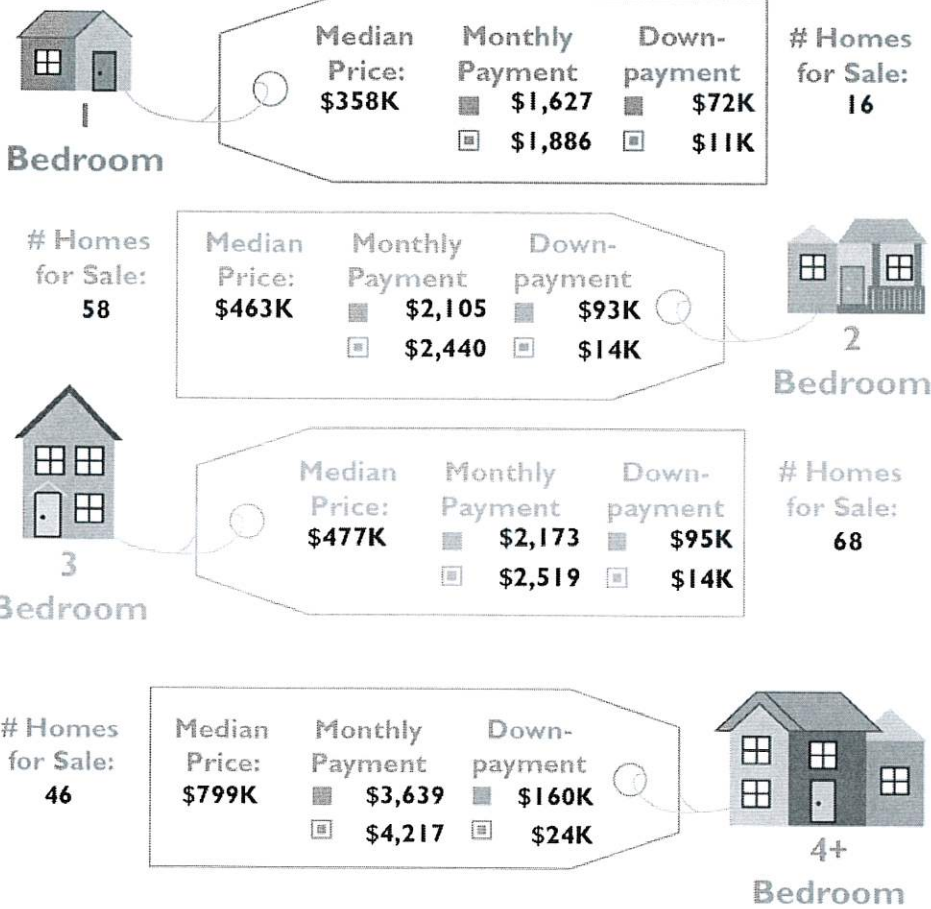
The bidding wars start immediately and tend to end quickly. The median length of time that houses stayed on the market last month was just 10 days, according to the Humboldt Association of Realtors.

A major reason for the local market's hotness is the limited inventory, Hansen-Rice explained. Relatively few new homes and subdivisions have been built in recent years for a variety of reasons, including geographical constraints, the "exorbitant" and volatile costs of construction and bureaucratic red tape. "The county does not make it user-friendly to build," Hansen-Rice said.

Below are some figures for last month provided by the Humboldt Association of Realtors:

# October 2021

■ with 20% down  
 □ with 3% down



<b>Current Interest Rate</b>	<b>Last Month's Interest Rate</b>	<b>Last Year's Interest Rate</b>
<b>3.07%</b>	<b>2.90%</b>	<b>2.83%</b>

The region's home price inflation is likely bad news for renters and low-income households already struggling to pay the bills. A 2020 analysis from the California Housing Partnership ([https://1p08d91kd0c03rlxhmhtydpr-wpengine.netdna-ssl.com/wp-content/uploads/2020/06/Humboldt\\_Housing\\_Needs\\_Report\\_2020-HNR.pdf](https://1p08d91kd0c03rlxhmhtydpr-wpengine.netdna-ssl.com/wp-content/uploads/2020/06/Humboldt_Housing_Needs_Report_2020-HNR.pdf)) found that 6,154 low-income renter households in Humboldt County did not have access to affordable housing. Meanwhile, more than 80 percent of extremely low-income households in the county were spending more than half of their income on housing costs compared to just 5 percent of moderate-income households.

Asked if she thinks the local housing market will crash back down to Earth anytime soon, Hansen-Rice said she's surprised it hasn't happened already.

"A year and a half, two years ago we had already reached the prices we had at the time of the [2008] crash," she said. And yet prices have just continued to rise since then.

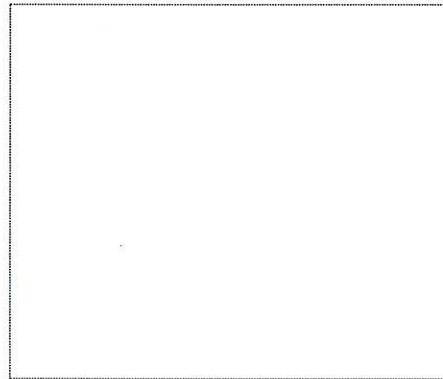
She recently attended a California Association of Realtors state director's meeting in Anaheim, where economists said they expect the state's housing market to stay hot for the next two years — "and then we'll see what happens with the interest rates," Hansen-Rice said.



She's still advising people to buy if they expect to stay in the house for at least five years, but hold off if they expect to move.

With the remote-work revolution, the influx of new residents from urban areas and other changes ushered in during the COVID-19 pandemic, one thing has remained constant, she added:

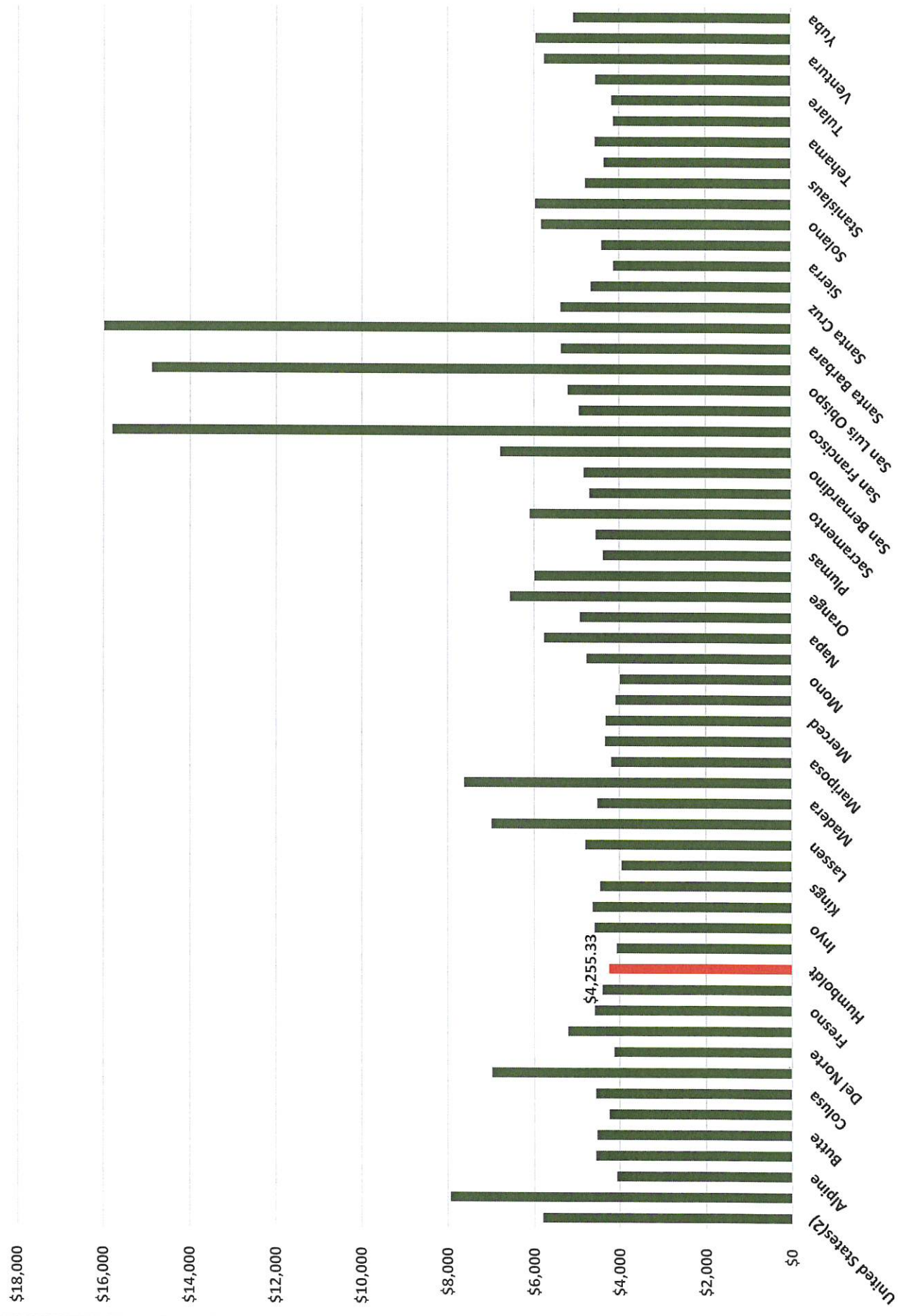
"Humboldt County — this is a very desirable place for people to live."



# Wages



Average Monthly Wage by County, Fourth Quarter 2020



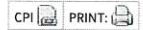




# CPI Data



Economic News Release



Consumer Price Index Summary

Transmission of material in this release is embargoed until  
8:30 a.m. (ET) January 12, 2022 USDL-22-0018

Technical information: (202) 691-7000 • cpi\_info@bls.gov • www.bls.gov/cpi  
Media Contact: (202) 691-5902 • PressOffice@bls.gov

CONSUMER PRICE INDEX - DECEMBER 2021

The Consumer Price Index for All Urban Consumers (CPI-U) increased 0.5 percent in December on a seasonally adjusted basis after rising 0.8 percent in November, the U.S. Bureau of Labor Statistics reported today. Over the last 12 months, the all items index increased 7.0 percent before seasonal adjustment.

Increases in the indexes for shelter and for used cars and trucks were the largest contributors to the seasonally adjusted all items increase. The food index also contributed, although it increased less than in recent months, rising 0.5 percent in December. The energy index declined in December, ending a long series of increases; it fell 0.4 percent as the indexes for gasoline and natural gas both decreased.

The index for all items less food and energy rose 0.6 percent in December following a 0.5-percent increase in November. This was the sixth time in the last 9 months it has increased at least 0.5 percent. Along with the indexes for shelter and for used cars and trucks, the indexes for household furnishings and operations, apparel, new vehicles, and medical care all increased in December. As in November, the indexes for motor vehicle insurance and recreation were among the few to decline over the month.

The all items index rose 7.0 percent for the 12 months ending December, the largest 12-month increase since the period ending June 1982. The all items less food and energy index rose 5.5 percent, the largest 12-month change since the period ending February 1991. The energy index rose 29.3 percent over the last year, and the food index increased 6.3 percent.

Table A. Percent changes in CPI for All Urban Consumers (CPI-U): U.S. city average

	Seasonally adjusted changes from preceding month							Un-adjusted 12-mos. ended Dec. 2021
	June 2021	July 2021	Aug. 2021	Sep. 2021	Oct. 2021	Nov. 2021	Dec. 2021	
All items.....	.9	.5	.3	.4	.9	.8	.5	7.0
Food.....	.8	.7	.4	.9	.9	.7	.5	6.3
Food at home.....	.8	.7	.4	1.2	1.0	.8	.4	6.5
Food away from home (1)...	.7	.8	.4	.5	.8	.6	.6	6.0
Energy.....	1.5	1.6	2.0	1.3	4.8	3.5	-4	29.3
Energy commodities.....	2.6	2.3	2.7	1.3	6.2	5.9	-6	48.9
Gasoline (all types)....	2.5	2.4	2.8	1.2	6.1	6.1	-5	49.6
Fuel oil (1).....	2.9	.6	-2.1	3.9	12.3	3.5	-2.4	41.0
Energy services.....	.2	.8	1.1	1.2	3.0	.3	-1	10.4
Electricity.....	-.3	.4	1.0	.8	1.8	.3	.3	6.3
Utility (piped) gas service.....	1.7	2.2	1.6	2.7	6.6	.6	-1.2	24.1
All items less food and energy.....	.9	.3	.1	.2	.6	.5	.6	5.5
Commodities less food and energy commodities....	2.2	.5	.3	.2	1.0	.9	1.2	10.7
New vehicles.....	2.0	1.7	1.2	1.3	1.4	1.1	1.0	11.8
Used cars and trucks....	10.5	.2	-1.5	-.7	2.5	2.5	3.5	37.3
Apparel.....	.7	.0	.4	-1.1	.0	1.3	1.7	5.8
Medical care commodities (1).....	-.4	.2	-.2	.3	.6	.1	.0	.4
Services less energy services.....	.4	.3	.0	.2	.4	.4	.3	3.7
Shelter.....	.5	.4	.2	.4	.5	.5	.4	4.1
Transportation services	1.5	-1.1	-2.3	-.5	.4	.7	-.3	4.2
Medical care services...	.0	.3	.3	-.1	.5	.3	.3	2.5

1 Not seasonally adjusted.



The food index increased 0.5 percent in December following larger increases in each of the three previous months. The food at home index increased 0.4 percent in December after rising 0.8 percent in November. Five of the six major grocery store food group indexes increased in December. The index for fruits and vegetables increased the most, rising 0.9 percent over the month as the index for fresh fruits increased 1.8 percent. The index for nonalcoholic beverages rose 0.8 percent in December, and the index for dairy and related products increased 0.7 percent. The index for other food at home rose 0.6 percent, and the index for cereals and bakery products increased 0.4 percent over the month.

The index for meats, poultry, fish, and eggs declined in December, falling 0.4 percent after rising at least 0.7 percent in each of the last 7 months. The indexes for beef (-2.0 percent) and pork (-0.8 percent) declined after recent sharp increases.

The food away from home index rose 0.6 percent in December, the same increase as in November. The index for full service meals rose 0.8 percent, and the index for limited service meals advanced 0.6 percent over the month.

The food at home index rose 6.5 percent over the last 12 months; this compares to a 1.5-percent annual increase over the last 10 years. All of the six major grocery store food group indexes increased over the period. By far the largest increase was that of the index for meats, poultry, fish, and eggs, which rose 12.5 percent over the year despite falling in December. The index for dairy and related products increased 1.6 percent, the smallest increase among the groups.

The index for food away from home rose 6.0 percent over the last year, the largest increase since January 1982. The index for limited service meals rose 8.0 percent over the last 12 months, and the index for full service meals rose 6.6 percent. The index for food at employee sites and schools, in contrast, declined 49.3 percent over the past 12 months, reflecting widespread free lunch programs.

#### Energy

The energy index declined 0.4 percent in December; this followed a 3.5-percent increase in November and was its first decrease since April 2021. The gasoline index fell 0.5 percent in December after rising 6.1 percent in both November and October. (Before seasonal adjustment, gasoline prices fell 2.2 percent in December.) The index for natural gas also declined in December, falling 1.2 percent after rising in each of the last 10 months. The electricity index, in contrast, rose in December, increasing 0.3 percent, the same increase as in November.

The energy index rose 29.3 percent over the past 12 months with all major energy component indexes increasing. The gasoline index rose 49.6 percent over the last year. The index for natural gas rose 24.1 percent over the last 12 months, and the electricity index rose 6.3 percent.

#### All items less food and energy

The index for all items less food and energy rose 0.6 percent in December. The shelter index increased 0.4 percent in December as the indexes for rent and owners' equivalent rent both rose 0.4 percent, the same increases as in November and October. The index for used cars and trucks continued to rise, advancing 3.5 percent in December after increasing 2.5 percent in each of the prior 2 months.

The index for household furnishings and operations rose 1.1 percent over the month as the indexes for furniture and bedding and for housekeeping supplies increased. The apparel index rose 1.7 percent over the month, its largest increase since January 2021. The index for new vehicles continued to rise, increasing 1.0 percent in December; this was its eighth consecutive monthly increase of at least 1.0 percent.

The medical care index rose 0.3 percent in December. The index for hospital services increased 0.2 percent and the index for prescription drugs rose 0.1 percent, while the index for physicians' services was unchanged. Other indexes that rose in December include airline fares (+2.7 percent), personal care (+0.5 percent), tobacco (+0.7 percent), and education (+0.1 percent).

In contrast to these increases, the motor vehicle insurance index fell 1.5 percent in December after declining 0.8 percent the prior month. The recreation index fell 0.2 percent in December, the same decline as last month. The communication index was unchanged over the month.

The index for all items less food and energy rose 5.5 percent over the past 12 months, its largest 12-month increase since the period ending February 1991. Major contributors to this increase include shelter (+4.1 percent) and used cars and trucks (+37.3 percent). However, the increase is broad-based, with virtually all component indexes showing increases over the past 12 months.

#### Not seasonally adjusted CPI measures

The Consumer Price Index for All Urban Consumers (CPI-U) increased 7.0 percent over the last 12 months to an index level of 278.802 (1982-84=100). For the month, the index increased 0.3 percent prior to seasonal adjustment.

The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) increased 7.8 percent over the last 12 months to an index level of 273.925

(1982-84=100). For the month, the index rose 0.3 percent prior to seasonal adjustment.

The Chained Consumer Price Index for All Urban Consumers (C-CPI-U) increased 6.9 percent over the last 12 months. For the month, the index increased 0.3 percent on a not seasonally adjusted basis. Please note that the indexes for the past 10 to 12 months are subject to revision.

The Consumer Price Index for January 2022 is scheduled to be released on Thursday, February 10, 2022 at 8:30 a.m. (ET).

-----  
Coronavirus (COVID-19) Pandemic Impact on December 2021 Consumer Price Index Data

Data collection by personal visit for the Consumer Price Index (CPI) program has been suspended almost entirely since March 16, 2020. When possible, data normally collected by personal visit were collected either online or by phone. Additionally, data collection in December was affected by the temporary closing or limited operations of certain types of establishments. These factors resulted in an increase in the number of prices considered temporarily unavailable and imputed. While the CPI program attempted to collect as much data as possible, many indexes are based on smaller amounts of collected prices than usual, and a small number of indexes that are normally published were not published this month.

For each month from March 2020 to December 2021, BLS has published a summary of the impact of the pandemic on the Consumer Price Index news release and data. The impact summary for December is available at [www.bls.gov/covid19/consumer-price-index-covid19-impacts-december-2021.htm](http://www.bls.gov/covid19/consumer-price-index-covid19-impacts-december-2021.htm). Beginning with publication of January 2022 data in February 2022, this month-specific impact summary will be discontinued. However, information related to the impact of the pandemic will continue to be available at [www.bls.gov/covid19/effects-of-covid-19-pandemic-on-consumer-price-index.htm](http://www.bls.gov/covid19/effects-of-covid-19-pandemic-on-consumer-price-index.htm).

