

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



**Agenda for Regular Meeting of the Board of Directors
April 14, 2022
Meeting Start Time: 9:00 am**

District Mission

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

COVID-19 Notice

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

Members of the public may join the meeting online at:

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

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

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

How to Submit Public Comment: Members of the public may provide public 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.

Time Set Items:	8.2	McNamara & Peepe	9:15 am
	8.3	2020 Census & Redistricting Public Hearing	9:30 am
	10.1	Engineering	11:00 am
	8.7	Closed Session – Anticipated Litigation (VDI)	2:00 pm
	8.8	Closed Session – Critical Infrastructure	2:30 pm
	8.9	Closed Session – Anticipated Litigation (DTSC)	3:00 pm

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 March 10, 2022 Regular Meeting* - discuss and possibly approve
- 5.2 Minutes of the March 22, 2022 Special 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 – N)* - discuss
- 6.2 CalFire Press Release – Fuels Reduction at Ruth Lake* - discuss

7. **CORRESPONDENCE**

- 7.1 Extension Request for 2021 Dam Safety Surveillance and Monitoring Report* - discuss
- 7.2 Support for Klamath Region Community Air Monitoring Network Project* - discuss
- 7.3 2021 HBMWD Draft Consumer Confidence Report* - discuss
- 7.4 Opposition Unless Amended Letter for SB 1157* - discuss
- 7.5 Opposition Letter for AB 1717* - discuss
- 7.6 DSOD Fee Schedule Notification* - discuss
- 7.7 Fuel Reduction Letter to Lease Lot Holders* - discuss
- 7.8 H. Benzonelli Letter regarding Appointment to LAFCo* - discuss
- 7.9 ARPA Request to Board of Supervisors* - discuss

8. **CONTINUING BUSINESS**

- 8.1 Water Resource Planning - status report on water use options under consideration*
 - a. Local Sales
 - i. Nordic Aquafarms* – discuss
 - ii. Trinidad Rancheria Mainline Extension - discuss
 - b. Transport – no update
 - c. Instream Flow* – discuss
- 8.2 McNamara & Peepe* - discuss **(Time Set 9:15 am)**
- 8.3 2020 Census & Redistricting Public Hearing and Resolution 2022-05* - discuss and possibly approve **(Time Set 9:30 am)**
- 8.4 Boldway Lot Line Adjustment* - discuss
- 8.5 Samoa Peninsula Clean CA Local Grant Program* - discuss
- 8.6 Joint Board Meeting with Ruth Lake CSD Draft Agenda (June 17, 2022)* - discuss
- 8.7 **CLOSED SESSION** - Conference with District Legal Counsel Ryan Plotz – Anticipated Litigation: Significant exposure to litigation pursuant to paragraph (2) or (3) of subdivision (d) of Section 54956.9 (VDI) **(Time Set 2:00 pm)**
- 8.8 **CLOSED SESSION** – Conference with District Legal Counsel Ryan Plotz – Critical Infrastructure: Threat to Public Services or Facilities pursuant to Gov. Code 54957 **(Time Set 2:30)**
- 8.9 **CLOSED SESSION** - Conference with District Special Counsel – Anticipated Litigation: Initiation of litigation pursuant to paragraph (4) of subdivision (d) of Section 54956.9 (DTSC) **(Time Set 3:00 pm)**

9. **NEW BUSINESS**

- 9.1 Tsunami Drill and Director Go Bag Review – discuss
- 9.2 Succession Planning Introduction* - discuss

10. **REPORTS (from STAFF)**

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

- a. 12 kV Switchgear Relocation (\$858,332 District match – Status Report
 - i. Contractor Pay Request for February/March* - discuss
 - ii. IPA Shipping Change Order Request Letter* - discuss
- b. TRF Generator Project (\$517,819 District match) – Status Report
- c. Status report re: other engineering work in progress

10.2 Financial

- a. March 2022 Financial Statement & Vendor Detail Report* – discuss and possibly approve
- b. Project Budget Meeting and BBQ Dates – discuss
- c. Unum Life Insurance Analysis* - discuss

10.3 Operations

- a. Monthly report on projects and operations* – discuss
- b. Reinstate Previously Surplused Property* - discuss and possibly approve

11. MANAGEMENT

- 11.1 Healthy Forest Grant Program* – status update
- 11.2 Resolution 2022-06 – Opposition to Initiative 21-0042A1* - discuss and possibly approve
- 11.3 Cal Poly HSU Senior Capstone Projects* - discuss

12. DIRECTOR REPORTS & DISCUSSION

12.1 General - comments or reports from Directors

12.2 ACWA

- a. ACWA Committee Update – report out

12.3 ACWA – JPIA

- a. Presentation of ACWA-JPIA refund check - discuss
- b. Liability, Property, and Workers' Compensation Programs Risk Assessment* - discuss

12.4 Organizations on which HBMWD Serves

- a. RCEA News and Updates* - discuss
- b. RREDC* - discuss

ADJOURNMENT

ADA compliance statement: In compliance with the Americans with Disability Act, if you need special assistance to participate in this meeting, please contact the District office at (707) 443-5018. Notification 48 hours prior to the meeting will enable the District to make reasonable arrangements to ensure accessibility to this meeting. (Posted and mailed April 8, 2022.)



HUMBOLDT BAY MUNICIPAL WATER DISTRICT

Board of Directors Meeting

April 2022



Reforestation at Ruth

MINUTES

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



**Minutes for Regular Meeting of the Board of Directors
March 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=MjZldGxRa08wZ0FWOHJrUjNlZnFLQT09>

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Time Set Items:	8.2	McNamara & Peepe	9:15 am
	8.3	2020 Census & Redistricting	9:30 am
	9.1	Supervisor Presentation on Crane Operations	10:00 am
	10.1	Engineering	11:00 am
	8.7	Closed Session – Anticipated Litigation (DTSC)	11:30 am
	10.2a	OPEB Presentation	1:30 pm
	10.2b	February Financials	2:15 pm
	8.8	Public Employee Performance Evaluation	3:30 pm

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

1. ROLL CALL

President Woo called the meeting to order at 8:59 am. Director Rupp conducted the roll call. Directors Fuller, Latt, Lindberg, Rupp, and Woo were present. General Manager (GM) John Friedenbach, Superintendent Dale Davidsen, Business Manager Chris Harris, and Board Secretary Fiona Wilson were present. District Operations Supervisor Ryan Chairez, District Counsel Ryan Plotz, Nathan Stevens of GHD, and members of the public Jennifer Kalt of Humboldt Baykeeper, Jennifer Boak, Linda Miller, Joseph Wilhelm, caller #3044, and an unidentified Galaxy Tab E user were present for a portion of the meeting.

2. FLAG SALUTE

President Woo led the flag salute.

3. ACCEPT AGENDA

GM Friedenbach notified the Board that the District is awaiting survey data for item 8.6. On motion by Director Lindberg, seconded by Director Rupp, the Board voted 5-0 by roll call vote to strike item 8.6 from the agenda and accept the agenda as amended.

4. PUBLIC COMMENT

Lease lot holder Jennifer Boak expressed concern regarding woody debris that has been left on her lot. The Board directed staff to investigate the complaint and follow up with the lease lot holder before reporting to the Board in April.

5. MINUTES**5.1 Minutes of the February 10, 2022 Regular Meeting**

On motion by Director Rupp, seconded by Director Fuller, the Board voted 5-0 by roll call vote to approve the minutes.

6. CONSENT AGENDA**6.1 Media articles of local/water interest (Articles A – L)**

On motion by Director Fuller, seconded by Director Lindberg, the Board voted 5-0 by roll call vote to approve the consent agenda.

7. CORRESPONDENCE**7.1 CalOES Program Compliance Letter**

The District received notification from CalOES to review and address audit findings regarding the District's procurement policies. Grant recipients must adhere to federal procurement policies to receive funding. Staff drafted an updated federal procurement policy and attended procurement training as directed by CalOES. Upon approval of the updated procurement policy, the District will have addressed the audit findings in full.

a. Update Federal Procurement Policy

GM Friedenbach introduced the draft Procurement Policy for Federally Funded Projects. The updated policy would ensure District compliance with FEMA Hazard Mitigation Grant Program requirements. Consultants who have prepared a federal grant application for the District are prohibited from bidding on a project unless a competitive bidding process has occurred which included the services for: grant application, project permitting and design engineering, and project construction management. The Board discussed the concern that contractors may be reluctant to bid on grant writing if they are interested in bidding on the project construction. The District will likely need to retain a new grant consultant to prepare future grants. On motion by Director Rupp, seconded by Director Fuller, the Board voted 5-0 to approve the revised Procurement Policy for Federally Funded Projects.

7.2 DOT Bridge Inspection Report Letter

In accordance with Title 23 of the Code of Federal Regulations and the National Bridge Inspection Standards, Caltrans Maintenance and Investigations performed an inspection of the spillway bridge at the R. W. Matthews dam. The DOT recommends sealing the surface and repairing the edge spalling at the bridge.

7.3 Dreissenid Mussel Prevention Program Annual Report Letter

The annual Quagga report summarizes implementation of the Prevention Plan for Quagga and Zebra mussels at Ruth Lake. The gates at the marina and Ruth Rec are now functioning. The gate at Old Ruth is not functioning but a new gate will be installed and it is chained off with a padlock in the meantime.

8. CONTINUING BUSINESS

8.1 Water Resource Planning

a. Local Sales

i. Nordic Aquafarms

The project is moving forward with permitting and GM Friedenbach introduced the District's comment letter on the draft EIR. The Board discussed concerns that GHD scientist Ken Mierzwa was misrepresented in the draft EIR and the project may have limited oversight.

ii. Trinidad Rancheria Mainline Extension

McKinleyville CSD met on March 2 and approved entering into an MOU with the District to wheel water through their district for the mainline extension. This topic will be discussed later on the agenda. Trinidad Rancheria continues to move forward with their funding efforts.

b. Transport

Nothing to report.

c. Instream Flow

The Committee met with NMFS and CDFW to discuss flow releases. and NMFS has expressed some issues that they would like addressed. The Committee had a follow up meeting and discussed options for moving the project forward.

8.2 McNamara & Peepe

President Woo recused herself due to a conflict of interest. The Mad River Policy Committee, special counsel, and Staff met with DTSC on March 2 to discuss remediation. The Board discussed concerns that DTSC will continue considering bioremediation as a viable method to address the contamination. They are only reviewing remediation of contamination under the cap. They are not responding swiftly and don't appear to share the District's concerns despite the science. The District has been requesting well testing in the area since July 2020, so Humboldt Baykeeper sampled and tested a well about 200 feet south of the cap that tested positive for contamination. Humboldt Baykeeper has shared the results with DTSC and will send the results to county Environmental Health because community members have been drilling new drinking water wells in the vicinity of contamination. Jennifer Kalt from Humboldt Baykeeper and Linda Miller provided public comment and share the District's concerns. Kalt attended the DTSC quarterly forum and reported that there is \$250 million dollars in funding that DTSC said they would explore. Humboldt Baykeeper has advocates in Sacramento that are requesting \$5 million in state funding for the cleanup. She thanked the Board for pursuing the issue. Miller expressed disappointment with DTSC. GM Friedenbach will ask Senator McGuire to earmark funding of \$5 million to clean up the site, and to direct DTSC to work with the District to clean up the site before the state budget is approved. The Board discussed pursuing legislation to force the cleanup if need be.