-----  
Technical Note

Brief Explanation of the CPI

The Consumer Price Index (CPI) measures the change in prices paid by consumers for goods and services. The CPI reflects spending patterns for each of two population groups: all urban consumers and urban wage earners and clerical workers. The all urban consumer group represents about 93 percent of the total U.S. population. It is based on the expenditures of almost all residents of urban or metropolitan areas, including professionals, the self-employed, the poor, the unemployed, and retired people, as well as urban wage earners and clerical workers. Not included in the CPI are the spending patterns of people living in rural nonmetropolitan areas, farming families, people in the Armed Forces, and those in institutions, such as prisons and mental hospitals. Consumer inflation for all urban consumers is measured by two indexes, namely, the Consumer Price Index for All Urban Consumers (CPI-U) and the Chained Consumer Price Index for All Urban Consumers (C-CPI-U). The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is based on the expenditures of households included in the CPI-U definition that meet two requirements: more than one-half of the household's income must come from clerical or wage occupations, and at least one of the household's earners must have been employed for at least 37 weeks during the previous 12 months. The CPI-W population represents about 29 percent of the total U.S. population and is a subset of the CPI-U population.

The CPIs are based on prices of food, clothing, shelter, fuels, transportation, doctors' and dentists' services, drugs, and other goods and services that people buy for day-to-day living. Prices are collected each month in 75 urban areas across the country from about 6,000 housing units and approximately 22,000 retail establishments (department stores, supermarkets, hospitals, filling stations, and other types of stores and service establishments). All taxes directly associated with the purchase and use of items are included in the index. Prices of fuels and a few other items are obtained every month in all 75 locations. Prices of most other commodities and services are collected every month in the three largest geographic areas and every other month in other areas. Prices of most goods and services are obtained by personal visits or telephone calls by the Bureau's trained representatives.

In calculating the index, price changes for the various items in each location are aggregated using weights, which represent their importance in the spending of the appropriate population group. Local data are then combined to obtain a U.S. city average. For the CPI-U and CPI-W, separate indexes are also published by size of city, by region of the country, for cross-classifications of regions and population-size classes, and for 23 selected local areas. Area indexes do not measure differences in the level of prices among cities; they only measure the average change in prices for each area since the base period. For the C-CPI-U, data are issued only at the national level. The CPI-U and CPI-W are considered final when released, but the C-CPI-U is issued in preliminary form and subject to three subsequent quarterly revisions.

The index measures price change from a designed reference date. For most of the CPI-U and the CPI-W, the reference base is 1982-84 equals 100. The reference base for the C-CPI-U is December 1999 equals 100. An increase of 7 percent from the reference base, for example, is shown as 107.000. Alternatively, that relationship can also be expressed as the price of a base period market basket of goods and services rising from \$100 to \$107.

Sampling Error in the CPI

The CPI is a statistical estimate that is subject to sampling error because it is based upon a sample of retail prices and not the complete universe of all prices. BLS calculates and publishes estimates of the 1-month, 2-month, 6-month, and 12-month percent change



February 1, 2022

By [David Leonhardt](#)

## Good morning. Inflation is up, and Americans are mad. But it's not a simple story.

# Prices and ire, rising

Paul Krugman, the economist and Times Opinion columnist, asked an intriguing question last week: Why are Americans [so upset about inflation](#)?

Inflation usually creates some dissatisfaction, of course. When price increases exceed wage increases, it means that the effective pay of most families is falling. That has happened in the U.S. over the past year.

It's partly a reflection of rising inflation around the world. Prices have increased because Covid-19 disruptions have reduced the supply of many goods while government stimulus programs have put extra money into families' bank accounts. More demand plus less supply equals higher prices.

But inflation is [especially high in the U.S.](#) The main reason is probably that this country spent more money on pandemic stimulus than many other countries. A second reason is that daily life here remains more disrupted than in [much of Europe](#) or Asia.

### Inflation since the start of the pandemic

Consumer Price Index

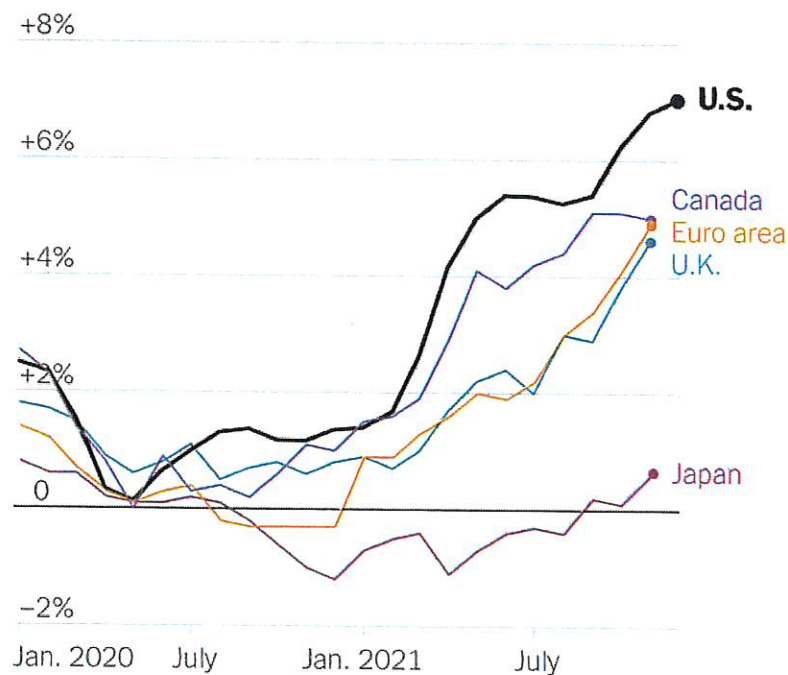


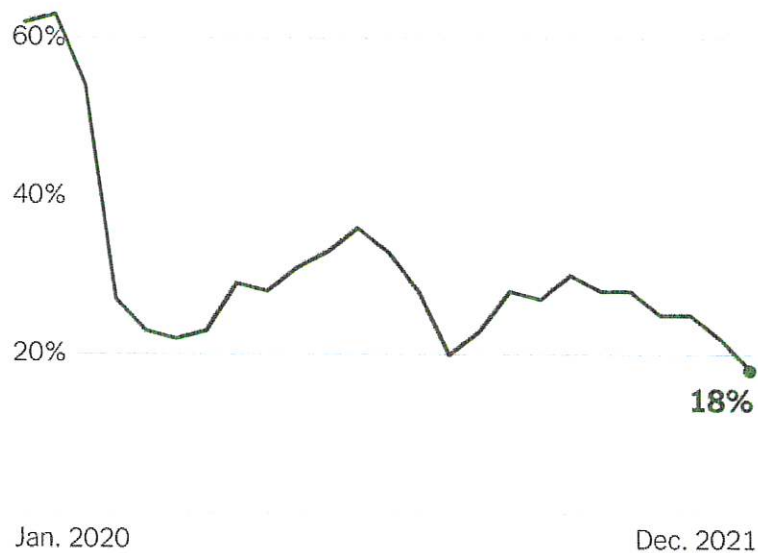
Chart shows year-over-year change. | Source: U.S. Bureau of Labor Statistics; O.E.C.D.

Yet even with the highest inflation rate since the 1980s, the U.S. economy is functioning pretty well in other ways. Work is so plentiful that many people are quitting their jobs for better ones. Thanks to the stimulus money and rising home values and stock prices, most families are better off financially than when the pandemic began. Child poverty has plummeted. [Lifesaving vaccine shots](#) are universally available.

As Krugman noted, an inflation rate that exceeds wage growth does not automatically make Americans grumpy. In both 1984 and 1988, when Republicans held the White House, inflation was also eating up wage gains. “Yet, Republicans won both elections by large margins by running *on the economy*,” Krugman noted. They were able to do so because economic confidence was high.

Today, it is not:

**Share of Americans who rate U.S. economic conditions as excellent or good**



Source: Gallup

Krugman suggests that the main reason is a national narrative, coming mostly from the media, that focuses on inflation and ignores the economy’s strengths. And I don’t doubt that this negative narrative plays a role in the country’s dissatisfaction. As regular Morning readers know, I agree that we in the media have [a bad-news bias](#).



But I would be surprised if a media narrative were the full story. What else might explain the dissatisfaction? Even if you forget about inflation, the experience of living and working in the U.S. economy is often unpleasant right now.

Among the problems: Public buses and subways are unreliable, mostly because of Covid absences, lengthening commutes. School buses and after-school activities are unreliable, creating child-care gaps. Grocery stores are routinely out of items. Retail lines are long. Doctor's appointments can be hard to get.

## A tough problem

In coming months, inflation is likely to decline. Much of the pandemic stimulus is expiring, and the Federal Reserve will be raising interest rates, as several top officials emphasized yesterday. The Biden administration is also taking steps to increase the supply of goods. It has encouraged ports to remain open and tried to increase the pool of truck drivers, by expanding apprenticeships and reducing licensing wait times.

“We are working aggressively with the private sector to increase throughput in the ports, and we're posting real results,” Jared Bernstein, a member of the President Biden's Council of Economic Advisers, told me. “A key part of that is our trucking action plan, to improve the quality and quantity of those jobs.”

Still, it remains unclear how far inflation will decline this year. “It's a very difficult problem for them to address,” my colleague Ana Swanson, who covers economic policy, said. Some economists have pointed out that inflation is now so high that it could decline in coming months while remaining uncomfortably high.

Ultimately, I think it makes sense to think of inflation not as a narrow economic problem but as part of something larger. American life remains highly abnormal because of the pandemic's disruption to daily life. By many measures — mental health, suicide attempts, blood pressure, violent crime, vehicle crashes, student learning — society is not functioning very well. An inflation rate high enough to shrink paychecks is another item on that list, and hardly the most important one.

No wonder most Americans have grown frustrated, including with Biden. People's living standards and even physical well-being are suffering. A disproportionate toll is falling on low-income families and children.

In a Monmouth University poll released yesterday, 70 percent of Americans said they agreed with the statement, “It's time we accept that Covid is here to stay, and we just need to get on with our

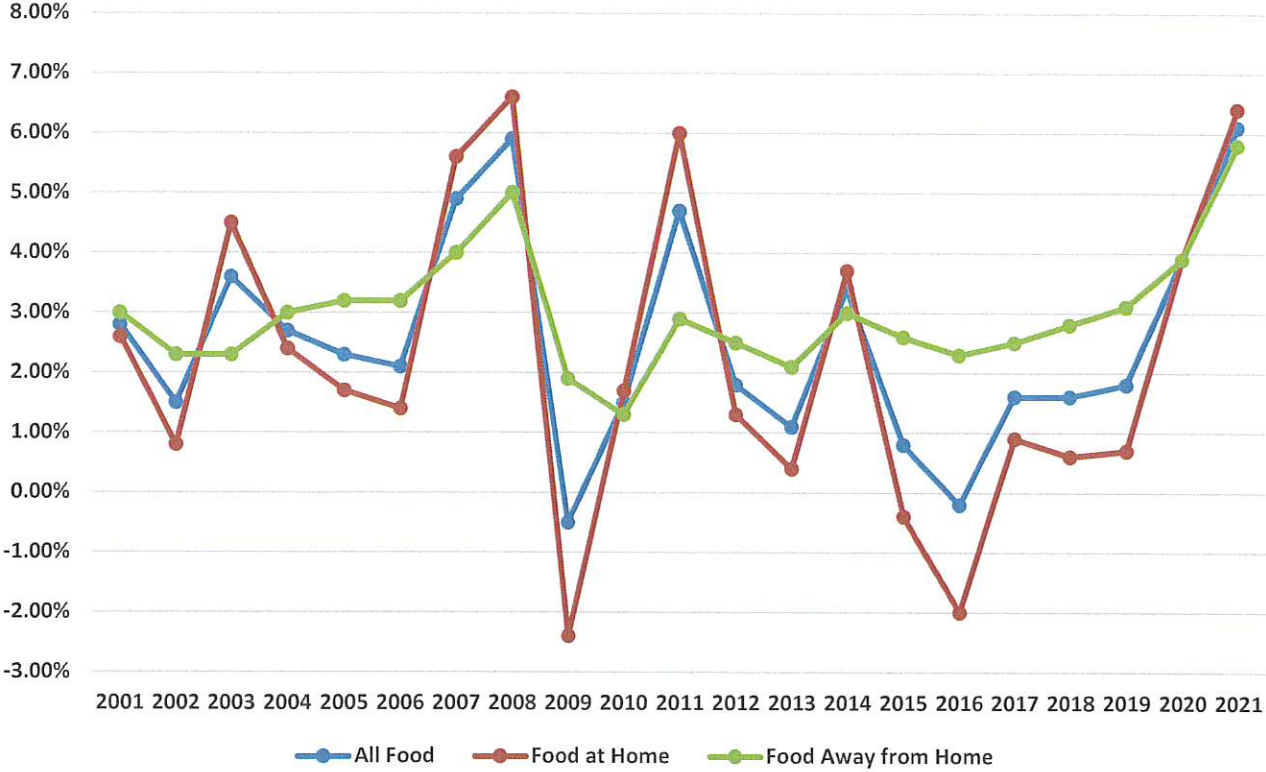
lives.” A growing number of governors, from both parties, seem to agree, [The Times reports](#). “The emergency is over,” Colorado Gov. Jared Polis, a Democrat, has said.

But none of this means that there are easy answers, at least not until cases have fallen well below their current level. About 2,500 Americans are still dying of Covid every day, mostly — but not entirely — because of the large remaining number of unvaccinated Americans.

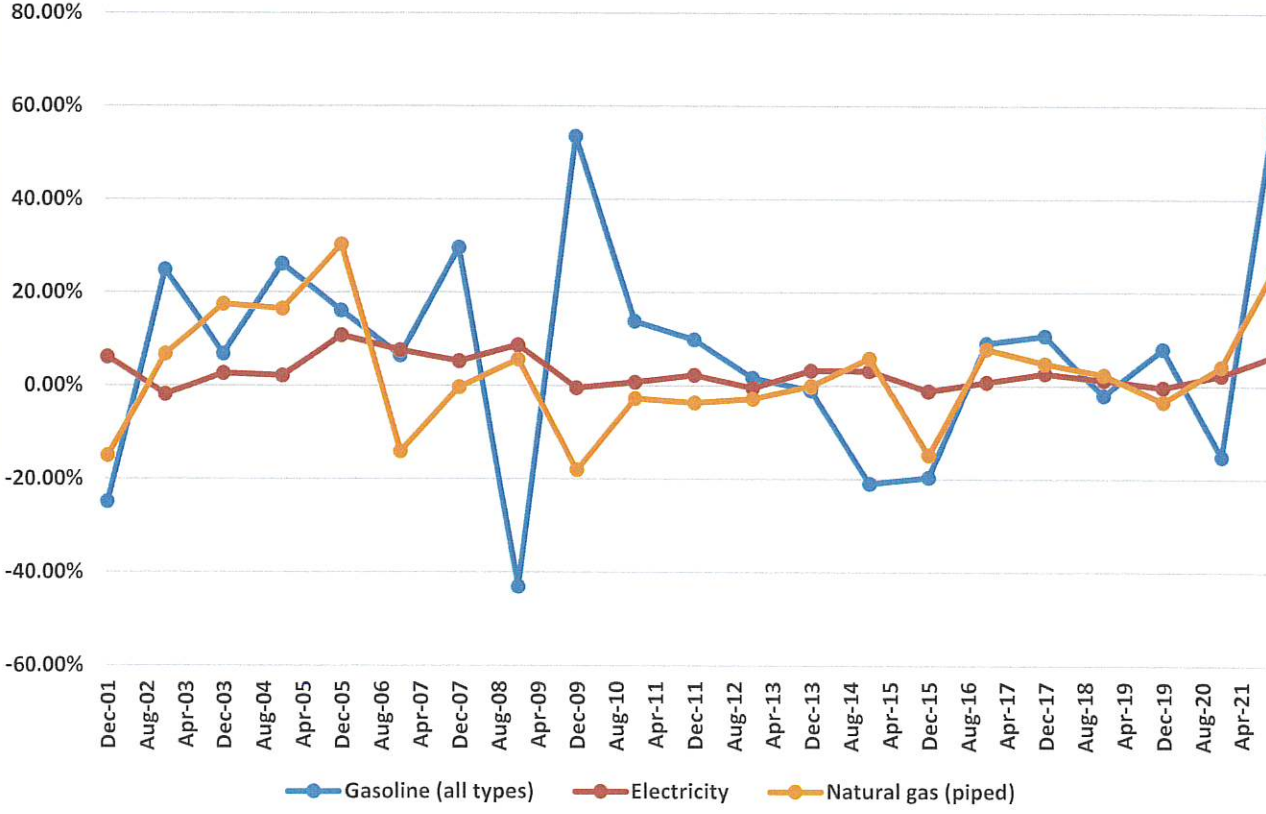
Pretending that Covid has disappeared has costs, to people’s livelihoods, happiness and physical well-being. And allowing Covid to continue dominating everyday life has costs, to people’s livelihoods, happiness and physical well-being. The only realistic option is to balance the two and look for a path that minimizes the human damage.