8.3 2020 Census & Redistricting

Every ten years, the District must consider redrawing division boundaries to comply with the federal Voting Rights Act of 1965. Staff reviewed the precinct and population census data and provided four scenarios for the Board's consideration. GM Friedenbach reviewed the scenarios with the Board and received feedback. President Woo opened the public hearing at 10:28 am. There was no public comment and the public hearing was closed at 10:28 am. The Board discussed the merits and shortcomings of the various scenarios. The Board requested additional scenarios to even out the

population and enhance continuity of populations and boundaries. They also requested a map layer that shows the boundaries of the Municipalities and CSDs. A special meeting will be scheduled prior to the April 14 Regular Meeting for further discussion. The deadline to submit the finalized District boundaries to Humboldt County Elections is April 17, 2022.

8.4 Resolution 2022-03 - Extension of AB 361

The District is required to reaffirm the circumstances that qualify this act every 30 days. The Board discussed options for meeting in-person and would like to resume in-person meetings with a hybrid option as soon as safely possible. The District has purchased technology to facilitate hybrid meetings. The Board discussed extending AB 361 until the next special meeting. On motion by Director Lindberg, seconded by Director Rupp, the Board voted 5-0 by roll call vote to approve the resolution.

8.5 Ruth Lake Emergency Declaration

Removal of woody debris is underway. Adam Jager has been working to address some issues with septic systems.

8.6 **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)**

This item was removed from the agenda under item 3.

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

The Board went into closed session at 11:31 am, and came out of closed session at 12:21 pm with nothing to report.

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

The Board went into closed session at 3:35 pm, and came out of closed session at 3:45 pm with nothing to report.

8.9 Amendment to Employment Agreement for General Manager

Two items were included in the employment amendment for the District's General Manager: a term extension through September 30, 2025, and a 1% merit increase based on the Board's performance evaluation of the GM. On motion by Director Rupp, seconded by Director Lindberg, the Board voted 5-0 by roll call vote to authorize the President and GM to execute the first amendment, extending the GM's term and providing a 1% merit increase of \$1,540 as an employer discretionary contribution to the GM's 457(b) account on the next payroll date. The GM's yearly compensation would remain at \$154,048. On motion by Director Rupp, seconded by Director Lindberg, the Board voted 5-0 by roll call vote to authorize the Board President and GM to execute the employment contract amendment.

9. **NEW BUSINESS**

9.1 Supervisor Presentation on Crane Operations

Maintenance Supervisor Ryan Chairez provided a presentation on crane operations. Crane operator certification is required to operate the District's 2013 Ford 750 Unic 15 ton crane truck with an 86' boom and man basket attachment. The District operates cranes to maintain the collectors, reservoirs, TRF, communications equipment, distribution/electrical systems, spillway, and log boom at Ruth Lake. Four employees will be recertified and one employee will be newly certified in May, 2022. The certification process includes a four-day training course, a written examination, and a practical. Superintendent Dale Davidsen reiterated the importance of the District's crane operators, and expressed appreciation and respect for the District's operators. The Board also expressed their

appreciation for the District's operators, and thanked Maintenance Supervisor Chairez for the presentation.

9.2 Preparation of MOU with McKinleyville Community Services District

The District will need to execute an agreement with MCSD to wheel water through their district for the mainline extension agreement with the Trinidad Rancheria. Wheeling water means: the conveying of water through the unused capacity in a pipeline or aqueduct by another water provider; the use of utility conveyance facilities by other than the owner. MCSD's legal counsel works for Mitchell law firm, so they will need to have conflict counsel represent them. GM Friedenbach clarified that the District will pay for MCSD's legal fees up front, and seek reimbursement from the Rancheria. Staff will discuss the reimbursement with Rancheria CEO Jacquie Hostler-Carmesin. GM Friedenbach clarified that the District would reimburse conflict counsel at a rate no higher than their district counsel's rate, unless the Rancheria authorized a higher rate if necessary. Staff will work with MCSD to prepare an MOU for wheeling water through their district to the Trinidad Rancheria for the Mainline Extension.

9.3 Joint Board Meeting with Ruth Lake Community Services District

The Board discussed possible dates for the meeting. Staff will follow up with RLCSO to determine whether they will have a quorum and be available on Friday, June 17, 2022.

10. REPORTS (from STAFF)

10.1 Engineering (Time set 11:00 am)

District Engineer Nathan Stevens of GHD provided the engineering report.

a. Collector 2 Rehabilitation Project

i. Mercer Fraser Bid Rejection Letter and GHD Memo

The rejection letter was sent to Mercer-Fraser because they did not possess the required experience and the bid amount was over the District's budget for the project. Staff analyzed whether rehabilitation of Collector 2 is necessary, and concluded that the rehabilitation is indeed critical to fulfilling the District's Mission. Staff will continue to seek additional funding for the project.

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

The District is sorting out final issues with PG&E for their approval to energize the equipment. PG&E may need some equipment to be moved and the contractor is on-site to try to sort it out. This has delayed the project and there may be additional costs. March 28, 2022 is the tentative date for the final site witness test. Once the District passes the test, PG&E will tentatively give approval to energize the equipment on May 4, 2022.

c. TRF Generator Project (\$517,819 District match)

Nothing new to report. The District is still waiting to hear from FEMA if they will award funding for the project.

d. Status report re: other engineering work in progress

Approximately \$220,000 in revenue from the 3-acre conversion at the TRF is available to use as a District match for a Hazard Mitigation Grant generator for the TRF.

10.2 Financial

a. OPEB Presentation

In addition to pensions, the District provides Other Post-Employment Benefits (OPEB) to employees. Actuary Cathy MacLeod presented a forecast for the District's OPEB future liabilities. The last valuation was prepared in June of 2018 and a current valuation is overdue. The estimated OPEB liability when factoring in the change by the ACWA-JPIA for retirees requiring

them to utilize Medicare Advantage Plans reduces the liability to \$3 million from \$4.7. The Board discussed establishing a 115 Trust to prefund liability. If a 115 was set up and was in place for 5 years with an expected rate of return at 6%, then the liability would be reduced by potentially 30%. Establishment of a trust would provide a higher return that could be used in the actuarial projections to reduce the OPEB liability. The Board expressed concern that a 115 Trust might interfere with the District's ability to obtain loans, and wants to confirm the District's current JPIA liability, debt obligations, and borrowing capability. The Board discussed the benefits of prefunding unfunded liability compared to limiting future liability. The actuary will provide an analysis of what the actual contribution to the trust would need to be to get the 6% discount rate. Staff will work with the actuary to explore the benefits of establishing and contributing to a 115 Trust.

b. February 2022 Financial Statement & Vendor Detail Report

Business Manager Chris Harris provided the February financial report. There is approximately \$3 million in the General Account. Accounts that are contingent on information from the County Auditor-Controller have not been reconciled yet due to deficiencies in the Auditor-Controller's office. If these accounts cannot get resolved, the District's overall financial position may be negatively impacted. General Fund Reserves are \$2.5 million which is a bit low while we await a FEMA reimbursement. Interest and tax revenues are still at \$0 because they have not been received by the County Auditor-Controller. At 67% of the way through the fiscal year, total S&B expenditures are at 70%. This includes the CalPERS unfunded liability expenditure which is paid in July to avoid interest, and the worker's comp expenditure which is paid quarterly. PG&E increased rates in January and will increase rates again in March. A solar project is underway for the Eureka main office. Director Lindberg reviewed the bills for February. On motion by Director Lindberg, seconded by Director Rupp, the Board voted 5-0 to accept the report and approve payment of the bills in the amount of \$344,905.61.

c. Budget Presentation Calendar

Staff will present the FY 2022/23 budget over four separate Board meetings. Staff will provide a preview of the proposed Total Budget before reviewing the proposed Services & Supplies, and Salary & Employee Benefits Budgets on May 12. The Board will review the proposed Project Budget at a special meeting in May, review the proposed Total Budget on June 9th, and potentially approve the proposed Total Budget on July 14. The Board selected May 31 to review the proposed Project Budget.

10.3 Operations

a. Monthly report on projects and operations

Superintendent Davidsen provided the operations report for February. Penstock maintenance is scheduled for the last week of March instead of in May due to the ongoing drought, and the hydro production graph reflects the recent leveling off of production. Superintendent Davidsen and Operations Supervisor Palmero attended a cyber-resiliency webinar, and Maintenance Mechanic Natividad attended a 10-hour OSHA training. A burning travel trailer near Collector 3 caused a power outage and breaker problems at Essex.

11. MANAGEMENT

11.1 Trapping at Ruth Lake

Illegal trapping of animals was discovered on District property and CDFW has been notified of the trapping.

11.2 ACWA Energy Committee, report out

GM Friedenbach attended the meeting and the minutes were included in the Board packet.

- 11.3 ACWA Headwaters Committee, report out
GM Friedenbach attended the meeting and the agenda was included in the Board packet.

12. DIRECTOR REPORTS & DISCUSSION

12.1 General - comments or reports from Directors

The Board discussed the limited capability of District laptops and whether upgrades would be appropriate for Directors whose needs aren't being met. Staff will obtain a more powerful laptop for Director Rupp due to his active committee engagement.

12.2 ACWA

a. Region 1 Board Meeting

Director Rupp attended the Region 1 Board meeting on February 16, 2022. The District will host the upcoming Region 1 Meeting and Tour.

b. Region 1 Eureka Meeting and Tour

The District will host the 2022 regional event on July 7 and 8, 2022. A tentative agenda was included in the packet. MCSD and CalTrout estuary restoration may be a possible item to include on the itinerary. Another discussion item could be the District's relationship with the Trinidad Rancheria.

c. ACWA Outreach Alert regarding Opposition of SB 1157

GM Friedenbach introduced the Outreach Alert that recommended members' opposition to Senate Bill 1157. SB 1157 would implement new indoor residential water use standards that the DWR and SWRCB recommended to the Legislature. On motion by Director Rupp, seconded by Director Latt, the Board voted 5-0 by roll call vote to oppose SB 1157.