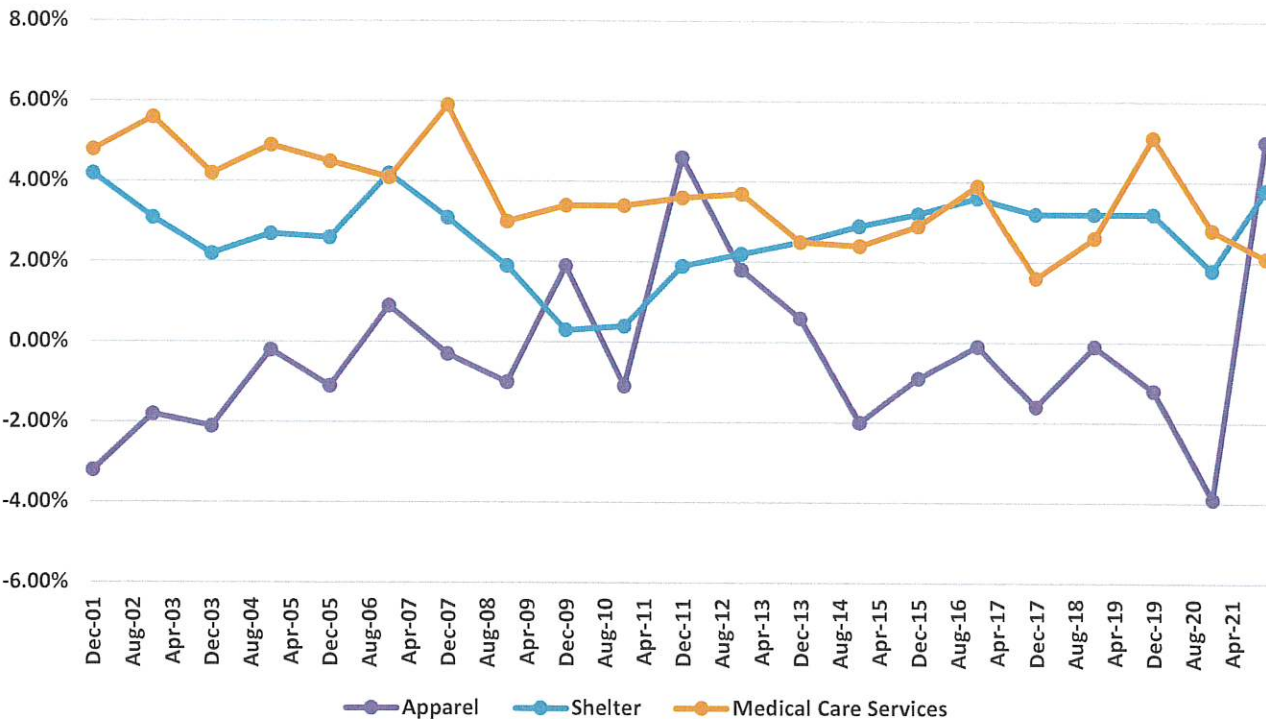
Consumer Price Index - Food - Prior 20-Years



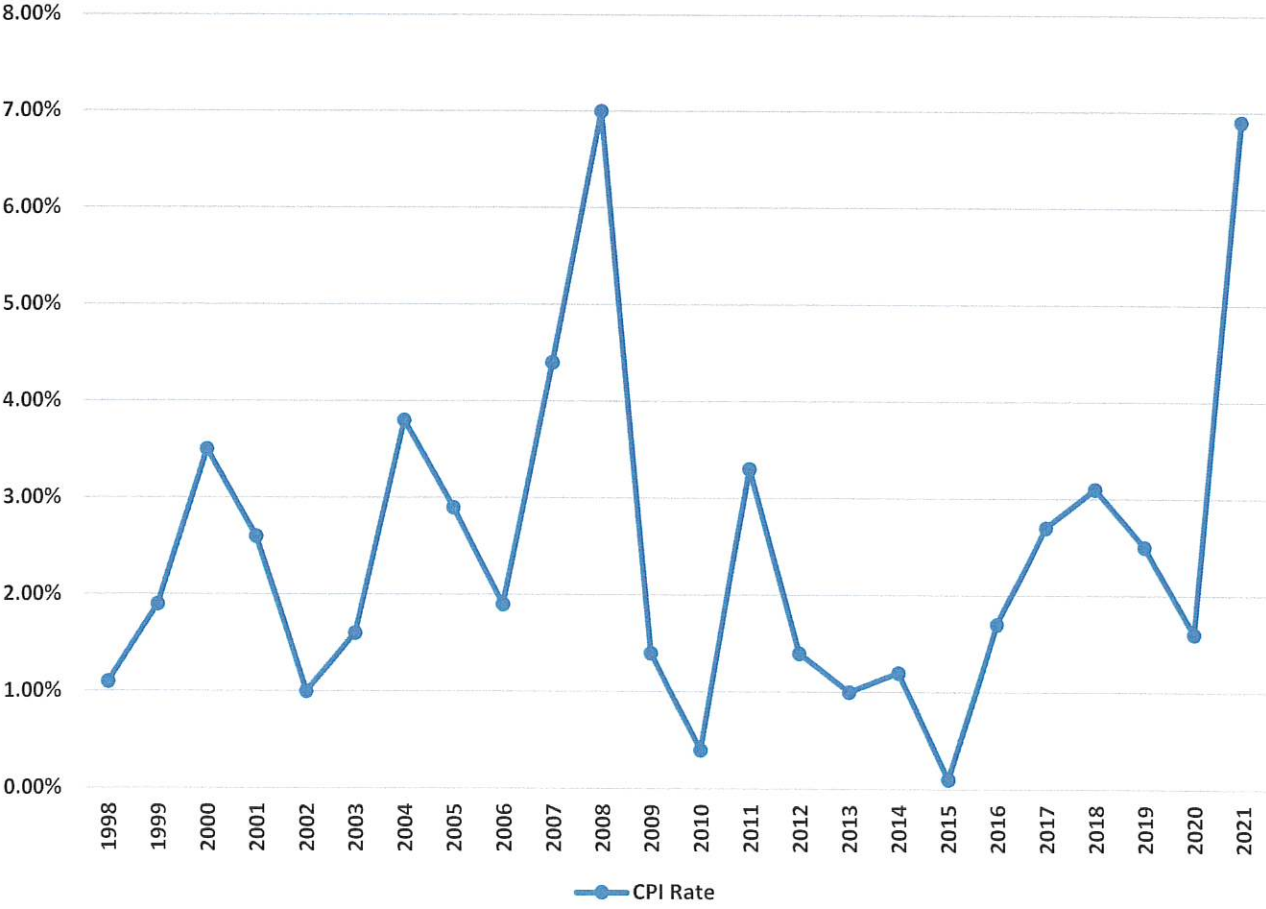
Consumer Price Index - Energy - Prior 20-Years



**Consumer Price Index - Shelter, Apparel, Medical Care Services - Prior 20-Years**



**Consumer Price Index - All Items (CPI Rate) - Prior 20-Years**

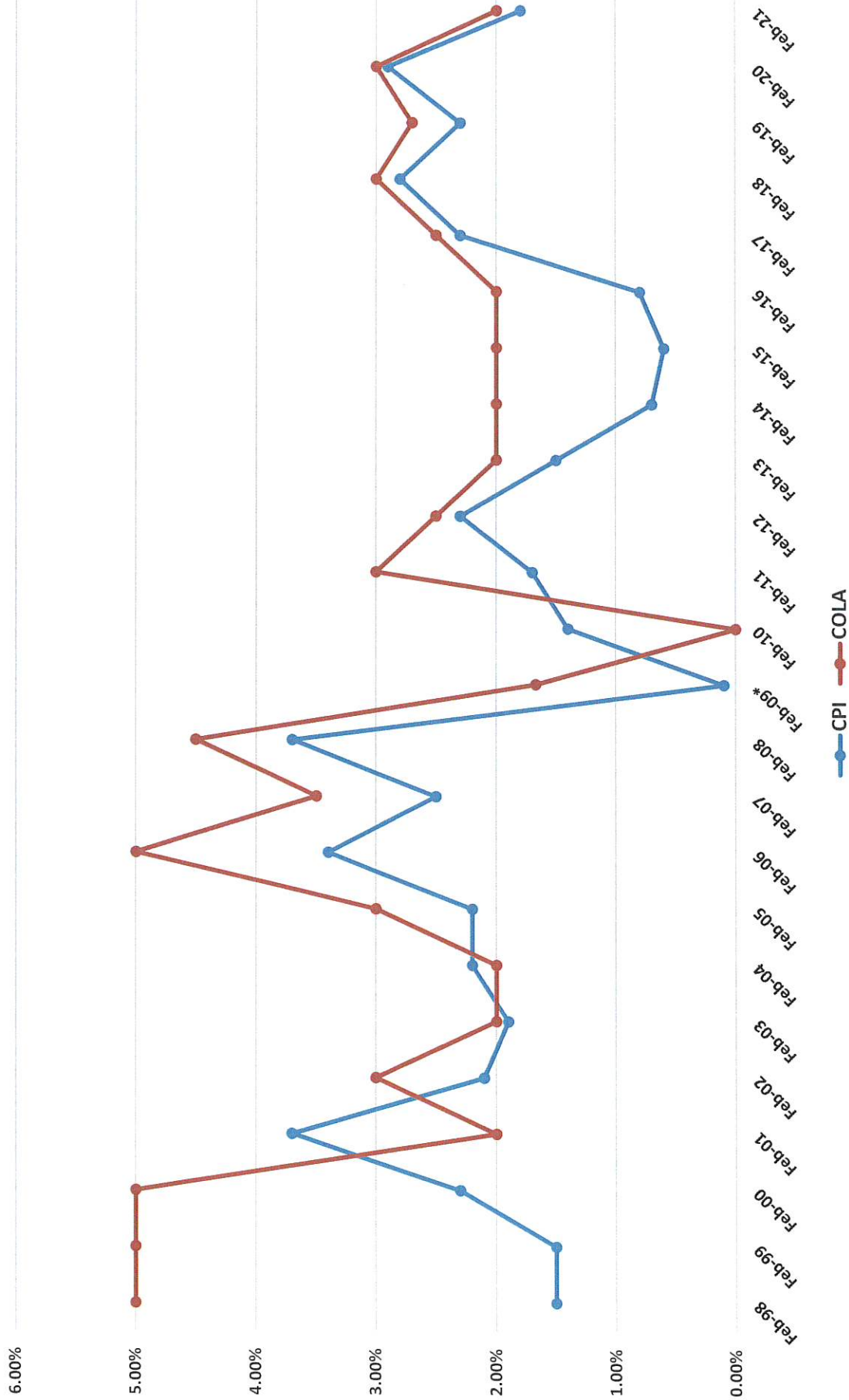




CPI Rates 1998-Present

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1997												2	
1998	1.9	1.5	1.1	0.8	0.9	1	1	1	0.9	0.9	1.1	1.4	1.1
1999	1.3	1.5	1.8	2.8	2.3	2.2	2.5	2.6	2.4	2.4	1.9	2.2	2.1
2000	2	2.3	2.9	2	2.4	3.1	3.1	2.9	3.4	3.3	3.5	3	2.9
2001	3.9	3.7	3.4	3.2	3.5	3.2	3.1	2.7	2.7	2.8	2.6	2.5	3.1
2002	1.9	2.1	1.9	2.8	1.3	0.9	1	1.6	1.3	1.1	1	1.3	1.5
2003	1.7	1.9	2.3	1.1	2	2	2.3	2.2	2.2	1.9	1.6	1.9	2
2004	1.9	2.2	2.2	2.5	3.1	3.1	2.4	2.3	2.4	3.2	3.8	3.3	2.7
2005	3	2.2	2.1	3.1	2.6	2.7	2.9	3.3	4	3.7	2.9	2.4	2.9
2006	2.8	3.4	3.2	2.9	3.6	3.7	3.5	3.4	2.3	1.5	1.9	2.6	2.9
2007	2.7	2.5	2.9	3.2	2.7	2.9	2.8	2.2	2.5	3.5	4.4	4.4	3.1
2008	4	3.7	3.9	3.8	3.8	4.7	5.4	4.9	4.5	3	0.7	-0.6	3.5
2009	-0.5	0.1	-0.8	-1.3	-1.5	-1.7	-2.4	-1.8	-1.3	-0.1	1.4	2.6	-0.6
2010	2.1	1.4	1.6	1.7	1.4	0.5	0.7	0.7	0.3	0.1	0.4	0.9	1
2011	1.2	1.7	2.5	3	3.5	3.5	3.3	3.3	3.8	3.7	3.3	2.7	3
2012	2.6	2.3	2.2	1.8	1.6	1.5	1.1	1.3	1.5	1.6	1.4	1.3	1.7
2013	1	1.5	1	0.8	0.7	1	1.6	1.6	1.2	0.8	1	1.4	1.1
2014	1.5	0.7	0.9	0.9	1.7	1.9	1.8	1.5	1.6	1.6	1.2	0.6	1.3
2015	0	0.6	0.8	0.9	0.8	0.5	0.3	0.3	0	0.1	0.1	0.5	0.4
2016	1.3	0.8	0.3	0.5	0.4	0.5	0.6	0.7	1.1	1.3	1.7	1.8	0.9
2017	1.8	2.3	2.5	2.3	2	2	1.9	2.3	2.6	2.7	2.7	2.7	2.3
2018	2.8	2.5	2.6	2.6	3	3.2	3.2	3	2.8	2.9	3.1	2.9	2.9
2019	2.5	2.3	2.3	2.7	2.8	2.6	2.6	2.5	2.3	2.5	2.5	2.8	2.5
2020	2.8	2.9	2.5	1.5	0.5	0.8	1.5	1.8	2	1.6	1.6	1.5	1.7
2021	1.6	1.8	2.6	3.9	5.4	6.0	6.0	5.6	5.7	6.3	6.9	7.4	4.9

CPI and COLA Comparison 1998-2021



\*2009 was a 2.0% COLA, employees were on a 5% furlough, resulting in 95% pay.



# **OPERATIONS**

Memo to: HBMWD Board of Directors  
From: Dale Davidsen, Superintendent  
Date: February 1, 2022  
Subject: Essex/Ruth January 2022 Operational Report

### **Upper Mad River, Ruth Lake, and Hydro Plant**

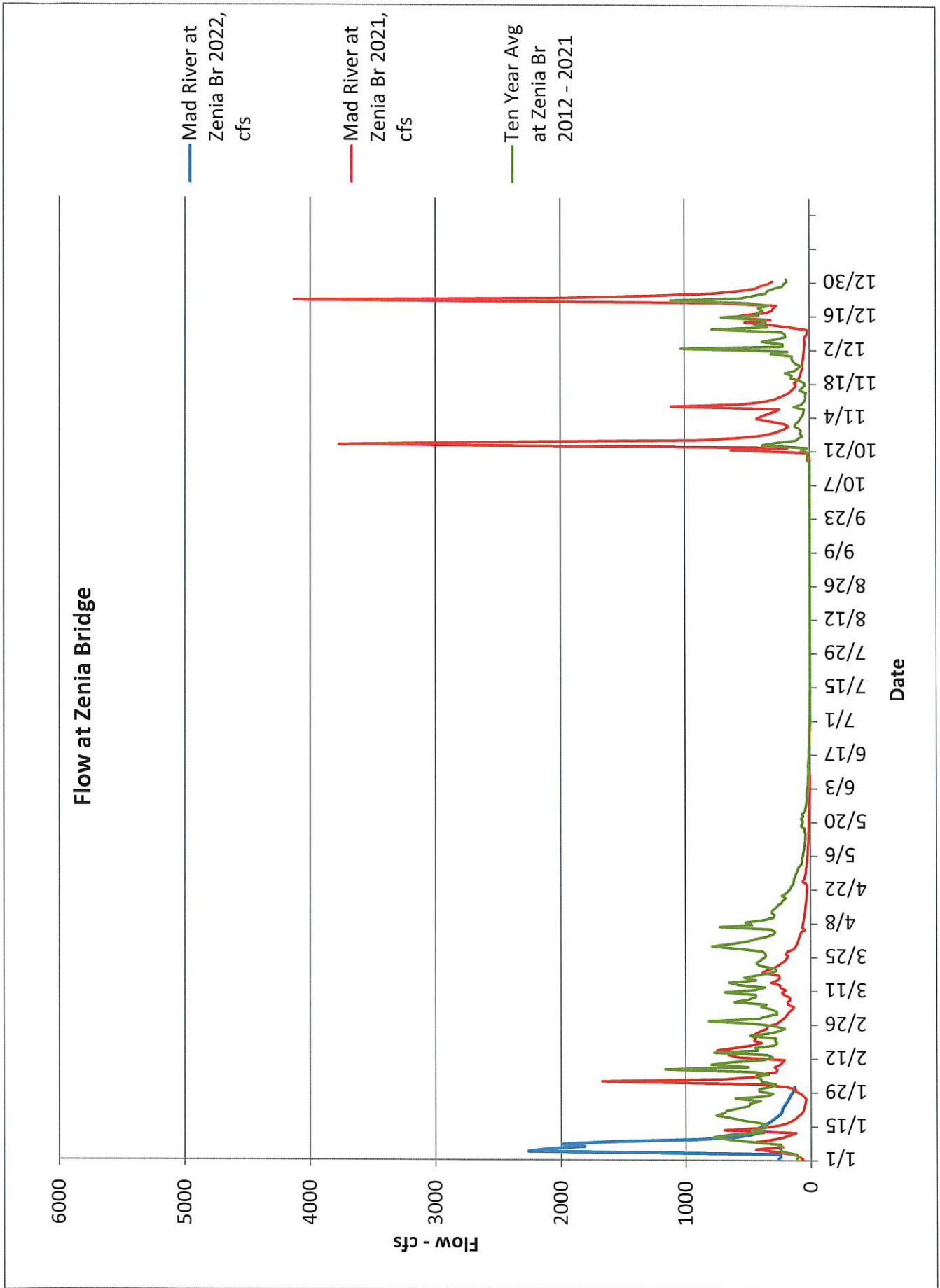
1. Flow at Mad River above Ruth Reservoir (Zenia Bridge) averaged 568 cfs with a high of 2260 cfs on January 4<sup>th</sup> and a low of 132 cfs on January 31<sup>st</sup>
2. The conditions at Ruth Lake for January were as follows:  
The lake level on January 31<sup>st</sup> was 2654.39 feet which is:
  - 0.74 feet lower than December 31<sup>st</sup>, 2021
  - 4.11 feet higher than January 31<sup>st</sup>, 2021
  - 3.01 feet higher than the ten-year average
  - 0.39 feet above the spillway
3. Ruth Headquarters recorded 2.69 inches of rainfall for January.
4. Ruth Hydro produced 912000 KWh in January. There was 1 shut down for PG&E (319 minutes with 7097 KWh lost production).
5. The lake discharge averaged 740 cfs with a high of 2431cfs on January 5<sup>th</sup>.

### **Lower Mad River, Winzler Control, and TRF**

6. The river at Winzler Control Center for January, had an average flow of 3137 cfs. The river flow reached a high of 10400 cfs on January 5<sup>th</sup>.
7. The domestic water conditions were as follows:
  - a. The domestic water turbidity average was 0.06 NTU, which meets Public Health Secondary Standards.
  - b. As of January 31<sup>st</sup>, we pumped 229.513 MG at an average of 7.442 MGD.
  - c. The maximum metered daily municipal use was 7.857 MGD on January 14<sup>th</sup>.
8. The TRF conditions for January were as follows:
  - a. Average monthly source water turbidity was 0.88 NTU.
  - b. Average monthly filtered water turbidity was 0.08 NTU.
  - c. Number of filter backwashes for the month was 50.