12.3 ACWA – JPIA

a. Resolution 2022-04 – Concurring in Nomination of Pam Tobin to ACWA/JPIA Executive Committee

JPIA will hold an election in May to fill a vacancy on the ACWA-JPIA Executive Committee. Pam Tobin was nominated by her own district, and the District's resolution concurs in nomination of Pam Tobin. On motion by Director Rupp, seconded by Director Fuller, the Board voted 5-0 by roll call vote to approve the resolution.

12.4 Organizations on which HBMWD Serves

a. RCEA News and Updates

President Woo reviewed the RCEA monthly update. PG&E rates are going up, but since RCEA rates are pegged to PG&E, the increased rates will increase RCEA's revenues.

b. RREDC

Director Latt provided the RREDC monthly update. RREDC conducted an envisioning session to assess priorities, and the ongoing priority is to provide local loans to those who can't obtain them elsewhere.

ADJOURNMENT

The meeting adjourned at 4:08 pm.

Humboldt Bay Municipal Water District
828 7th Street, Eureka



Minutes for Special Meeting of the Board of Directors
Meeting Start Time: 5:00 pm
 DUE TO COVID-19 THE DISTRICT WILL HOLD THE MEETING VIA ZOOM
March 22, 2022

District Mission

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

1. ROLL CALL

President Woo called the meeting to order at 5:04 pm. Director Rupp conducted the roll call. Directors Fuller, Latt, Lindberg, Rupp, and Woo were present. General Manager (GM) John Friedenbach, Regulatory Analyst Sherrie Sobol, Board Secretary Fiona Wilson, and Daniel Jones of GHD were present.

2. FLAG SALUTE

President Woo led the flag salute.

3. ACCEPT AGENDA

On motion by Director Rupp, seconded by Director Fuller, the Board voted 5-0 by roll call vote to accept the agenda.

4. PUBLIC COMMENT

No members of the public were present.

5. CONTINUING BUSINESS

5.1 Resolution 2022-05 – Extension of AB 361* - discuss and possibly approve

The District is required to reaffirm the circumstances that qualify this act every 30 days. The Board discussed extending AB 361 until the next regular meeting vs. returning to in-person meetings with a hybrid option. The District has purchased technology to facilitate hybrid meetings. The Board took no action on the item and will meet in-person for the April 14th regular meeting. A hybrid option will be available for the public to attend via Zoom. Director Fuller stated that she will not be in attendance for the April meeting.

5.2 12kv Change Order #9* - discuss and possibly approve

GM Friedenbach introduced Change Order #9 to move the current transformers (CTs) from the previously PG&E approved location. PG&E has now requested that the CTs be moved from the load side to the line side of 52-U. On motion by Director Rupp, seconded by Director Lindberg, the Board voted 5-0 by roll call vote to approve Change Order #9 in the amount of \$6,867.00.

5.3 2020 Census & Redistricting* - discuss

Every ten years, the District must consider redrawing division boundaries to comply with the federal Voting Rights Act of 1965. Staff reviewed the precinct and population census data and developed scenarios for the Board's consideration. At the March 10 regular meeting, the Board requested

revisions that would even out the population and enhance continuity of populations and boundaries. Staff revised the scenarios and returned to the Board with the requested revisions. The Board was satisfied with the revisions and staff will bring finalized division maps to the April 14 public hearing for the Board's consideration and approval.

ADJOURNMENT

The meeting was adjourned at 5:35 pm.

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Sheri Woo, President

Bruce Rupp, Secretary/Treasurer

DRAFT

CONSENT

Western US's Worst Drought in 1,200 Years Brings Year-Long Fire Season



A wildfire burns in the Cleveland National Forest in this view from Orange, California, on March 2, 2022.

MARK RIGHTMIRE / MEDIANEWS GROUP / ORANGE COUNTY REGISTER VIA GETTY IMAGES

BY [Leanna First-Arai](#), [Truthout](#) PUBLISHED March 13, 2022

Ten weeks after the wind-whipped Marshall fire **blasted through Boulder County, Colorado**, on December 30, taking with it one man's life and over 1,000 houses, some residents with the means to do so are now **preparing to build back**.

The instinct to return home, and the planning, saving and grappling with underinsurance that requires, is unfolding amid the backdrop of the western United States' **worst drought in 1,200 years** and what's morphed into a year-long fire season. Winter wildfires by the names of Emerald and Airport have **scorched thousands of acres** in California; led to the destruction of over **100 structures** in Kansas; and amid this writing, prompted the evacuation of **1,100 houses** in the Florida Panhandle — at a time of year when those with intimate knowledge of the cycles of burning and regeneration once relied on wetter and cooler conditions to keep blazes at bay.

According to a **February 23 report** by the United Nations, extreme wildfires such as the Marshall fire are on track to increase by up to 50 percent by 2100 due to the climate crisis. "We have reached a point where there is no future scenario in our lifetimes that does not see an increase in wildfire," Molly Mowery, executive director of the Community Wildfire Planning Center, told *Truthout*. "So we must accept fire and learn to live with it."

But in Colorado, many looking to build back on their land have no plans — or no ample budget — to upgrade the houses they'll erect again to be any less flammable than the structures that just burned down.

Colorado is one of just **eight states** without a minimum building code, and some critics are urging officials to act on this problem. The lack of comprehensive state policy means that fireproofing is not required in Superior and Louisville, the towns that were leveled by fire on December 30, so residents may build back with the same combustible materials.

In contrast with Colorado, Oregon passed a wildfire mitigation bill requiring a set of uniform standards in high-risk areas in 2020, following a slew of destructive fires. Early research shows that enforcing a building code that includes fire-resilient materials may reduce the chance that a building is lost during a wildfire by 40 percent, according to a December 2021 **working paper** by the National Bureau of Economic Research.

Beyond the Forest

Numerous factors are at play in the rise of extreme fires, wildfire ecologists say. A **heightened concentration of oxygen** in the atmosphere as a result of changing climatic conditions, for instance, acts on smaller fires much like blowing on embers to stoke flames in a wood stove. A **paper** published in February 2022 in *Nature* found that an increase in nighttime temperatures across burnable areas of the earth has had the overall effect of weakening the “brakes” on wildfires — the overnight window during which a landscape is less flammable, dew sets in and flames die down — thus allowing for even longer, stronger fires.

“We have reached a point where there is no future scenario in our lifetimes that does not see an increase in wildfire.”

Another major factor driving the rise in destructive and traumatic fire events is the expansion of human designs — namely, suburbs — into what's known as the wildland-urban interface (WUI), where the built environment intermingles with ecosystems lush with flammable vegetation. **Nearly a third** of all wildfires in the U.S. occur in the WUI — just about all of them caused by human activity such as downed power lines, fireworks, cigarettes, and potentially in the case of the Marshall fire, which is still under investigation, **smoldering underground coal mines**.

And yet we continue to build in the WUI. According to a study of public records on **200 million parcels** accessed through Zillow, between 1992 and 2015, the number of residential homes built in the WUI rose by 32 million. That's on track to **double** by 2030.

“The general public tends to think that they aren't in a fire-prone environment if they don't see the forest right up against the neighborhood,” John Abatzoglou, head of the University of California Merced's Climatology Lab, **told 5280**, of the grassland areas throughout Boulder County. “By thinking that way, we may be increasing the vulnerability of communities that are not in forested environments but are still quite fire-prone,” Abatzoglou said.

As some social scientists point out, the expansion into these hyper-flammable zones is also driven by our system of unencumbered economic growth and the absence of a strong social

safety net. Unaffordable housing has pushed some residents to purchase homes or build in the WUI, where it's cheaper, further expanding burnable structures in the most flammable places.

Often, discussions around resilience to fire center on hardening homes through measures such as surrounding a foundation with gravel and blocking vents with mesh to prevent materials like pine needles and embers from getting inside.

But Sasha Plotnikova, an independent scholar and architect based in Los Angeles, told *Truthout* that we also need to look at the often-horrendous conditions that working-class tenants and unhoused people are forced into. "As long as the places where we live are understood as commodities, we'll only further entrench ourselves in a system premised on the exploitation of poor people and natural resources," Plotnikova said.

The Housing Crisis Is a Fire Factor Too

In Louisville, Colorado, the coal-town-turned-suburb that the Marshall fire leveled, Mirek Maez, general contractor and owner of Cooper Building Group, says supply chain issues and the doubling in cost of building materials means the lumber and metal plates he's ordering to help residents build back won't show up for a year and a half.

The expansion into these hyper-flammable zones is also driven by our system of unencumbered economic growth and the absence of a strong social safety net.

"People are just ordering and ordering and ordering and well now, we have another 1,000 people ordering," he told Denver-area NBC-affiliate *9News*. "It's a snowball effect that doesn't seem to be ending."

That delay is exacerbating what was already a housing crisis, with former homeowners now displaced by fire stressing the rental market. The spike in demand is continuing to drive up rental prices even further.

"Landlords' incentive right now is to push out long-time residents, do a superficial renovation, and jack up the rent," Plotnikova said.

The principle of "degrowth," which holds that scaling back what we consume could actually improve overall quality of life, could also, perhaps, slow expansion into the most flammable locales. If housing was more accessible and not driven by a growth-oriented economic model, the argument goes, there may not be reason to continue carving out the WUI, "to pull ever-larger swaths of nature into circuits of extraction and production," as leading degrowth scholar Jason Hickel said of the concept in his book, *Less Is More*.

Short of system change, however — or while we work towards it — the reality is that houses and buildings must be adapted, or "hardened," as soon as possible, to prevent loss of life and repeat infernos. Proactive mitigation includes measures such as replacing wood fences with metal ones and retrofitting homes with fire-resistant shingles.

Unlike flood risk, fire risk must be viewed at the micro and the macro scales, Mowery said, "because property owners can make choices that can change their [and their neighbors'] risk."

Luckily, more data on fire risk is available than ever before. A new [map](#) — the first-ever comprehensive tool to chart fire risk — was created by the USDA Forest Service under the direction of Congress in 2021. Signing up for local emergency alerts is also critical, Mowery said, along with tuning in to programs like [Ready, Set, Go!](#) and [Firewise](#).

Additionally, Rebecca Samulski, executive director of Fire Adapted Colorado, told *Truthout* that as long as construction is still occurring in the WUI, which is expected, wildfire professionals can also forge relationships with groups that encourage urban infill over sprawl in the WUI for benefits like transportation and sustainable infrastructure. “We cannot and should not exclude fire from our environments, but we can have wildfires without having wildfire disasters,” Samulski said.

We’ve Done It Before

We tend to think of flame-laden landscapes as uniquely of the Anthropocene — haunting and heartbreaking, which indeed they are. But human communities have actually lived in WUI-like conditions for millennia, according to a [2021 paper](#) coauthored by Christopher Roos, assistant professor of anthropology at Southern Methodist University.

“One dimension of the issues that human communities seem to be facing ... is a lack of historical perspective,” Roos said at a March 2021 Southwest Fire Science Consortium [webinar](#).