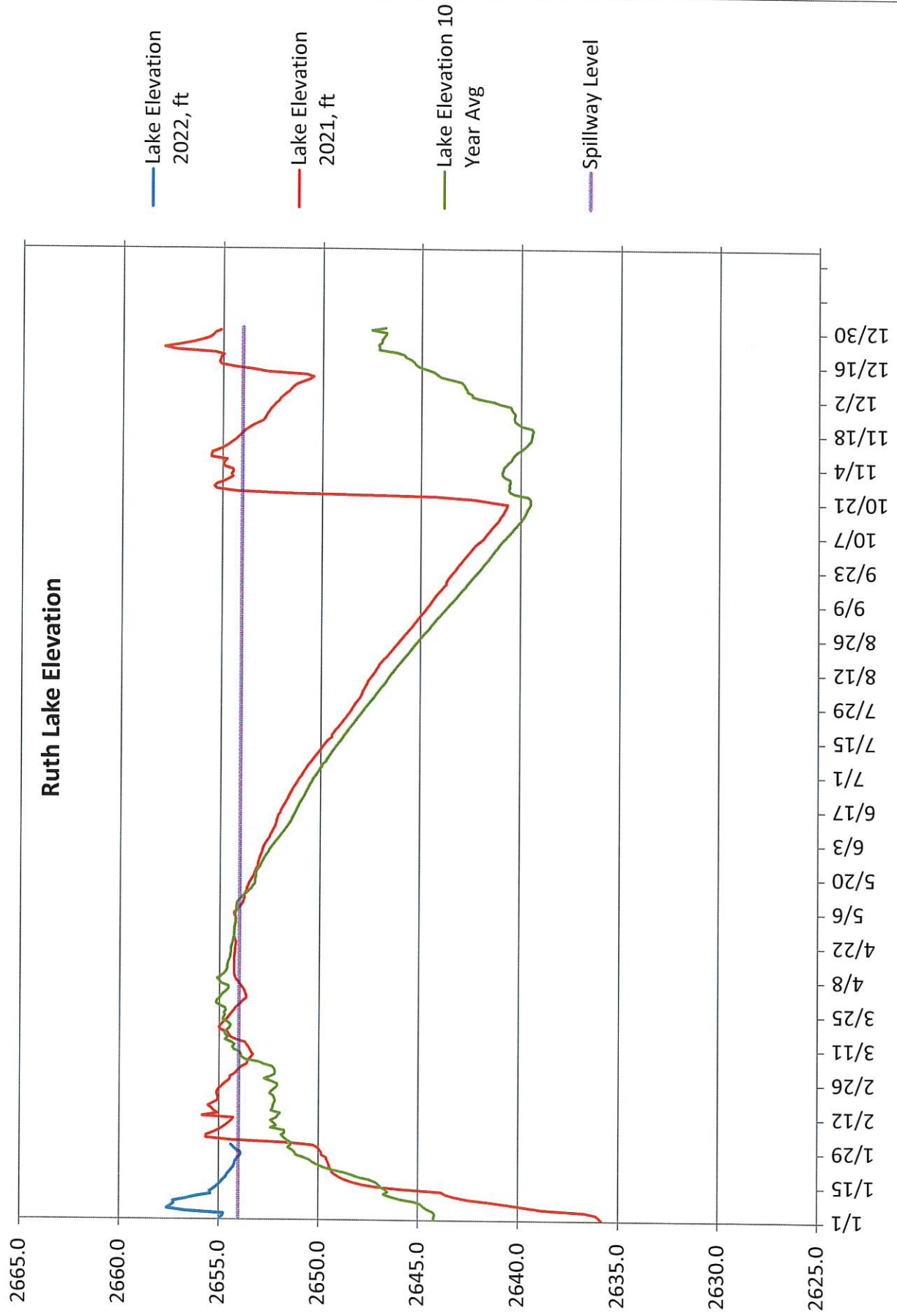


9. January 3<sup>rd</sup>. – Maintenance repaired the leak on Glendale Drive.
10. January 5<sup>th</sup>. - Operations started testing a new blend of treatment chemical
11. January 14<sup>th</sup> – Found that someone had broken into Line shed 6. Causing hundreds of dollars in repairs needed.
12. January 25<sup>th</sup> - 28<sup>th</sup> – I attended parts of a 4 day ASDSO webinar with John.
13. January 26<sup>th</sup> – Safety meetings
  - a. WIIPP
  - b. Ruth EAP and ODSP
  - c. General emergency response
  - d. AQMD regulations
14. Current and Ongoing Projects
  - a. COVID 19 – Dealing with modified staffing arrangements due to COVID as best we can. Had a number of staff out this month, common colds or Covid.
  - b. 12kV project. – A lot of work going on. Coordinating with contractors for power shutdowns, etc. as needed.
  - c. Tesla battery bank projects – Coordination meetings and design work is in progress.
  - d. TRF EOC / breakroom construction on-going.
  - e. OSHG – Worked on system bid specs & drawings, Draft Electrical system design.
  - f. Routine annual equipment maintenance and services.

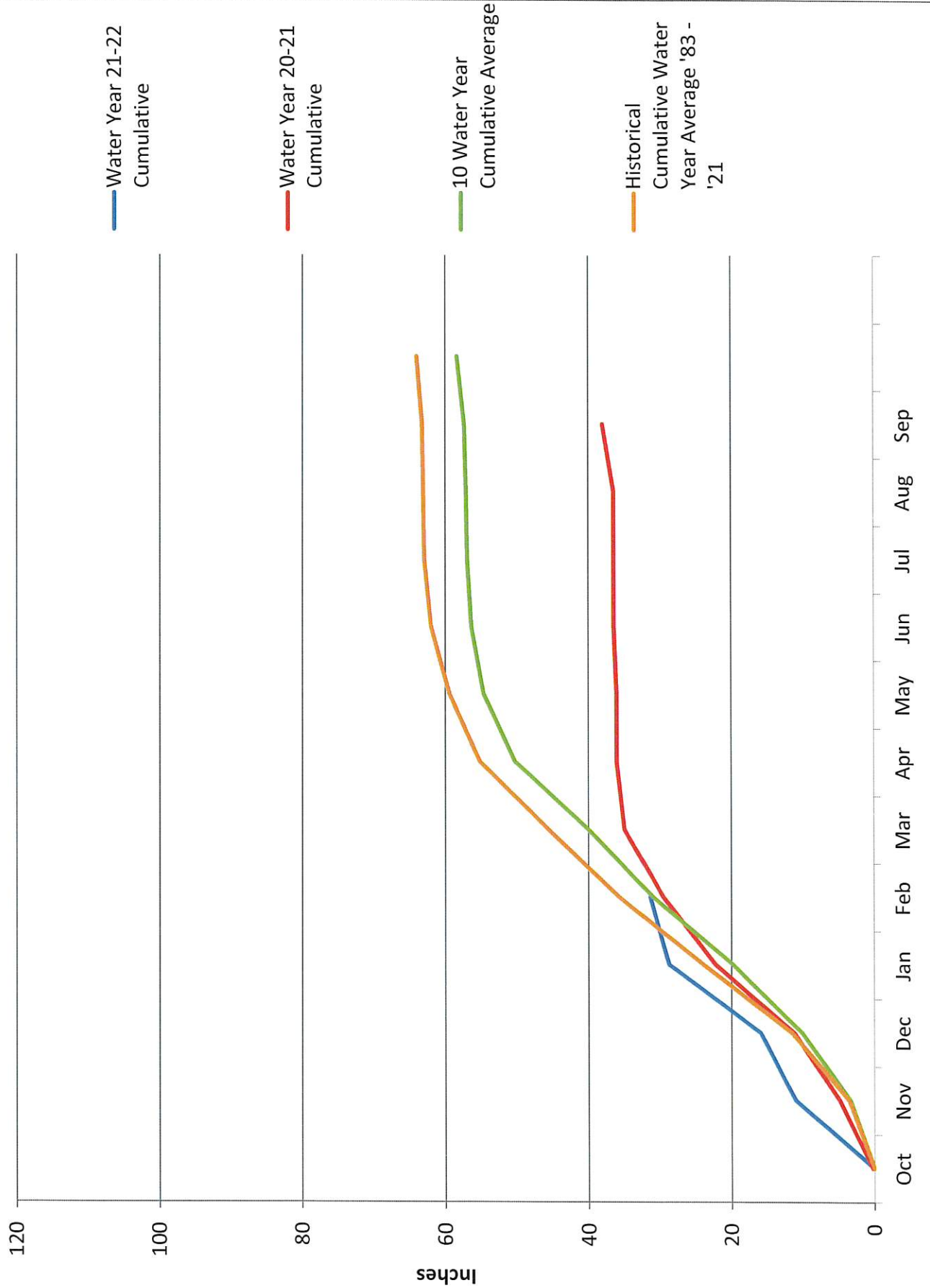




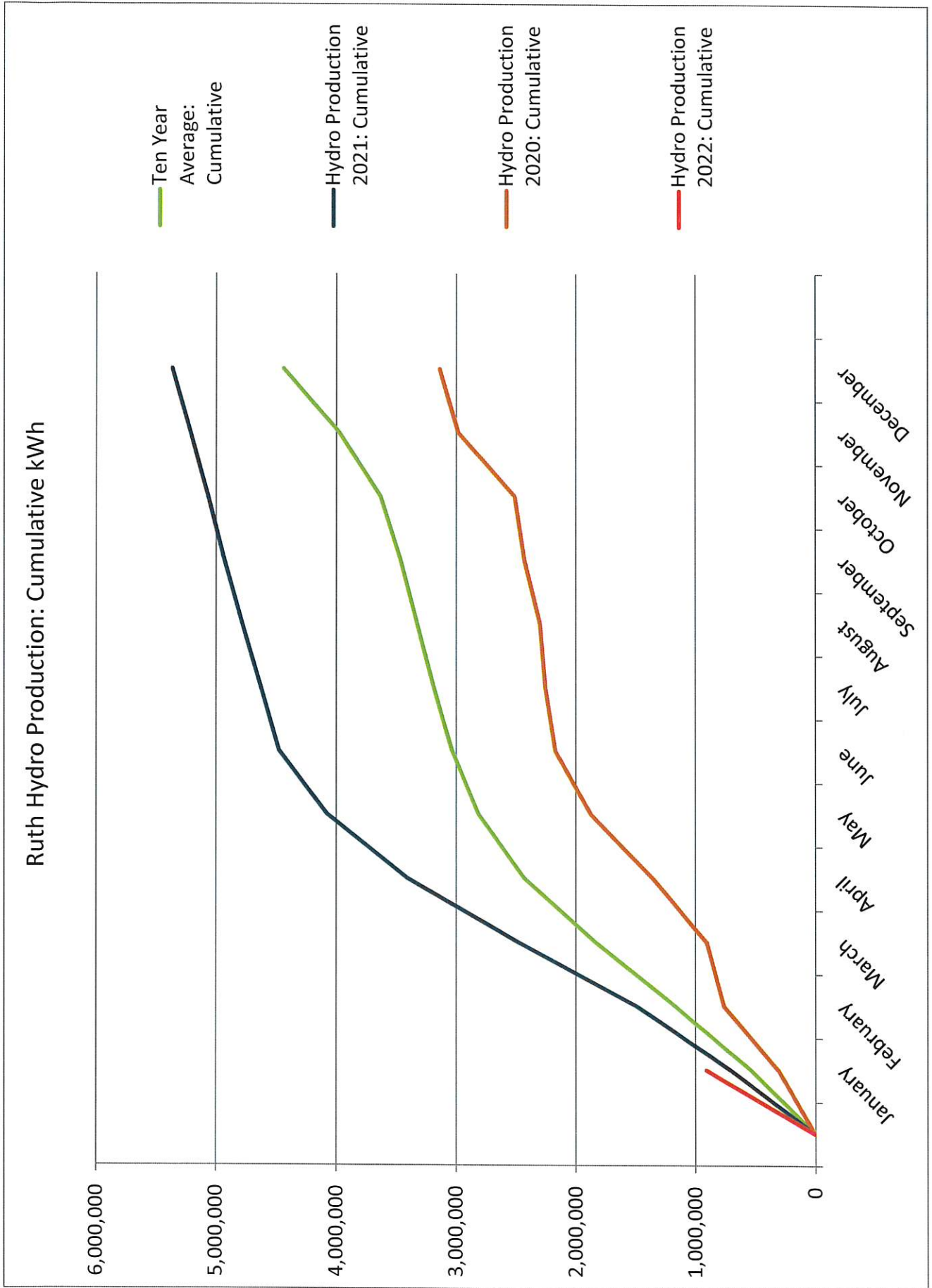
Ruth Lake Elevation

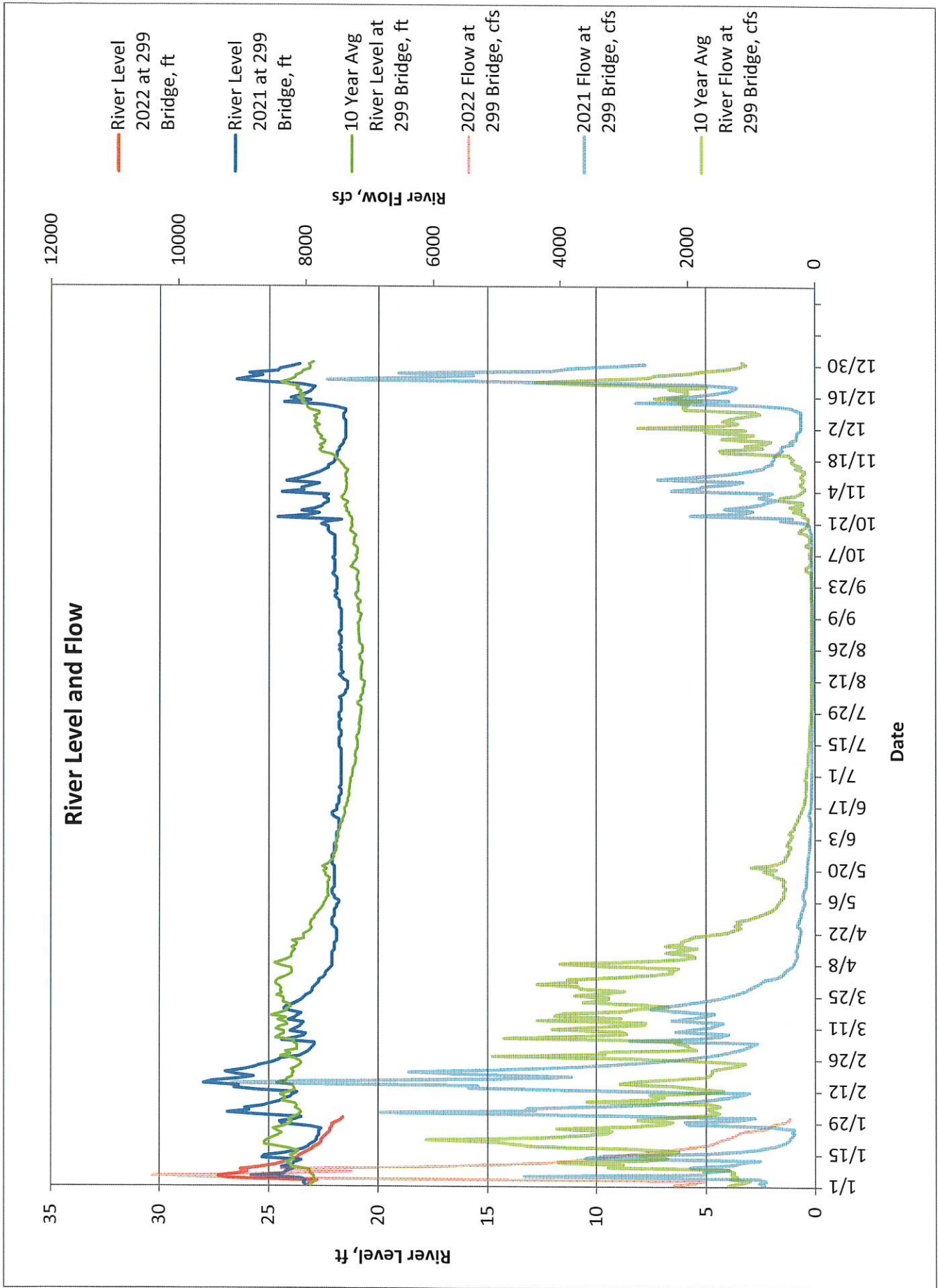


Ruth Rainfall - Water Year 2021-2022











# **MANAGEMENT**

**fiona@hbmwd.com**

---

**From:** ACWA JPIA <srobinson@acwajpia.com>  
**Sent:** Friday, January 28, 2022 2:12 PM  
**To:** fiona@hbmwd.com  
**Subject:** 2022 Election Notice for the California Water Insurance Fund (An ACWA JPIA Captive Insurance Company)

[View this email in your browser](#)



**2022 Election Notice  
California Water Insurance  
Fund (CWIF)  
(An ACWA JPIA Captive Insurance Company)**

There are two positions to be filled on JPIA’s captive insurance company board, the California Water Insurance Fund (CWIF). The election will be held during the JPIA’s Board of Directors’ meeting on May 2, 2022, at the spring conference in Sacramento. These two positions will be filled for two-year terms each. The incumbent office holders are Andrew Morris (Santa Rosa Regional Resources Authority) and Scott Quady (Calleguas Municipal Water District).

JPIA Directors who are interested in being candidates for the election should follow the [nomination procedures](#) found on the JPIA’s website.

The deadline to qualify for the election is Friday, March 18, 2022.

Sample copies of the nominating and concurring in nomination resolutions can also be found on the [JPIA’s website](#).





## Improving Emergency Operations for Dam & Levee Failures & Incidents

### January 25-28, 2022

### Course Agenda

Day 1	Duration	Time (EST)	Topic	Presenter	Type <sup>1</sup>
1-1	1 h	11:00-12:00	Introductions & Course Overview	Jamieson	P
1-2	45 m	12:00-12:45	Dam Safety 101	Treacy	P
	30 m	12:45-1:15	<i>Break</i>		
1-3	45 m	1:15-2:00	ICS Overview	Price	P
1-4	1 h 15 m	2:00-3:15	Overview of Historic Failures & Incidents	France	P
	30 m	3:15-3:45	<i>Break</i>		
1-5	45 m	3:45-4:30	Common Dam and Levee EAP Formats	Jamieson	P
1-6	1 h 15 m	4:30-5:45	Step #1 – Detection Group Discussion	Treacy	A
Day 2	Duration	Time (EST)	Topic	Presenter	Type
2-1	45 m	11:00-11:45	Potential Failure Modes for Dams & Levees	France	P
2-2	1 h 15 m	11:45-1:00	Step #2 – Decision-making Workshop	Hannes	A
	30 m	1:00-1:30	<i>Break</i>		
2-3	1 h	1:30-2:30	Emergency Action Plan Preparation and Testing	Purley	P
2-4	45 m	2:30-3:15	Planning for a Tabletop Exercise and After Action Reporting & Follow-up	Purley	P
	30 m	3:15-3:45	<i>Break</i>		
2-5	1 h 15 m	3:45-5:00	Step #3 – Internal Communications Workshop	Price	A
2-6	15 m	5:00-5:15	Introduction to the NRCS EAP Template	Jamieson	P
2-7	30 m	5:15-5:45	EAP Orientation Seminar	Jamieson	P
Day 3	Duration	Time (EST)	Topic	Presenter	Type
3-1	30 m	11:00-11:30	Overview of New Technology	Price/Hannes	P
3-2	1 h 30 m	11:30-11:00	Tabletop Exercise #1 & Hotwash	Purley/Hannes	A
	30 m	1:00-1:30	<i>Break</i>		
3-3	1 h	1:30-2:30	Crisis Communication	Purley	A
3-4	1 h	2:30-3:30	Inundation Mapping	Hannes	P
	30 m	3:30-4:00	<i>Break</i>		
3-5	2 h	4:00-6:00	Evacuation Planning Workshop	Price	A
Day 4	Duration	Time (EST)	Topic	Presenter	Type
4-1	2 h	11:00-1:00	Tabletop Exercise #2 & Hotwash (Focus on Integrated Step #4)	Purley/Treacy	A
	30 m	1:00-1:30	<i>Break</i>		
4-2	1 h 30 m	1:30-3:00	Functional Exercise	Jamieson/Price	A
4-3	30 m	3:00-3:30	Functional Exercise Hot Wash	Jamieson/Price	A
	30 m	3:30-4:00	<i>Break</i>		
4-4	30 m	4:00-4:30	Course Review & EAP Checklist	Treacy	P
4-5	1 h 30 m	4:30-6:00	Course Wrap-up Panel Discussion	All	A

<sup>1</sup> P = class presentations & A = class activities



Association of State Dam Safety Officials  
**CERTIFICATE OF PARTICIPATION**

This is to confirm that

**John Friedenbach**

Registered for and Participated in the ASDSO Dam Safety Event

**Improving Emergency Operations for Dam and Levee Failures  
and Incidents**

and is entitled to 19.00 Professional Development Hours.