Roos and his coauthors partnered with Jemez Pueblo fire experts as well as members of Hopi, White Mountain Apache and Zuni tribes, to study former “fire wise” villages and towns in the Jemez Plateau, in what is now northern New Mexico. “Fire and smoke would have been as commonplace as birdsong,” Roos said of how local Indigenous groups lived with frequent patches of controlled surface fires, prior to being displaced by settler-colonial dynamics. “In a matter of decades, modern human-natural systems at the WUI have developed a pathological relationship with fire,” the [paper](#) reads.

Place-based, Indigenous-influenced fire management practices have been catching on in some state legislatures. In 2021, [California](#) and [New Mexico](#) both passed prescribed burn bills. Notably, Colorado’s forest service is one of the only state agencies that is not allowed to conduct prescribed burns under state law, as [Colorado Public Radio reported](#).

Chris Toya, archaeologist and tribal historic preservation officer for the Jemez Pueblo, who spoke alongside Roos, noted that the kind of controlled fires that keep grasses and other combustible growth in check have not occurred on the Jemez Plateau since before the Jemez population was [removed to the Village of Walatowa](#) around the turn of the 17th century and his ancestral lands later placed under [management by federal agencies](#), including the U.S. Forest Service and the National Park Service. “As far as purposefully putting fire on the ground [now], we’re very limited to pretty much just the areas that we manage down here in the valley,” Toya explained.

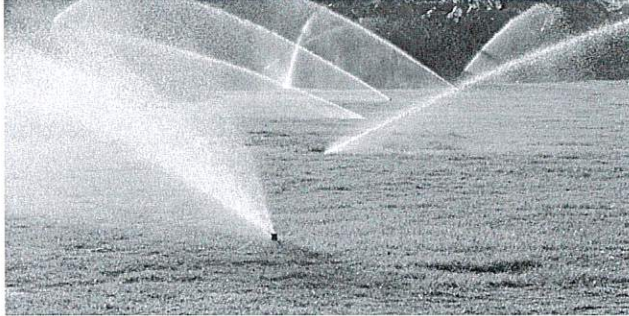
More co-management relationships between state and federal agencies and tribes could help with the learning curve. “It all comes down to education,” Toya [said](#). “We can manage our forest more efficiently, that way not only Jemez people can enjoy the forest but also anybody else that wants to be out there to get the benefits of being outdoors.”

North Coast Journal

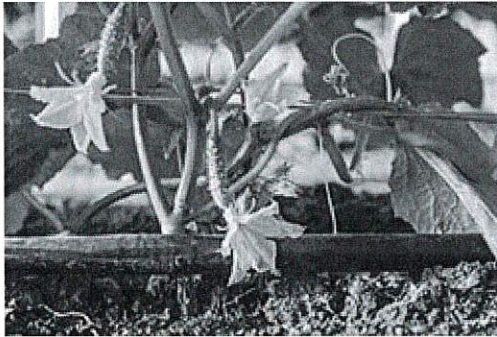
march 11, 2021 letters + opinion » views

Reward Water's Worth

BY J.A. SAVAGE



SHUTTERSTOCK



SHUTTERSTOCK

When you think of shipping Humboldt's Finest in Ziplocs to Southern California, you're not thinking of bags of river water. But, putting Humboldt's water in giant baggies on a boat to Southern California was a plan actually taken seriously in 2003 to encourage *more* water use.

Humboldt historically has an outsized allocation of water from the state because the former pulp mills consumed an astronomical amount of water. Squandering water in order to preserve our state water allocation was the idea of some political leaders and business people. They were thinking of it like vacation days at the end of the year, if you don't take off from work, those days don't roll over, they disappear. Only, thanks to the slow-moving state water bureaucracy, that never really happened.

Yet, the vestiges of "spend it or lose it" water remain in at least one Humboldt public utility.

The concept of pulp-mill-sized oversupply (about 50 million gallons per day) is built into Humboldt Community Services District rates. There's no incentive for consumers to treat water in the district as the precious commodity that it is because there's no value attached to conservation.

Water-wasting industries like nuclear power plants and pulp mills of the 1960s were the old, clear-cutting, resource-wasting Humboldt County. We will never go back to that kind of industry, nor do we want to.

Putting a value on conservation will give the district's ratepayers a basic financial incentive to conserve. And when we do that, we also save on our environmental impacts of fossil fuel consumption by pumping less water through the system. We save on pollution by treating less sewage (shared with the city of Eureka). And, it allows us to have more control over monthly bills.

HCSD doesn't have any giant customers, like those old pulp mills. Its 7,800 meters are largely residential. There's likely two to three humans or more behind each meter, so the lack of conservation incentive affects tens of thousands.

The last time the district restructured its rates, in 2017, the consulting firm did not recommend valuing conservation, much less allowing for incentives to conserve. Four years ago, the phrase "climate change" was absent in the analysis. The rapidly escalating cost of energy for pumping was basically dismissed as minor inflation. There was no discussion of solar water pumps. The Redwood Coast Energy Authority was still in its gestation, so there was no concept of saving money through using local energy rates.

Reality begs a new approach.

Forget historical water allocations. Not only are they difficult to manage, like enforcing the weather, they're complicated by climate change. Even the State Water Resources Control Board says water allocations are going to be changed soon because California has to face up to global warming. In recommendations released this month, this notoriously slothful bureaucracy noted that we can't rely on history to allocate future water.