Jennifer Burns  
*ASDSO Training Director*

January 28, 2022



# Learn Online with Upcoming JPIA Live Webinars

- Sexual Harassment Prevention for Staff (1hr):** March 22, 2022
- Sexual Harassment Prevention for Management/Board (2hr):** February 15, April 28, 2022
- Hot Java and HR Topics:** February 17, March 17, April 21, May 19
- Effective Performance Feedback:** January 26 & February 2, 2022\*\*
- Workers' Comp. Basics/Return to Work:** February 23, 2022
- Performance Management (PDP):** March 24 & March 31, 2022\*\*
- Nuts and Bolts of Supervisor Law (PDP):** February 22, April 13, 2022
- Job Descriptions, A Firm Defense For Your Agency (PDP):** March 10, April 26, 2022
- Documenting (PDP):** March 29, 2022
- Onboarding New Staff (PDP):** April 5, 2022

\*\*Attend both sessions for PDP



To register, go to <https://www.acwajpia.com/resources-webinars>  
For questions, or assistance, email [training@acwajpia.com](mailto:training@acwajpia.com)

**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: John Friedenbach  
Date: February 10, 2022  
Re: AB 1717 Prevailing Wage Requirement for Fuel Reduction Projects

**Background**

AB 1717 would subject the labor used for publicly funded fuel reduction work as part of a fire mitigation project to prevailing wage. ACWA is currently surveying its members in the headwaters committee to gauge their level of concern with this bill. District staff estimates that this bill would increase costs significantly and likely result in an adverse impact on agency work trying to conduct fuel reduction projects.

If enacted as currently drafted, AB 1717 would greatly reduce the District's efforts to conduct fuel reduction on District property at Ruth Lake, not to mention efforts by others throughout the state at a time when wildfires seem to be the new normal for California.

**Next Steps**

Staff requests Board authorization to oppose AB 1717's provisions to subject labor used for publicly funded fuel reduction work as part of a fire mitigation project to prevailing wage.




[Home](#)
[Bill Information](#)
[California Law](#)
[Publications](#)
[Other Resources](#)
[My Subscriptions](#)
[My Favorites](#)

**AB-1717 Public works: definition.** (2021-2022)

SHARE THIS:



Date Published: 01/27/2022 09:00 PM

CALIFORNIA LEGISLATURE— 2021–2022 REGULAR SESSION

**ASSEMBLY BILL**

**NO. 1717**

**Introduced by Assembly Member Aguiar-Curry**

**January 27, 2022**

An act to amend Section 1720 of the Labor Code, relating to public works.

LEGISLATIVE COUNSEL'S DIGEST

AB 1717, as introduced, Aguiar-Curry. Public works: definition.

Existing law requires that, except as specified, not less than the general prevailing rate of per diem wages, determined by the Director of Industrial Relations, be paid to workers employed on public works projects. Existing law defines the term "public works" for purposes of requirements regarding the payment of prevailing wages to include construction, alteration, demolition, installation, or repair work done under contract and paid for using public funds, except as specified. Existing law makes a willful violation of laws relating to the payment of prevailing wages on public works a misdemeanor.

This bill would expand the definition of "public works" to include fuel reduction work paid for in whole or in part out of public funds performed as part of a fire mitigation project, as specified. By expanding the scope of a crime, the bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: yes

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

**SECTION 1.** Section 1720 of the Labor Code is amended to read:

**1720.** (a) As used in this chapter, "public works" means all of the following:

(1) Construction, alteration, demolition, installation, or repair work done under contract and paid for in whole or in part out of public funds, except work done directly by a public utility company pursuant to order of the Public

Utilities Commission or other public authority. For purposes of this paragraph, "construction" includes work performed during the design, site assessment, feasibility study, and other preconstruction phases of construction, including, but not limited to, inspection and land surveying work, regardless of whether any further construction work is conducted, and work performed during the postconstruction phases of construction, including, but not limited to, all cleanup work at the jobsite. For purposes of this paragraph, "installation" includes, but is not limited to, the assembly and disassembly of freestanding and affixed modular office systems.

(2) Work done for irrigation, utility, reclamation, and improvement districts, and other districts of this type. "Public works" does not include the operation of the irrigation or drainage system of an irrigation or reclamation district, except as used in Section 1778 relating to retaining wages.

(3) Street, sewer, or other improvement work done under the direction and supervision or by the authority of an officer or public body of the state, or of a political subdivision or district thereof, whether the political subdivision or district operates under a freeholder's charter or not.

(4) The laying of carpet done under a building lease-maintenance contract and paid for out of public funds.

(5) The laying of carpet in a public building done under contract and paid for in whole or in part out of public funds.

(6) Public transportation demonstration projects authorized pursuant to Section 143 of the Streets and Highways Code.

(7) (A) Infrastructure project grants from the California Advanced Services Fund pursuant to Section 281 of the Public Utilities Code.

(B) For purposes of this paragraph, the Public Utilities Commission is not the awarding body or the body awarding the contract, as defined in Section 1722.

(8) Tree removal work done in the execution of a project under paragraph (1).

*(9) Fuel reduction work paid for in whole or in part out of public funds performed as part of a fire mitigation project, including, but not limited to, residential chipping, rural road fuel breaks, fire breaks, and vegetation management.*

(b) For purposes of this section, "paid for in whole or in part out of public funds" means all of the following:

(1) The payment of money or the equivalent of money by the state or political subdivision directly to or on behalf of the public works contractor, subcontractor, or developer.

(2) Performance of construction work by the state or political subdivision in execution of the project.

(3) Transfer by the state or political subdivision of an asset of value for less than fair market price.

(4) Fees, costs, rents, insurance or bond premiums, loans, interest rates, or other obligations that would normally be required in the execution of the contract, that are paid, reduced, charged at less than fair market value, waived, or forgiven by the state or political subdivision.

(5) Money loaned by the state or political subdivision that is to be repaid on a contingent basis.

(6) Credits that are applied by the state or political subdivision against repayment obligations to the state or political subdivision.

(c) Notwithstanding subdivision (b), all of the following apply:

(1) Private residential projects built on private property are not subject to this chapter unless the projects are built pursuant to an agreement with a state agency, a redevelopment agency, a successor agency to a redevelopment agency when acting in that capacity, or a local public housing authority.

(2) If the state or a political subdivision requires a private developer to perform construction, alteration, demolition, installation, or repair work on a public work of improvement as a condition of regulatory approval of an otherwise private development project, and the state or political subdivision contributes no more money, or the equivalent of money, to the overall project than is required to perform this public improvement work, and the state or political subdivision maintains no proprietary interest in the overall project, then only the public improvement work shall thereby become subject to this chapter.



(3) (A) If the state or a political subdivision reimburses a private developer for costs that would normally be borne by the public, or provides directly or indirectly a public subsidy to a private development project that is de minimis in the context of the project, an otherwise private development project shall not thereby become subject to this chapter.

(B) (i) For purposes of subparagraph (A), a public subsidy is de minimis if it is both less than six hundred thousand dollars (\$600,000) and less than 2 percent of the total project cost.

(ii) Notwithstanding clause (i), for purposes of subparagraph (A), a public subsidy for a project that consists entirely of single-family dwellings is de minimis if it is less than 2 percent of the total project cost.

(iii) This subparagraph shall not apply to a project that was advertised for bid, or a contract that was awarded, before July 1, 2021.

(4) The construction or rehabilitation of affordable housing units for low- or moderate-income persons pursuant to paragraph (5) or (7) of subdivision (e) of Section 33334.2 of the Health and Safety Code that are paid for solely with moneys from the Low and Moderate Income Housing Fund established pursuant to Section 33334.3 of the Health and Safety Code or that are paid for by a combination of private funds and funds available pursuant to Section 33334.2 or 33334.3 of the Health and Safety Code do not constitute a project that is paid for in whole or in part out of public funds.

(5) Unless otherwise required by a public funding program, the construction or rehabilitation of privately owned residential projects is not subject to this chapter if one or more of the following conditions are met:

(A) The project is a self-help housing project in which no fewer than 500 hours of construction work associated with the homes are to be performed by the home buyers.

(B) The project consists of rehabilitation or expansion work associated with a facility operated on a not-for-profit basis as temporary or transitional housing for homeless persons with a total project cost of less than twenty-five thousand dollars (\$25,000).

(C) Assistance is provided to a household as either mortgage assistance, downpayment assistance, or for the rehabilitation of a single-family home.

(D) The project consists of new construction, expansion, or rehabilitation work associated with a facility developed by a nonprofit organization to be operated on a not-for-profit basis to provide emergency or transitional shelter and ancillary services and assistance to homeless adults and children. The nonprofit organization operating the project shall provide, at no profit, not less than 50 percent of the total project cost from nonpublic sources, excluding real property that is transferred or leased. Total project cost includes the value of donated labor, materials, and architectural and engineering services.

(E) The public participation in the project that would otherwise meet the criteria of subdivision (b) is public funding in the form of below-market interest rate loans for a project in which occupancy of at least 40 percent of the units is restricted for at least 20 years, by deed or regulatory agreement, to individuals or families earning no more than 80 percent of the area median income.

(d) Notwithstanding any provision of this section to the contrary, the following projects are not, solely by reason of this section, subject to this chapter:

(1) Qualified residential rental projects, as defined by Section 142(d) of the Internal Revenue Code, financed in whole or in part through the issuance of bonds that receive allocation of a portion of the state ceiling pursuant to Chapter 11.8 (commencing with Section 8869.80) of Division 1 of Title 2 of the Government Code on or before December 31, 2003.

(2) Single-family residential projects financed in whole or in part through the issuance of qualified mortgage revenue bonds or qualified veterans' mortgage bonds, as defined by Section 143 of the Internal Revenue Code, or with mortgage credit certificates under a Qualified Mortgage Credit Certificate Program, as defined by Section 25 of the Internal Revenue Code, that receive allocation of a portion of the state ceiling pursuant to Chapter 11.8 (commencing with Section 8869.80) of Division 1 of Title 2 of the Government Code on or before December 31, 2003.

(3) Low-income housing projects that are allocated federal or state low-income housing tax credits pursuant to Section 42 of the Internal Revenue Code, Chapter 3.6 (commencing with Section 50199.4) of Part 1 of Division

31 of the Health and Safety Code, or Section 12206, 17058, or 23610.5 of the Revenue and Taxation Code, on or before December 31, 2003.

(e) Notwithstanding paragraph (1) of subdivision (a), construction, alteration, demolition, installation, or repair work on the electric transmission system located in California constitutes a public works project for the purposes of this chapter.

(f) If a statute, other than this section, or a regulation, other than a regulation adopted pursuant to this section, or an ordinance or a contract applies this chapter to a project, the exclusions set forth in subdivision (d) do not apply to that project.

(g) For purposes of this section, references to the Internal Revenue Code mean the Internal Revenue Code of 1986, as amended, and include the corresponding predecessor sections of the Internal Revenue Code of 1954, as amended.

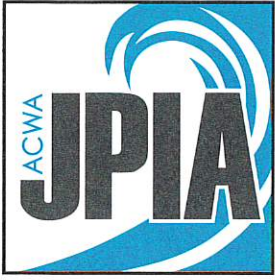
(h) The amendments made to this section by either Chapter 938 of the Statutes of 2001 or the act adding this subdivision shall not be construed to preempt local ordinances requiring the payment of prevailing wages on housing projects.

**SEC. 2.** No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.



**ACWA**

H.B.M.W.D. JAN 10 2022



YOUR BEST PROTECTION

## ACWA JPIA

P. O. Box 619082  
Roseville, CA 95661-9082

phone  
916.786.5742  
800.231.5742

[www.acwajpia.com](http://www.acwajpia.com)

### President

E.G. "Jerry" Gladbach

### Vice President

Tom Cuquet

### Chief Executive Officer

Walter "Andy" Sells

### Executive Committee

Fred Bockmiller

Tom Cuquet

David Drake

E.G. "Jerry" Gladbach

Brent Hastey

Melody A. McDonald

Randall Reed

J. Bruce Rupp

Pamela Tobin

### Core Values

- People
- Service
- Integrity
- Innovation

November 03, 2021

Humboldt Bay Municipal Water District (H002)  
P.O. Box 95  
Eureka, CA 95502-0095

General Manager:

Each year at Fall Conference, the JPIA recognizes members that have a Loss Ratio of 20% or less in either of the Liability, Property, or Workers' Compensation programs (loss ratio = total losses / total premiums).

The members with this distinction receive the "**President's Special Recognition Award**" certificate for each Program that they qualify in.

The JPIA is extremely pleased to present Humboldt Bay Municipal Water District (H002) with this special recognition and commends the District on the hard work in reducing claims.

Congratulations to you, your staff, Board, and District. Keep up the good work!

The JPIA wishes you the best in 2022.

Sincerely,

E.G. "Jerry" Gladbach  
President

Enclosure: President's Special Recognition Award(s)



# *President's Special Recognition Award*

*The President of the  
ACWA JPIA  
hereby gives Special Recognition to*

## *Humboldt Bay Municipal Water District*

*for achieving a low ratio of "Paid Claims and Case Reserves" to "Deposit Premiums"  
in the Property Program for the period 04/01/2017 - 06/30/2020  
announced at the Board of Directors' Meeting in Pasadena.*



*December 15, 2021*

*E. G. "Jerry" Gladbach*

*E. G. "Jerry" Gladbach, President*



*President's Special Recognition Award*  
*The President of the*  
**ACWA JPIA**  
*hereby gives Special Recognition to*  
**Humboldt Bay Municipal Water District**

*for achieving a low ratio of "Paid Claims and Case Reserves" to "Deposit Premiums"  
in the Liability Program for the period 10/01/2017 - 09/30/2020  
announced at the Board of Directors' Meeting in Pasadena.*



*December 15, 2021*

*E. G. "Jerry" Gladbach*

*E. G. "Jerry" Gladbach, President*



## ACWA/JPIA Liability Committee and Executive Committee Meeting 1/31/22

The Liability Committee met to review loss experience, training and inspections for best practices, and trends in premiums. The JPIA loss experience continues to be very good with the exception of three unusual years in the last fifteen. Two years involved aerial spraying, and an accident causing death. Wild fires and the Orville Dam contributed to others. While our losses have been good, the industry as a whole has been hard hit. Thus there is an expectation of rate increases in the fifteen percent range for the foreseeable future. Thus to maintain liquidity in the programs and moderate premium increases it was recommended and the Exco agreed to forego retroactive premium adjustments to allow for use of those funds. This would not affect Workers Compensation and some four million will be distributed to members.

There was a general discussion of loss prevention programs which included such things as member specific Vehicle Operating Procedures, Wildfire Prevention Policies, Training and other best practices.

In the afternoon the Executive Committee met. We approved the committee recommendations. The Committee took up the appointment to fill a vacancy but was unable to do so because of a vote tie. It was decided to postpone the Strategic Planning Meeting in March until covid and the vacancy issue is resolved. We will meet again at the end of March.

Bruce Rupp

**RREDC/RCEA**





# REDWOOD COAST Energy Authority



## Community **RE**port

RePowering Humboldt with Renewable Energy - 2021-22 Annual Report

RCEA's Redwood Coast Airport Microgrid now supplies energy to our local grid. We expect it to be fully operational in March. Watch for our Grand Opening celebration in April.

<b>Governance</b>	<b>2</b>
<b>Executive Director's Message</b>	<b>3</b>
<b>Regional Planning and Coordination</b>	<b>4-5</b>
<b>Community Choice Energy</b>	<b>6-8</b>
<b>Redwood Coast Airport Microgrid</b>	<b>9</b>
<b>Customer Energy Solutions</b>	<b>10-13</b>
<b>Advanced Transportation</b>	<b>14-15</b>
<b>Collaboration</b>	<b>16</b>



Redwood Coast Energy Authority 2021

## Board of Directors

City of Arcata	<b>Sarah Schaefer</b>
City of Blue Lake	<b>Chris Curran</b>
City of Eureka	<b>Scott Bauer</b>
City of Ferndale	<b>Stephen Avis</b> <i>(Vice Chair)</i>
City of Fortuna	<b>Mike Losey</b>
City of Rio Dell	<b>Frank Wilson</b>
City of Trinidad	<b>Dave Grover</b>
County of Humboldt	<b>Mike Wilson</b>
Humboldt Bay Municipal Water District	<b>Sheri Woo</b> <i>(Board Chair)</i>

The Redwood Coast Energy Authority (RCEA) is a local government joint powers agency that was founded in 2003 whose members include the County of Humboldt; the Cities of Arcata, Blue Lake, Eureka, Ferndale, Fortuna, Rio Dell, and Trinidad; and the Humboldt Bay Municipal Water District.

RCEA is governed by a **Board of Directors** made up of elected officials appointed by the governing bodies of our member agencies. We wish to extend our **gratitude** to both our current and past Board members, as well as to the **Community Advisory Committee** members who advise them, for the time and energy they put into making RCEA as resilient and strong as it is.

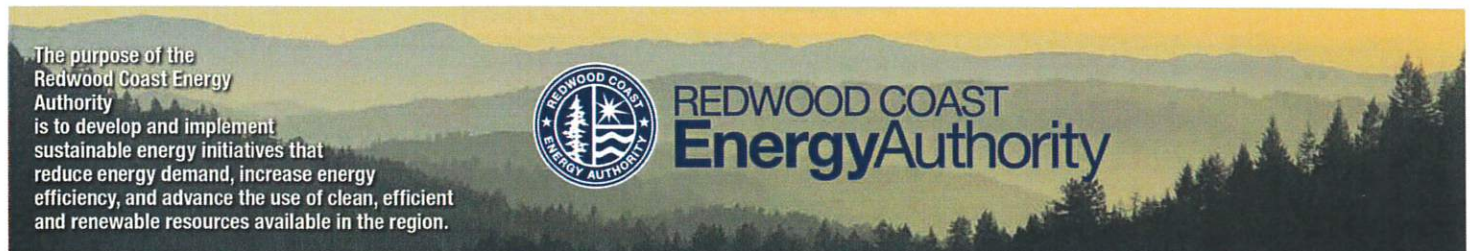
RCEA's Board and CAC meetings are open to the public and community members are encouraged to attend and participate. Communities in RCEA's service area — not private shareholders — control their own energy choices. Meeting notices and agenda packets are available through the RCEA website, [www.RedwoodEnergy.org](http://www.RedwoodEnergy.org).



“ Thank you Humboldt residents for supporting your Community Choice Energy program, which allows us to build renewable energy projects that slow climate change. Energy systems are complex and technical, and together we've learned how to impact and even disrupt the old ways of thinking. RePower to the People!”

*Sheri Woo*

RCEA 2021 Board Chair, Humboldt Bay Municipal Water District



## Community Advisory Committee

City of Arcata	<b>Norman Bell</b>
City of Blue Lake	<b>Kit Mann</b>
City of Eureka	<b>Catherine Gurin</b>
City of Ferndale	<b>Dennis Leonardi</b> <i>(Vice Chair)</i>
City of Fortuna	<b>Elizabeth Burks</b>
City of Rio Dell	<b>Roger Hess</b>
City of Trinidad	<b>Richard Johnson</b>
Humboldt Bay Municipal Water District	<b>Ethan Lawton</b>
County 1	<b>Luna Latimer</b>
2	<b>Christopher Honar</b>
3	<i>(Vacancy)</i>
At Large 1	<b>Jerome Qiriazzi (Carman)</b>
2	<b>Colin Fiske</b>
3	<b>Larry Goldberg</b> <i>(Chair)</i>
4	<b>Pam Halstead</b>

RCEA's Board of Directors established a Community Advisory Committee (CAC) to support RCEA public engagement efforts and to provide decision-making support to the RCEA Board.

The CAC can have up to 15 members. Eleven are nominated by RCEA Board members and four are selected through an open application process. All members are confirmed by the full RCEA Board. CAC members serve two-year terms and all members live in Humboldt County.

“ I'm proud of the work the Community Advisory Committee accomplished in the past year. We represent the citizen's voice of Humboldt in energy policy with RCEA.”

*Larry Goldberg*

Chair of the Community Advisory Committee







## A Message from the Executive Director

“

The ongoing pandemic made 2021 another roller coaster year, but that didn't stop RCEA and our community partners from making significant strides toward building a sustainable energy future for Humboldt County.

Completing the Redwood Coast Airport Microgrid construction was a major milestone for our community, California and the whole clean energy industry. This cutting-edge project will provide robust, renewable energy resilience and enhanced emergency response capabilities for the County airport and the U.S. Coast Guard Air Station and will be replicated across California. The Japanese government and utility industry even sent representatives to learn how to reproduce our innovation in their energy-resilience efforts.

Our Customer Energy Solutions offerings are expanding decarbonization support for building electrification, electric vehicles, energy storage, energy efficiency and solar energy. Our new Community Grid Program will help customers install renewable backup power at their home or business and provide an incentive to be part of a “virtual power plant” to improve the power grid's reliability and cost-effectiveness. Our public agency and critical community facility partners can continue to count on our support to deploy renewable energy resilience and efficiency systems.

Here's what's coming up in 2022:

- Sandrini Solar Project construction begins. RCEA is procuring 100 MW of this project's output, enough renewable electricity to power over 46,000 homes.
- The federal lease auction for offshore wind development areas off the Humboldt coast is expected this fall. Offshore wind planning work will ramp up after the auction.
- Stay tuned for updates on numerous solar energy and battery storage projects.

We offer our sincere thanks to all our customers and organizational partners – we couldn't do this work without your ongoing support and commitment to our community's renewable and resilient energy future.”

*Matthew Marshall*

RCEA Executive Director

## REsources for Your Home or Business

RCEA's Customer Energy Solutions help our customers switch from fossil fuels to clean energy with financial resources, technical support and education.

## REducing Greenhouse Gas Emissions

RCEA offers a big bang for your energy buck when it comes to reducing GHGs. Our electricity customers will be powered by 100% renewable energy by 2030. Their energy dollars are invested right back into Humboldt County through building electrification and vehicle fuel switching programs.

## REsponding to Community Needs

RCEA engages with you, our customers, to set priorities and develop programs that are valuable to you. You've told us we need affordable, clean, non-fossil fuel backup power for prolonged power shutoffs and we hear you. **RCEA is committed to building a greater level of energy resilience for Humboldt County.**



We first started using RE in  
**REpower Humboldt**

in 2013 when RCEA and partner jurisdictions created a comprehensive energy plan for our region. We updated this bold strategic plan with help from the community in 2019.

**REenvisioning  
REnewable energy!**



# Regional Planning and Coordination



“ Coordinating the long-term management of our energy resources is what drove local leaders to form the Redwood Coast Energy Authority in the first place. Nineteen years later the drivers behind RCEA’s goals are the same, albeit intensified as climate change worsens, but the methods are ever evolving. In 2022 we are moving closer to bigger projects that require bigger collaboration: new local generation projects must satisfy diverse community values; associated ancillaries will require growth in new directions; and the unpredictable will test our resolve to work together. I’m confident that our increasingly discerning community is up for these challenges. Onward!”

Aker Offshore Wind’s conceptual illustration of what offshore wind support infrastructure could look like on the Samoa Peninsula in Humboldt Bay Harbor.

## GOALS for Regional Planning and Coordination

- Achieve net-zero greenhouse gas emissions county-wide by 2030.
- By 2030 Humboldt County will be energy-secure and can affordably meet its local energy needs, including during emergencies and disruptions, with local renewable resources.
- Make clean energy efforts a cornerstone of our local economy using strategies that include innovation, research and development, local energy-related business development, and establishing Humboldt Bay as the primary West Coast hub for the offshore wind energy industry.

*Lori Biondini*

Director of Business Planning and Finance

## Equity, Racial Justice & Diversity

RCEA recognizes that access to energy, energy efficiency, freedom from pollution and a place in the renewable energy transition intimately affect economic and personal health outcomes. RCEA strives to more equitably serve everyone in Humboldt County, and to that end, RCEA adopted a Racial Justice Plan and is actively committed to the following:

### Diversity & Inclusion

Seek ways to ensure diversity and inclusion in hiring and promotion, observing the legal limitations on such practices set by state and national statutes.

### Local Native Nations

Increase engagement with local Native nations and work directly with them on a long-term plan for meaningful collaboration.

### Jobs

Add equity and inclusion activities to new job descriptions, future revisions of existing job descriptions, and staff work plans.

### Programs & Projects

Explicitly address inclusion in selection, design, and implementation of RCEA’s programs and projects, and in our public outreach and education materials to ensure that communities and organizations of Indigenous, Black, Latinx, Asian, and other people of color are optimally served.

### Supplier Diversity

RCEA submitted our inaugural Supplier Diversity Report in 2021 which lays out our plans to increase procurement from a more diverse set of suppliers in line with CPUC guidance. This reflects RCEA’s commitment to achieving greater economic and racial equity in Humboldt County through our day-to-day operations.



## COREHub

### Redwood Region Climate & Community Resilience (CORE) Hub

RCEA participated in the creation of the CORE Hub this year, a community organization focused on helping solve the climate emergency. The founding members of the CORE Hub include representatives from the Schatz Energy Research Center; the Blue Lake Rancheria, a sovereign Tribal Nation; the Humboldt Area and Wild Rivers Community Foundation; and RCEA, along with local and state leaders.

**The vision of CORE is that the Redwood Region will become the first proven carbon-sequestering rural area in the U.S. by 2030.**

The COREHub wants to work with our community to build energy resiliency, find innovative solutions that provide the greatest benefits to those who live here, and make sure our voices are heard when energy-related conversations need to be had. CORE Hub hopes to do this through community engagement, by prioritizing equity, and while providing technical assistance.

## Climate Action Plan

Since 2018, RCEA has provided technical and project management support to the County and the seven cities to develop the Humboldt Regional Climate Action Plan (CAP).

The Humboldt Regional Climate Action Plan Environmental Review Draft will soon be released for public review and comment. The CAP is the culmination of a multi-jurisdictional effort led by the County of Humboldt in collaboration with all incorporated cities including Arcata, Blue Lake, Eureka, Ferndale, Fortuna, Rio Dell, and Trinidad.

While subject to change during the public review process, the draft CAP is designed to be implemented between 2022 and 2030 to reduce county-wide greenhouse gas (GHG) emissions to 40% below 1990 levels by 2030 and make progress toward the State's goal of zero net emissions by 2045. Key measures in the CAP that achieve the most local GHG emissions reductions by the year 2030 include replacing gas vehicles with electric vehicles, and replacing gas and propane residential and commercial heating systems with electric systems.

RCEA has launched the 2020 GHG inventory process which will be key to tracking progress toward the CAP's 2030 target.

## The Schatz Energy Research Center

HSU's Schatz Energy Research Center is internationally recognized for its innovation and expertise in renewable energy research and development. They have played a critical role in the creation of our Redwood Coast Airport Microgrid, and are leading an offshore wind research program for the North Coast. Thank you for bringing Humboldt County to the cutting edge of clean energy solutions.



# Community Choice Energy



“It’s an exciting time to be working in the energy field and to be operating RCEA’s Community Choice Energy Program. This spring RCEA will celebrate its fifth anniversary as Humboldt County’s default electric provider, **servicing over 93% of our community’s electricity users**. We were one of the earlier CCE programs to launch in the state, and the first one serving a rural population. This came with many challenges and a steep learning curve for our team, but I’m glad to say this model for electricity service, in which our public agency procures the power and our partner PG&E delivers it, works well for Humboldt.

The community choice energy model has enjoyed amazing growth in California in recent years, with **23 programs now servicing over 11 million customers in more than 200 communities**. With this growth comes new responsibility. The California Public Utilities Commission (CPUC) is now looking to community choice energy program operators like RCEA to help ensure electric reliability as the state makes its needed transition to renewable energy and retires its old fossil fuel and nuclear plants. In coordination with the CPUC and our sister community choice programs, RCEA is contracting with energy project developers locally and across the state to strategically deploy **the right types and sizes of clean energy plants in the right locations** to make sure the lights stay on for all power users, and at affordable prices.

This new regional role for RCEA has not made us lose sight of our local goals. We are continuing to build a portfolio of **local clean energy resources**, with the **solar-powered microgrid at our county airport** coming online in December as our most recent and exciting milestone. We continue to solicit and contract for new projects that will advance RCEA toward its Board-adopted goals of **100% clean and renewable power by 2025, and all of it sourced locally by 2030**.

The next major chapter in our local energy development story will be **offshore wind**. The Humboldt coast has emerged as one of the most promising areas on the West Coast for floating wind platforms, and RCEA is in the final stages of building a **public-private partnership** to ensure local projects **maximize community control and benefits**. Humboldt’s offshore wind potential is much greater than our local electricity appetite, but we are planning for a portion of the resource to make up a sizable slice of the energy portfolio that will serve our local customers.

**Thank you Humboldt County** for putting your faith in RCEA and community choice energy as the way forward to clean, reliable, and affordable electricity for all of us.”

*Richard Engel*

Director of Power Resources

## GOALS for Community Choice Energy

- **By 2025** 100% of RCEA’s power mix will be from solar, wind, biomass, small hydroelectric, geothermal, and existing large hydroelectric.
- **By 2030** Humboldt County will be a net exporter of renewable electricity and RCEA’s power mix will consist of 100% local, net zero carbon emission renewable sources.
- Ensure our customers receive high-quality service related to enrollment, rates, billing, and customer programs.

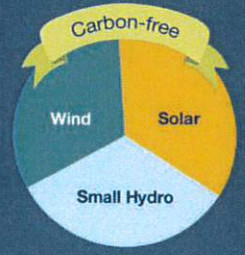


Over **62,000** customers served

Over **93%** of Humboldt County homes and businesses receive electricity from RCEA

**REpower**  
RCEA’s default electricity service is at least **38%** renewable

**REpower+** is RCEA’s **100%** renewable + carbon-free electricity option

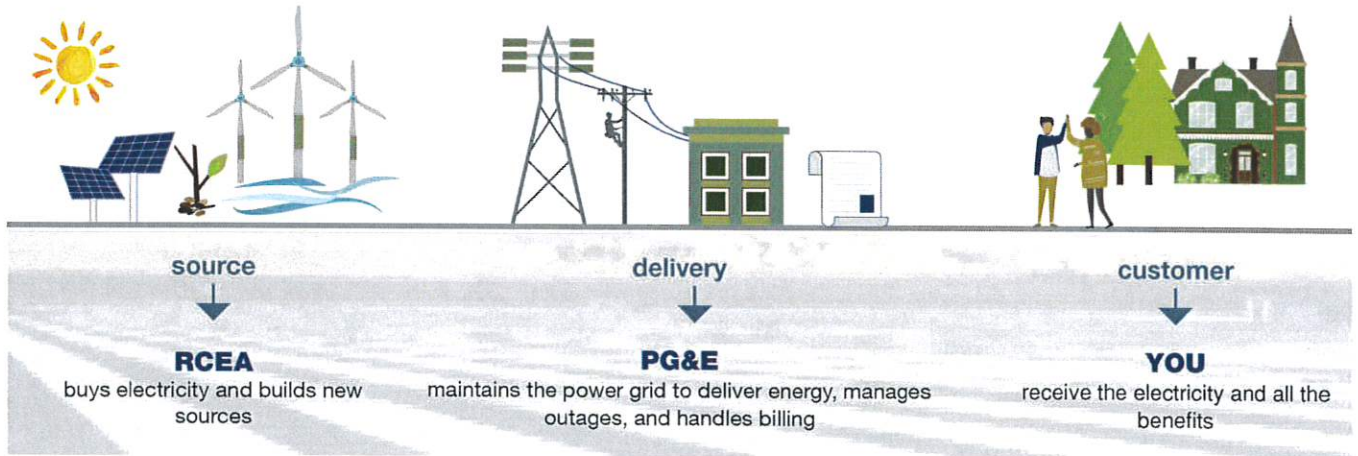




## How Does it Work?

RCEA administers Humboldt County's Community Choice Energy program. The program is designed by your city councils and county supervisors to offer you lower rates on electricity, and to keep the benefits and control right here in the County.

Simply put, we're buying greener, more locally-produced electricity and feeding it into the grid. And we're working in partnership with PG&E, who continues to deliver electricity and maintain the lines as they always have. Community Choice Energy, sometimes known as Community Choice Aggregation, is a great way to bring needed economic development to Humboldt County, while actually costing you less.



## Is RCEA an Extra Charge on Your Bill?

**NO.** RCEA's generation charges replace PG&E's generation charges on your monthly bill. PG&E itemizes how much they *would have* charged you for generation if you were still with them, and then credits that amount back to you on page 3. The credit is more than what RCEA is charging you, so you actually save a bit of money.

• Current PG&E Electric <b>Delivery</b> Charges	▶ \$14.00 - DELIVERY of electricity, not generation
• Redwood Coast Energy Authority Electric <b>Generation</b> Charges	▶ \$7.00 - ELECTRICITY ONLY - not a duplicate charge
• Current <b>Gas</b> Charges	▶ \$22.00 - RCEA is not involved with gas

## What Are the Benefits?



### Economics

RCEA's community choice program costs a little less than you would be paying to PG&E, and all of PG&E's rate discount options remain in place for income-qualifying households. If you're a solar customer, we buy back your excess energy at a better rate.



### Choice

RCEA is accountable to our community and our customers. Whether it's the type of energy we are buying, the cost to the customer, energy options offered, program development, and everything in between, our community is helping make those choices.



### Environment

Community Choice Energy programs are having a big impact on reducing greenhouse gas emissions throughout the state. California is taking bold steps toward addressing climate change, and community choice is one of Humboldt County's most powerful tools in that effort.



### Community

Revenues from community choice programs are reinvested into their communities rather than going to utility company shareholders. That means local jobs, local projects and programs, building local solar arrays, and keeping energy dollars local.

# RCEA's Renewable Energy Resources

Our goal is to continue to utilize the energy expertise that exists on the North Coast to develop sustainable, renewable, local energy sources and jobs. Power procured by RCEA through short- and long-term contracts is resold to Humboldt County ratepayers, and the revenues fuel community-driven energy choices.



## Redwood Coast Airport Microgrid

In December 2021 the Redwood Coast Airport Microgrid reached a major milestone and officially began supplying power to the electric grid. The team is now making minor adjustments and expect the microgrid to be fully operational by March 2022. Congratulations to all that made this possible, including our Community Choice Energy customers!



## Offshore Wind

Plans to bring offshore wind energy to Humboldt County have picked up speed in recent months after years of local discussions. The State of California and the Biden Administration announced that it will focus on what would be the first U.S. commercial-scale wind projects off the Pacific Coast, including in the waters off Humboldt County. The Bureau of Ocean Energy Management is expected to hold a lease auction in late summer 2022. This is a 100-150 MW floating offshore wind project that would be located approximately 25 miles from Eureka.



## Cove Hydroelectric

RCEA has a 15-year contract with Snow Mountain Hydro for its Cove Hydropower Project, an existing, seasonal, run-of-the-river project in Shasta County. Small, low-impact hydro projects like Cove don't impound the creek with a dam like large-scale hydropower projects do.



## Sandrini Solar Project

RCEA completed a 15-year power purchase agreement with EDP Renewables North America for the 100 MW Sandrini Sol 1 Solar Park in Kern County, CA. The project is expected to be operational in 2023 with construction anticipated to start in February 2022.



## Tierra Buena Battery Energy Storage Project

RCEA signed an agreement with Ormat Technologies for 2.5 MW of resource adequacy (purchase of energy resources to ensure enough electricity to serve demand). This project is being constructed in Sutter County, CA, and is on track to be commercially operable in April 2022.



## Feed-In Tariff

RCEA is fostering local renewable energy projects through our Feed-In Tariff, or "FIT" program. New renewable energy projects in Humboldt that are under 1 MW in size can apply to sell their output to RCEA through a 20-year fixed-price contract. So far, six FIT contracts have been signed, each for a 1 MW solar array. The Hatchery Road Solar Project in Blue Lake is anticipated to be commercially-operable in April 2023 and the North Coast Highway Solar Project is anticipated to be commercially-operable in October 2022.



## Biomass

Local biomass power makes up approximately one-fourth of Redwood Coast Energy Authority's current electricity portfolio. We have a contract with Humboldt Sawmill Company in Scotia, which uses waste material from local sawmills to power their plant. We have an extended power purchase agreement with HSC through 2031.

For complete details visit [RedwoodEnergy.org/power-procurement](https://www.RedwoodEnergy.org/power-procurement).





## The Redwood Coast Airport Microgrid

The phrase “Behind the Redwood Curtain” is a clue that business in Humboldt brings special challenges, and building a solar and battery storage system is no exception. Our Executive Director Matthew Marshall says that while we avoided the major blunder highlighted in the movie “The Princess Bride,” (never get involved in a land war in Asia), “But second only to that is building the first ever DC coupled, front-of-the-meter, multi-customer microgrid, in collaboration with a CCA and an investor owned utility, and then use USDA financing for the first CCA project as well as the first microgrid that they’ve ever financed, and they’re doing that at an airport in the middle of a global pandemic.”

The Redwood Coast Airport Microgrid project navigated these perils and started commercial operation in December 2021. During normal operation, the battery system is used to store solar power and then sell it into the wholesale market when it is most valuable. During outages and emergencies, the microgrid provides onsite electricity to sustain air transport activities and support regional emergency response.

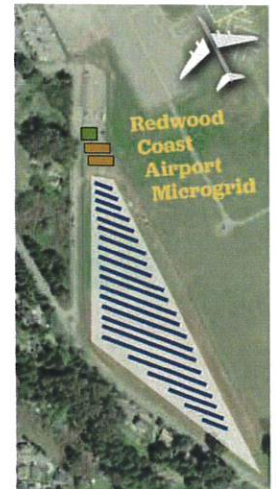
Research and development projects are inherently risky, and this project had its share of adventures. I’m proud that the Redwood Coast Airport Microgrid not only made it to the finish line but starts a path for other projects. North Coast U.S. Rep. Jared Huffman stated, “We’ve got extreme heat, wind-driven wildfires, water shortages and increasingly we’re concerned about the condition of our roads, bridges and airports... This ingenious system will provide a blueprint for other microgrids around the state and around the country which is going to make it easier for other communities to do the same thing we’re doing here in Humboldt County.”

The microgrid also demonstrates the complementary nature of renewable energy and resilience for community planning. “This type of project will hopefully be a catalyst for the transition to clean energy and a more resilient and more robust energy system in the future,” says Matthew Marshall. “There doesn’t need to be a choice between reliability and decarbonization and renewables. We don’t need to compromise resilience. We can actually enhance resilience by transitioning off of fossil fuels to renewables.”

This project is possible because our Community Choice Energy customers support RCEA’s mission to invest our energy dollars locally rather than exporting them to distant shareholders. As each passing season demonstrates what we can expect from climate change, Humboldt shows how to be part of the solution and grow stronger in the process.

*Dana Boudreau*

RCEA Director of Infrastructure Planning and Operations



The microgrid includes roughly:

- seven acres of solar panels
- battery energy storage
- control systems

The battery system stores and releases electricity.

Control system manages routine and emergency operating modes.

Solar panels convert sunlight into electricity.





# Customer Energy Solutions



RCEA's Customer Energy Solutions is a devoted team of **local energy professionals** dedicated to providing Humboldt County customers the best service possible. We will work with you to help identify solutions that best fit your needs and goals, whether it is bill savings, greater resilience, equipment upgrades, decarbonization...or all of the above.

We are constantly working to find **innovative** ways to increase our offerings, emphasizing all sectors and customer types. We are especially excited to highlight some of our work with local **public agencies**. By helping your local school, city office, fire station, or tribal office reduce their energy costs, become more resilient, and move toward greener energy, **we are helping them serve you better.**

This year we are offering more **direct-to-customer equipment rebates** to help you save money and make more efficient choices when you upgrade. We have a multitude of offerings for business customers to **help your bottom line**, including **no-cost consultations** to help create a roadmap toward a more efficient energy future.

Our goal is to **provide the best solution** to the customer, whether that ends up being one of our own programs or rebates, or connecting you with incentives offered by other providers.

Most recently we launched a **Contractor and Vendor Network** to connect customers with local contractors who are familiar with our incentives and can help you complete your project. Visit our webpage to see our current offerings, or better yet, complete our simple **Customer Interest Form** and connect with a trusted Energy Advisor. They are ready to help you choose what works best for you. We look forward to working with you to build a greener, more resilient energy future for Humboldt County.”

*Stephen Kallmann*

Director, Customer Energy Solutions

**Southern Humboldt Unified School District** is one of the many public agencies RCEA's Public Agency Solar Program serves, helping them secure a California Energy Commission loan for South Fork High's solar array project.

- \$1,049,000 loan
- 273 kW (DC) solar installation
- Estimated annual savings = \$89,000
- 100% of site electricity use offset
- 84% of overall site energy use offset



RCEA and Project Manager Mike Avcollie guided and communicated with us through our entire solar project. He gathered all the data and information needed to apply for a Prop 39 California Energy Commission loan, which convinced our school district to proceed with the project. He worked through all the red tape and kept things moving along. It was a rewarding process and I learned a lot.”

*Karl Terrell*

Retired M.O.T. Director and current Project Manager  
Southern Humboldt Unified School District



## GOALS for Customer Energy Solutions

- Make energy efficiency and conservation services available to every household and business in the county by 2030.
- Expand existing energy efficiency, conservation and electrification programs to achieve a 20% reduction in greenhouse gas emissions from use of fossil fuels in buildings by 2030, and reduce emissions from natural gas by 90% by 2050.



## Public Agency Projects

RCEA helps Humboldt County's energy dollars go further by making our local public agencies more efficient and resilient.

City of Arcata  
Arcata Elementary School District  
Pacific Union School District  
Redwood Preparatory Charter School  
Coastal Grove Charter School  
Laurel Tree Charter School  
Six Rivers Charter School  
Redwood Coast Montessori

No. Humboldt Union High School District

City of Eureka  
Eureka City Schools  
Humboldt Transit Authority  
Humboldt Bay Harbor District  
Pacific View Charter School  
County of Humboldt  
USPS

Wiyot Tribe  
Loleta Union Elementary School District

City of Ferndale

Freshwater School  
Cuttan Elementary School District  
Bear River Band of the Rohnerville Rancheria  
Fortuna Union High School District  
City of Rio Dell  
Scotia Community Services District

Mattole Unified School District

South Fork High  
So. Humboldt Unified School District

Yurok Tribe

Orleans Fire Dept.

City of Trinidad  
Westhaven Community Service District  
Arcata/Eureka Airport  
Fieldbrook Elementary School

### Services for our local agencies include:

- Lighting and equipment upgrades
- Energy assessments and reports
- Assistance securing low-cost loans and grants
- Renewable energy projects
- On-site energy storage and resiliency
- Electric vehicle charging infrastructure
- HVAC and refrigeration upgrades
- Building professional training and capacity building
- ...and more



REDWOOD COAST  
**Energy Authority**



## Solar Net Energy Metering

Generate your own electricity



**\$341,870** 2021 - \$182,653  
**Total** paid out to 2020 - \$103,902  
 NEM customers 2019 - \$44,733  
 2018 - \$10,582

RCEA is dedicated to supporting customers who want to generate their own renewable energy. RCEA's solar Net Energy Metering (NEM) customers sell energy to the grid at higher rates, buy energy at lower rates, and may earn credits or cash at the end of the year.

There has been a lot of discussion on NEM changes proposed by the California Public Utilities Commission. Learn more and follow updates on their website:  
[https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5\\_PROCEEDING\\_SELECT:R2008020](https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5_PROCEEDING_SELECT:R2008020)

## Energy Storage Incentives and the Community Grid Program

RCEA partnered with **Swell Energy** to offer solar + battery customers extra savings by connecting to a "virtual power plant." Earn a \$1000 gift card just for signing up.

Learn more about how you can build your own resilience.

[swellenergy.com/rcea](http://swellenergy.com/rcea)

## Contractor & Vendor Network

RCEA is developing a resource for our customers to find approved contractors and vendors that can **help you with your energy projects.** **CONTRACTORS** - you can apply to join the network through a simple application on our website.

[RedwoodEnergy.org/contracting](http://RedwoodEnergy.org/contracting)

## Equipment Rebates

For residential high-efficiency **heat pump water heaters** and **space heating** systems

Bonus incentives for smart controls and electric **service panel** upgrades

Contact us to learn about additional equipment rebates.

## No-Cost Residential Energy Efficiency Services

- Energy Advisor consultations
- Energy Assessments over the phone
- Reports with custom recommendations for your home
- Energy Efficiency Kits

Efficiency Kits valued up to \$75, customized for your home



## Thank you!

to nearly 1000 RCEA residential customers who took advantage of our energy services in 2021.

You received a home energy consultation, bought an electric car and received our EV rebate, took advantage of our charging equipment rebate and are topping up your EV at home, joined RCEA in generating your own electricity or are connecting your battery to our virtual power plant with Swell Energy. And thank you to all the contractors and vendors who joined RCEA's network.

## Get Help with Your Energy Bills

Take advantage of options to reduce your energy consumption, lower your costs, and get help paying your energy bills. Visit our website for details.



## Drive an Electric Vehicle and Charge at Home

Take advantage of RCEA EV REBATES

Apply for RCEA's **EV Rebate** and the California Clean Vehicle Rebate Project (CVRP) rebate. RCEA customers are eligible for a rebate totaling 50% of whatever incentive amount they received from the CVRP.

The **charging equipment rebate** is for up to \$500 per residential customer for charging stations listed on our Approved Products List, not to exceed 50% of the total charging station hardware costs.

Details can be found at

[Redwoodenergy.org/rcea-rebates](http://Redwoodenergy.org/rcea-rebates)



## Coming Soon RCEA Commercial and Residential Rebate Catalogs

Watch our website for details



## Residential Services

**Cathy Chandler-Klein, Michelle Weston, Wesley Caddell, and Caroline Isaacs** are a few of RCEA's customers who are working towards making their homes more energy efficient by participating in RCEA's **Customer Energy Solutions** programs. By switching to cleaner fuel sources like electricity, and utilizing the RCEA services featured on the left, customers like them can help reduce greenhouse gas emissions and save on energy costs.

“ We are lucky to have agencies like RCEA help people understand how to make the changes necessary for us all to live in a more just and sustainable world. As a customer and member of your community, I am grateful for your support and that you help others navigate the best ways to make positive changes. Having a report like this really helps me make the necessary improvements. Thank you for all your work that you do!”

*Wesley Caddell*

For any of RCEA's services,  
start by filling out a simple  
**CUSTOMER INTEREST FORM**  
[www.RedwoodEnergy.org](http://www.RedwoodEnergy.org)  
or call us at (707) 269-1700.



## Commercial and Non-Residential Services

RCEA has launched a variety of new energy efficiency and electrification programs to provide customized solutions for **local businesses**. Whether RCEA has served your business in the past or we're meeting for the first time, our Energy Advisors will work with you to find projects that fit your needs and budget for exterior and interior lighting, refrigeration and HVAC, equipment upgrades and more. Contact us before you get started on projects so we can find rebates to reduce your costs.



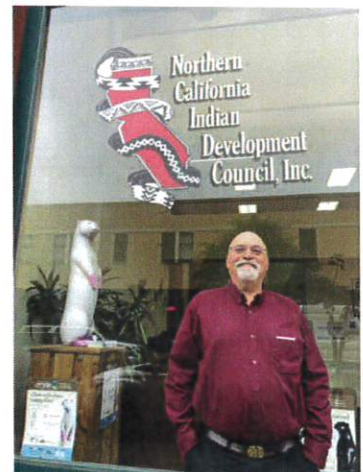
“ Saving money is an important part of management decisions but the environmental and ecological desire from Indian people is to preserve the earth and maintain balance of the earth. There's a real cultural affinity towards the kind of contemporary technology we are using to cut energy costs, a match between the moral values of traditional Indian culture and what we're able to do with this rebate program.”

RCEA had a great team. They did the install themselves. Derek organized a crew and they worked with each individual retailer to find the times that they could come in, working around the retailer's schedule. They were very respectful working around the merchandise and fixtures. There were no issues or breakage—it was very clean, efficient and very professional. That made a big difference having an install done that way.”

*Greg Gehr*

Northern California Indian Development Council  
Director and Carson Block Manager

- Entire Carson Block Building in Old Town Eureka
- About 70% of the total project expense was funded through RCEA
- Payback = less than 2 years
- Total of 382 lamps installed



**For a limited time, RCEA will donate \$100 to Food for People on behalf of RCEA customers with a business account that sign up for an energy consultation.**



# Advanced Fuels and Transportation



“ In 2021 electric vehicles encountered major supply chain issues, a hot used car market, and high gas prices, but 2022 is shaping up to be a banner year for EVs. Auto makers still struggle with material shortages and shipping delays, and with limited new car inventory and uncertainties of the pandemic, used vehicles become a natural choice for many drivers. We saw used EV inventory drop and prices rise, so expect to pay a premium in early 2022 until supply catches up with demand. Persistent high gas prices also create strong demand for EVs and their low operating costs, giving EV drivers another reason to be thankful when they drive by gas stations. We’re still waiting to see what federal spending looks like in 2022, but the Build Back Better plan looks promising for EV incentives and infrastructure.

In 2022 we’ll see more EV body styles enter the market. Pickup trucks are a best-selling US vehicle, and in 2021 Ford announced their electric truck contender, the F-150 Lightning. With more than 200,000 reservations this could be the vehicle that brings EVs to mainstream America. Electric cross-overs and SUV options are also expanding, filling in the top four preferred vehicle types in the US and giving car shoppers plenty of electrified options.

As said by Chris Harto, Senior Policy Analyst at Consumer Reports, “There’s all of this pent-up demand from consumers for EVs at a reasonable price, at a reasonable range, in segments they want, and they haven’t had that option, up until really this year.” There’s a good chance 2022 will be the year that EVs really take off.”

*Dana Boudreau*

Director of Infrastructure Planning and Operations

## GOALS for Advanced Transportation

- Accelerate the adoption of electric vehicles, with a target of over 6,000 EVs in Humboldt County by 2025 and 22,000 by 2030. Develop public, workplace, and residential EV charging infrastructure necessary to support these targets.
- Work with other local public entities to reduce vehicle miles traveled in Humboldt County by at least 25% by 2030.
- By 2030 reduce greenhouse gas emissions from transportation by over 65% and eliminate the use of fossil fuels by 2050.



The RCEA EV Charging Network welcomes the Arcata Community Center as our latest site with eight ports. The site serves community events, downtown access, and nearby apartment dwellers who are unable to install their own chargers. We’ll open four more charging ports at the regional airport during spring 2022, with a few more sites later this year.



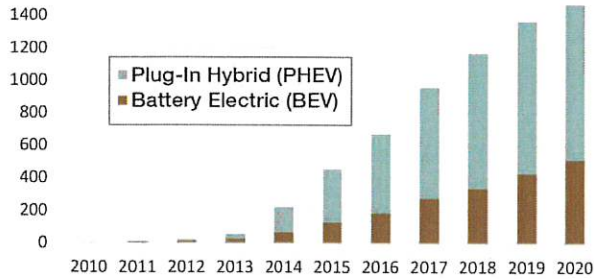
“ A bumper car incident forced me out of my last petrol beast into a new plug-in hybrid electric vehicle. I’m still using petrol, but to the tune of 500 miles per tank. This electric fuel option has showed me that I CAN actually achieve that kind of mileage with the current resources at hand. What sweetened the deal, besides a number of rebates, was the assistance provided by RCEA. They not only provided one of those rebates, but the hope for a better future with the programs and education they provide on how this fossil fuel-driven American society can transition to more sustainable systems. Thank you, RCEA!”

*Stacy Becker*

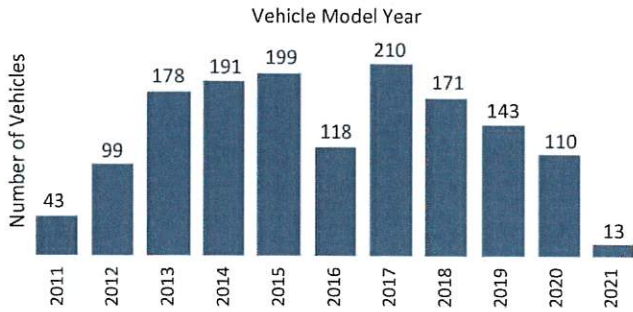
RCEA EV Rebate Recipient



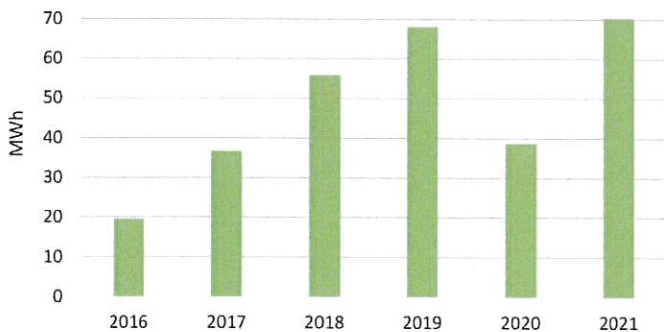
Electric Vehicle Totals  
in Humboldt County



Electric Vehicle Model Years  
in Humboldt County



RCEA Charging Network Energy Usage



Data is from the California Energy Commission. Please visit their website for more information:

<https://www.energy.ca.gov/data-reports/energy-insights/zero-emission-vehicle-and-charger-statistics>

**RCEA Charging Network**

RCEA is proud to operate many of the LEVEL 2 charging stations in Humboldt County. All 14 locations (52 ports on 27 stations) are part of the ChargePoint network and can also be found on the PlugShare app.

**Fast Charging Stations**

The State of California is investing heavily in the expansion of fast-charge infrastructure for electric vehicles. If you own an EV with a range of 150 miles or more, you can now complete trips from Humboldt County to Sacramento, the Bay Area, and beyond.

Locations marked on the map include: Smith River, Crescent City, Klamath, Trinidad, McKinleyville, Arcata, Eureka, Ferndale, Hoopa, Blue Lake, Willow Creek, Loleta, Fortuna, Rio Dell, Miranda, Garberville, Leggett, Laytonville, Willits, Ukiah, Cloverdale, and Santa Rosa.



**“If you want to go far, go together.”**



Capt. Mark Hiigel (US Coast Guard, Humboldt Bay Sector Commander) speaking at the Redwood Coast Airport Microgrid’s “Take Off” event in July about how critical it is to have energy resilience when it comes to search and rescue missions and emergency services on the North Coast.



While representatives from Principle Power, Ocean Winds and Aker look on, Jeff Hunerlach from Operating Engineers Local 3 and State Building and Construction Trades Council of CA President Robbie Hunter assemble a floating wind turbine model.

Constructing new energy projects to provide power and jobs for Humboldt County requires innovation, new partnership models, and interagency

### COLLABORATION

We will continue to partner with local community stakeholders and customers to design and build customized energy resilience solutions for Humboldt County.



Interior Secretary Deb Haaland met with local leaders in August to discuss a range of issues, including the need to build out a clean energy economy and create jobs by spurring offshore wind development. Photo courtesy of the North Coast Journal.



Humboldt County Aviation Director Cody Roggatz, Schatz Energy Research Center Founding Director Peter Lehman, RCEA Executive Director Matthew Marshall, and RCEA Infrastructure Planning & Operations Director Dana Boudreau.



**REDWOOD COAST Energy Authority**



**www.RedwoodEnergy.org**  
(707) 269-1700  
info@RedwoodEnergy.org  
633 3rd St., Eureka CA 95501





Redwood Coast Energy Authority  
 633 3<sup>rd</sup> Street, Eureka, CA 95501  
 Phone: (707) 269-1700 Toll-Free (800) 931-7232 Fax: (707) 269-1777  
 E-mail: [info@redwoodenergy.org](mailto:info@redwoodenergy.org) Web: [www.redwoodenergy.org](http://www.redwoodenergy.org)

## **BOARD OF DIRECTORS MEETING AGENDA**

January 27, 2022 -Thursday, 3:30 p.m.

### **COVID-19 NOTICE**

#### **RCEA AND HUMBOLDT BAY MUNICIPAL WATER DISTRICT OFFICES WILL NOT BE OPEN TO THE PUBLIC FOR THIS MEETING**

Pursuant to the AB 361 Brown Act open public meeting law revisions signed into law on September 17, 2021, and Governor Newsom's State of Emergency Proclamation of March 4, 2020, this meeting will not be convened in a physical location. Board members will participate in the meeting via an online Zoom video conference.

**To listen to the meeting by phone**, call (669) 900-6833 or (253) 215-8782. Enter webinar ID: 819 7236 8051. **To watch the meeting online**, join the Zoom webinar at <https://us02web.zoom.us/j/81972368051>.

**You may submit written public comment** by email to [PublicComment@redwoodenergy.org](mailto:PublicComment@redwoodenergy.org). Please identify the agenda item number in the subject line. Comments will be included in the meeting record but not read aloud during the meeting.

**To make a comment during the public comment periods**, raise your hand in the online Zoom webinar, or press star (\*) 9 on your phone to raise your hand. You will continue to hear the meeting while you wait. When it is your turn to speak, a staff member will unmute your phone or computer. You will have 3 minutes to speak.

While downloading the Zoom application may provide a better meeting experience, Zoom does not need to be installed on your computer to participate. After clicking the webinar link above, click "start from your browser."

In compliance with the Americans with Disabilities Act, any member of the public needing special accommodation to participate in this meeting should call (707) 269-1700 or email [Ltaketa@redwoodenergy.org](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.

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. BOARD APPOINTMENTS

#### 1.1. Election of Officers and Community Advisory Committee

Select the RCEA Board Chair and Vice Chair to serve through January 2023 and authorize them as signers on RCEA bank accounts.

Appoint a Board Liaison, and an alternate liaison if desired, to the Community Advisory Committee to serve through January 2023.

#### 1.2. Board Subcommittee Member Assignment

Determine whether the standing Finance Subcommittee should continue its work.

Appoint up to four Directors to serve on the standing Finance Subcommittee for one-year terms ending on the first regular Board meeting of 2023.

Recruit up to three Director-volunteers to review and nominate Community Advisory Committee at-large seat applicants to fill four at-large CAC seats with terms ending April 9, 2024.

### 2. REPORTS FROM MEMBER ENTITIES

### 3. ORAL COMMUNICATIONS

This time is provided for people to address the Board on matters not on the agenda. At the conclusion of all oral communications, the Board may respond to statements. Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

### 4. CONSENT CALENDAR

All matters on the Consent Calendar are considered to be routine by the Board and are enacted in one motion. There is no separate discussion of any of these items. If discussion is required, that item is removed from the Consent Calendar and considered separately. At the end of the reading of the Consent Calendar, Board members or members of the public can request that an item be removed for separate discussion.

4.1 Approve Minutes of December 16, 2021, Board Meeting.

4.2 Approve Disbursements Report.

4.3 Accept Financial Reports.

4.4 Authorize Extension of RCEA Resolution 2021-7 Ratifying Governor Newsom's March 4, 2021, State of Emergency Proclamation and Authorizing Remote Teleconference Meetings of RCEA's Legislative Bodies for the Period January 28, 2022, through February 26, 2022, Pursuant to Brown Act Revisions.

4.5 Approve the 2022 RCEA Board of Directors Meeting Calendar.

4.6 Approve Reinstatement of the Late Payment Notice Policy for the RCEA CCE Program, Aligning with PG&E's Resumption of Account Shutoffs for Customer Non-Payment, Starting in Q1 2022.

4.7 Approve Amendment No. 1 to Agreement Between Redwood Coast Energy Authority and Calpine Energy Solutions, LLC Providing RCEA Staff with Access to the Recurve Analytics Platform, and Authorize the Executive Director to Execute the Amendment and All Associated Documents.



- 4.8 Approve Amendment No. 7 to Agreement for Employment of Executive Director with Matthew Marshall.

## 5. REMOVED FROM CONSENT CALENDAR ITEMS

Items removed from the Consent Calendar will be heard under this section.

## COMMUNITY CHOICE ENERGY (CCE) BUSINESS (Confirm CCE Quorum)

Items under this section of the agenda relate to CCE-specific business matters that fall under RCEA's CCE voting provisions, with only CCE-participating jurisdictions voting on these matters with weighted voting as established in the RCEA joint powers agreement.

## 6. OLD CCE BUSINESS

- 6.1. Mid-Term Reliability Solicitation Shortlist

Approve the proposed shortlist for the RFQ-RFO for Long-Term Reliability Resources and authorize staff to commence negotiations with the shortlisted parties.

Authorize the Executive Director to replace individual projects on the shortlist with other offers received under the RFO Track if the price or availability of the shortlisted projects materially changes prior to the February RCEA Board meeting and commence negotiations with the new offeror.

Authorize the Executive Director to shortlist a forthcoming offer from EDP Renewables for Sandrini energy storage and additional generating capacity and commence negotiations, if the offer meets RCEA's eligibility criteria stated in its RFQ-RFO and is price-competitive with the other short-listed offers.

- 6.2. Energy Risk Management Quarterly Report

Accept Energy Risk Management Quarterly Report.

## 7. NEW CCE BUSINESS – None.

## END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS

## 8. OLD BUSINESS

- 8.1. Mitigation of 2022 Cashflow Constraints

For the proposed Blue Lake Rancheria loan:

Approve \$2,000,000 unsecured loan from the Blue Lake Rancheria with 8% interest rate and 7-month term and authorize the Executive Director to execute any associated documents and agreements.

For the proposed transaction with MCE:

1) Authorize the sale of up to \$5 million of energy and/or renewable energy credits from existing RCEA long-term power purchase agreements to MCE (and/or another buyer) with a delivery term not to exceed 10 years and authorize Executive Director to execute any associated documents and agreements; and

2) Authorize the Executive Director and General Counsel to negotiate and execute transaction terms and/or a supplemental agreement enabling RCEA to buy back at the same price (not including any agreed-to transaction or processing fees) any undelivered energy and/or renewable energy credits prior to or during the delivery term.

**8.2. Rural Regional Energy Network Business Plan**

Adopt Resolution 2022-01: A Resolution of the Board of Directors of the Redwood Coast Energy Authority Authorizing Submission of a Business Plan to the California Public Utility Commission for the Formation of a Rural Regional Energy Network.

Authorize Executive Director to execute, after final review and approval by RCEA Legal Counsel, the Memorandum of Understanding between Mendocino Council of Governments, Lake Area Planning Council, and Redwood Coast Energy Authority to provide Regional Energy Network programs, and all applicable documents.

*NOTE: The memorandum of understanding between Lake Area Planning Council, Mendocino Council of Governments and Redwood Coast Energy Authority was not available at the time of agenda and packet publication. This document will be made available by 5 p.m. on Wednesday, January 26, 2022, at [www.redwoodenergy.org](http://www.redwoodenergy.org).*

**9. NEW BUSINESS**

**9.1. Net Energy Metering Successor Tariff Updates**

Discuss, and potentially direct, RCEA action on next steps regarding advocacy in forthcoming NEM successor tariff policy development.

**10. STAFF REPORTS**

**10.1. Report from Executive Director Matthew Marshall**

**a. 2021-2022 Community REport**

**11. FUTURE AGENDA ITEMS**

Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

**12. ADJOURNMENT**

---

**NEXT REGULAR MEETING**

Thursday, February 24, 2022, 3:30 p.m.

This meeting will be an online teleconference following AB 361 Brown Act open public meeting law revisions of September 17, 2021, and RCEA Board Resolution 2021-7.





## **BOARD OF DIRECTORS MEETING DRAFT MINUTES**

**December 16, 2021 - Thursday, 3:30 p.m.**

Notice of this meeting was posted on December 12, 2021. Chair Sheri Woo called a regular meeting of the Board of Directors of the Redwood Coast Energy Authority to order on the above date at 3:32 p.m., stating that the teleconference meeting was being conducted pursuant to the AB 361 Brown Act open public meeting law revisions signed into law on September 16, 2021, and Governor Newsom's State of Emergency Proclamation of March 4, 2020. Chair Woo stated that the posted agenda contained public teleconference meeting participation instructions.

PRESENT: Vice Chair Stephen Avis, Chris Curran, David Grover, Mike Losey, Sarah Schaefer, Frank Wilson, Chair Sheri Woo. ABSENT: Scott Bauer, Mike Wilson. STAFF AND OTHERS PRESENT: Power Resources Director Richard Engel; Blue Lake Rancheria Sustainability and Government Affairs Director Jana Ganion; Humboldt Area Foundation Health and Nonprofit Resources Program Manager Amy Jester; Executive Director Matthew Marshall; Customer Service Coordinator Summer Sanderson; Community Strategies Manager Nancy Stephenson; Clerk of the Board Lori Taketa, Deputy Executive Director Eileen Verbeck.

There were no reports from member entities nor comments from the public on non-agenda items. Executive Director Marshall introduced Deputy Executive Director Eileen Verbeck to the Board members, who welcomed her to RCEA. Chair Woo closed the non-agenda item public comment period.

### **CONSENT CALENDAR**

- 3.1 Approve Minutes of November 18, 2021, Board Meeting.
- 3.2 Approve Disbursements Report.
- 3.3 Accept Financial Reports.
- 3.4 Authorize Extension of RCEA Resolution 2021-7 Ratifying Governor Newsom's March 4, 2021, State of Emergency Proclamation and Authorizing Remote Teleconference Meetings of RCEA's Legislative Bodies for the Period December 29, 2021, through January 27, 2022, Pursuant to Brown Act Revisions.
- 3.5 RCEA Public Agency Coalition Enterprise (PACE) Board of Directors Representative Amendment
  - 3.5.1 Repeal Resolution 2020-7 Designating the Official Representative and Alternate Representative to the PACE JPA Board of Directors
  - 3.5.2 Adopt Resolution 2021-8 - Designation of the Official Representative and Alternate Representative to the PACE JPA Board of Directors, and
  - 3.5.3 Authorize the Deputy Executive Director to Sign All Applicable Documents.

- 3.6 Approve Resolution 2021-9 Authorizing the RCEA Deputy Executive Director Access to Criminal History Information for Personnel Administration Purposes.
- 3.7 Adopt Resolution 2021-10 Updating Financial Management Policy to Reflect Staff Position and Duty Changes.

Director Woo requested that item 3.1, the November 2021 minutes, be removed from the consent calendar.

**M/S: Grover, Losey: Approve consent calendar items 3.2 through 3.7.**

**The motion passed with a unanimous roll call vote. Ayes: Avis, Curran, Grover, Losey, Schaefer, F. Wilson, Woo. Noes: None. Absent: Bauer, M. Wilson. Abstain: None.**

## ITEMS REMOVED FROM CONSENT CALENDAR

Chair Woo requested that the spelling of Morro Bay be corrected in the Executive Director's update section of the November 2021 minutes.

There was no public comment on this item and no member of the public requested removal of items from the consent calendar. Chair Woo closed the public comment period.

**M/S: Avis, Grover: Approve consent calendar item 3.1 Minutes of November 18, 2021, Board Meeting with the requested correction.**

**The motion passed with a unanimous roll call vote. Ayes: Avis, Curran, Grover, Losey, Schaefer, F. Wilson, Woo. Noes: None. Absent: Bauer, M. Wilson. Abstain: None.**

## NEW BUSINESS

- 5.1 Humboldt Area Foundation CORE Hub presentation by Amy Jester, Humboldt Area Foundation Health and Nonprofit Resources Program Manager, and Jana Ganion, Blue Lake Rancheria Sustainability and Government Affairs Director

Ms. Ganion and Ms. Jester introduced the Humboldt Area Foundation and Wild Rivers Community Foundation's Redwood Region Climate and Community Resilience (CORE) Hub project. The CORE Hub's goal is for Humboldt County to be the first proven carbon sequestering rural and tribal area in the United States.

Ms. Ganion described RCEA as being a positive catalyst for affordable clean energy in the region, and listed RCEA-led projects in which the Blue Lake Rancheria has participated, including distributed generation development, installing electric vehicle charging infrastructure, developing low-carbon microgrids, and the demand-response incentive pilot program.

Ms. Ganion presented CORE Hub's community education materials. She outlined current global and regional climate change impacts; Humboldt County's dependence on imported natural gas—supplied to the region through one 10" pipeline—for the actual electrons used locally; Humboldt County's tenuous connection to the greater electrical grid—through a transmission and redundant line running through wildfire-prone areas—which cannot import all the power needed regionally; and sea-level rise's projected impacts on Humboldt County's



natural gas power plant, nuclear waste storage area and wastewater treatment plants. Ms. Ganion emphasized the regional need for equitable, decarbonized resilience by 2030, the timeframe current science identifies for humans to mitigate the climate disaster. Ms. Ganion pointed out that being at the forefront of this work improves the region's chances of accessing resources to reduce greenhouse gas emissions and become more resilient at the same time. Federal and state funding programs are seeking to support regions that are organized and collaborating across governments, agencies and community groups. The CORE Hub is a way to coordinate regional collaboration and provide information to support knowledgeable decision making, without competing with or duplicating existing efforts.

The directors discussed ways the CORE Hub could support regional offshore wind energy development, how the program is being received by the community so far, and outreach to access state resources.

Chair Woo invited public comment. There were no comments from the public on non-agenda items. Chair Woo closed the public comment period.

## **5.2 Community Advisory Committee Proposed 2022 Work Goals**

Executive Director Marshall presented the Community Advisory Committee's proposed 2022 work goals. Board members supported all proposed goals but expressed concern about commenting on environmental impact reports (EIR) for major projects due to staff workload concerns and because the task could require large amounts of CAC volunteer time. It was suggested that EIR comments be submitted through different jurisdiction governing bodies. The directors asked that the goal be removed from the list or reworked. Possible adjustments to the goal included alerting the Board to projects on which to comment and suggesting comments on major projects for 2022 only with clear guidelines based on staff time, staff's identification of projects appropriate for RCEA comment and Board approval. Chair Woo offered to communicate the Board's wishes to the CAC. Vice Chair Avis offered to review initial study questions to identify those pertaining to RCEA's scope.

Chair Woo invited public comment. There were no comments from the public on non-agenda items. Chair Woo closed the public comment period.

Chair Woo stated there was no CCE business, nor old business to discuss.

## **STAFF REPORTS**

### **10.1. Update from Executive Director (Information only)**

Executive Director Marshall stated that offshore wind development activity will increase in 2022 but there was nothing to report this month. Staff is working with The Energy Authority (TEA) to formulate a bridge solution to a projected cash shortfall in February and March 2022 resulting from delayed power charge indifference adjustment and PG&E rate changes. A potential agreement with MCE to guarantee the Sandrini Solar Project's \$4 million security deposit for six months combined with a cash loan from TEA may adequately address the problem.

Director Grover thanked Executive Director Marshall for keeping RCEA initiatives moving forward despite pandemic challenges. Community Strategies Manager Stephenson described

RCEA's end-of-year promotion where \$100 will be donated to Food for People for each business signing up for an energy saving assessment. No member of the public responded to Chair Woo's invitation for comment.

### **FUTURE AGENDA ITEMS**

There were no requests for future agenda items from the directors or the public.

### **CLOSED SESSION**

Chair Woo invited public comment on agenda item 12.1 – Public Employee Performance Evaluation, pursuant to Government Code Section 54957(b)(1): Executive Director.

There was no public comment on this item. The Board adjourned to closed session at 5:05 p.m. and reconvened in open session at 6:13 p.m.

RCEA General Counsel Nancy Diamond stated that the Board had successfully concluded its annual evaluation of Executive Director Marshall and will consider providing a merit salary increase at its meeting in January.

The meeting was adjourned at 6:13 p.m.

Lori Taketa  
Clerk of the Board





Redwood Region Economic Development Commission

**REDWOOD REGION ECONOMIC DEVELOPMENT COMMISSION  
Regular Meeting of the Board of Directors**

Via ZOOM <https://us02web.zoom.us/j/84500614643?pwd=NIFDMkhpR3F1YjlrTDRTT2NMam1mUT09>  
or by phone call in +1 669 900 6833  
Meeting ID: 845 0061 4643 / Passcode: 580438

**January 24, 2022 at 6:30 pm PT**

**AGENDA**

- I. **Call to Order**
- II. **Approval of Agenda**
  - A. Approval of Agenda for January 24, 2022
- III. **Public Input for non-agenda items**
- IV. **Consent Calendar**
  - A. Approval of Minutes of the Board of Directors Meeting: October 25, 2021
  - B. Acceptance of Agency-wide Financial Reports: 1<sup>st</sup> Quarter FY 22 & November 2021
- V. **Program** – Natalynne DeLapp, Executive Director, Humboldt County Growers Alliance  
<https://www.hcga.co/> – *Discussion of State & Local Taxation on Cannabis Businesses, and Current State of the Industry*
- VI. **New Business**
  - A. Request for Amendment to FY 22 RREDC Budget
  - B. Adoption of 2022 Regular Meeting Schedule
  - C. Election of Board Officers and Executive Committee Members
  - D. Election/Reappointment of Board Member to Loan Committee
- VII. **Old Business**
  - A. Design/Scheduling Board Strategic Planning
- VIII. **Reports – No Action Required**
  - A. Executive Director's Report
  - B. Loan Portfolio Report: November 30, 2021
- 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.*