Instead of trying to preserve allocations that may or may not truly exist, it's time HCSD pivoted to valuing water appropriately. Putting a truer value on the water we use will help protect fisheries, reduce energy consumption, reduce wear and tear on infrastructure, and avoid wastewater pollution. By valuing conservation, ratepayers also have more control over monthly bills.

That last point is for those struggling to pay basic services. There's an equity component to putting a value on conserving water.

Without a price on conservation, HCSD customers have little control over their bills. Unlike electric rates, where ratepayers can save money by changing habits by opting for time-of-use rates or conserving power at home, HCSD customers have high fixed rates and extremely little wiggle room. The water component of the bill now only varies by a few dollars, so that one aggravating neighbor who

keeps the lawn estate-worthy verdant all summer pays only slightly more for the privilege than another who gently waters their drip-use veggies.

By saving money on pumping, maintenance and wastewater treatment through less consumption, and putting a bigger price on the commodity of water, those high fixed rates can be reduced. Ratepayers will have more control of how much they have to spend on a basic necessity.

Humboldt's 1960s-era, water-wasting history is as wise today as the 1960s' ideas that asbestos makes a great building material, seat belts are useless and women shouldn't be in the workforce. The industry of today, like an aquafarm, can't just suck it up and spit it out anymore. At 2 million gallons a day, even the water-intensive proposal for a fish farm is a small fraction of what the mills were consuming. We, as individual consumers, can't wantonly use up water, either.

Humboldt Community Services District is not a massive impersonal utility like PG&E. We elect the district board. New, more progressive members were voted in this past November. The district's Zoom meetings are open twice a month.

J.A. Savage is working on that drippy vegetable garden in Eureka. She's ok with s/he pronouns.

Humboldt County's start to 2022 driest on record

By **JACKSON GUILFOIL** | jguilfoil@times-standard.com | Eureka Times-Standard
PUBLISHED: March 13, 2022 at 5:17 p.m. | UPDATED: March 14, 2022 at 10:41 a.m.

For Humboldt County, the year to date has been the driest on record, with rainfalls slightly over an entire foot below normal.

So far in 2022, Humboldt County has seen about 2.36 inches of rain. The normal to date amount for this time of year would be 14.7 inches. However, this week will likely bring some respite as rains begin to fall on the county on Monday evening through Tuesday morning and Friday evening through Saturday morning, each system bringing roughly a half-inch to an inch of rain.

“That is the driest start to the year on record,” Alex Dodd, a meteorologist at the National Weather Service office in Eureka, said.

“(This is an) exceptionally dry start to the year, a record-dry start. We did have a fairly wet month in December and some rain in October and November, so we’re doing a little bit better, relatively speaking on the water year, but as far as the calendar year, record dry,” Dodd added.

The previous record holder of the driest start to the year was in 1923, when the county received five inches of rain around this time of the year. Dodd noted that there is a tentative storm system that could shower the county on Thursday evening, but even if it does, it won’t be an amount of rain comparable with other days this week which are forecast to have stronger storms.

Dodd noted that, while the rest of March is likely to be wetter than the two previous months of 2022, it is highly unlikely that the county will receive enough rain to make up for the deficit caused by dry January and February.

“We’ll probably still end up with a drier than normal March, even if it’s not nearly as anomalously dry as January and February, so some good news, but unfortunately, still a long way to go for making up for the deficit that we started there for the year in January and February,” Dodd said.

While March has been dry so far, the coming weeks could push the month’s precipitation within striking distance of normal. The average rains for March usually total 5.75 inches, and the county is currently sitting at .19 inches of rain.

Dodd added that Humboldt County’s mountain passes could see minor amounts of snow on late Saturday night.

Humboldt County is still in a drought, with the southeast corner in extreme drought, the majority in the severe category and the northwest corner in moderate drought, according to statewide data.

“By the time the rainy season is about wrapping up there later in spring, it would take a record wet spring to get us even close to that normal rainfall for the calendar year. At this point, it’s looking pretty darn unlikely unless something drastic happens,” Dodd said.

Temperatures are expected to range from the 50s to low 40s throughout the week in the Humboldt Bay region.

For more up-to-date weather information, go to <https://www.weather.gov/eka/>.

Water, Commercial Companies Face More Urgent Reporting of Hacks

March 14, 2022, 2:00 AM by Maria Curi, *Bloomberg Law*

- Businesses to report breaches in 72 hours, ransom in 24 hours
- Heavily regulated industries better equipped to meet deadlines

Water utilities, casinos, and shopping malls would have to beef up their cybersecurity operations to comply with hack reporting requirements set to become law as soon this week.

Cybersecurity reporting rules passed in a government funding bill (H.R. 2471) March 10 would encompass a broad range of businesses in 16 critical infrastructure sectors. Companies would have 72 hours to report a hack, and 24 hours to report a ransomware payment to the government, once rules are in place. “A 72-hour reporting requirement is often a challenge for even large and well-resourced organizations,” said Jim McKenney, practice director for industrials and operational technologies at NCC Group, a security consultancy. For industries such as commercial facilities or water systems, it will be a lot more work to prepare, as they aren’t already highly regulated and lack resources, cyber experts said.

The reporting requirements were pulled from Gary Peters’s (D-Mich.) Senate-passed Strengthening American Cybersecurity Act (S. 3600), and have broad bipartisan backing. “More often than not, there is no critical aspect to the commercial sector,” said Kevin Gonzalez, security director at the cybersecurity detection firm Anvilogic. That includes shopping malls, casinos, and amusement parks.

Utilities in ‘Own Boats’

Cybersecurity regulations among the water systems are splintered at the local level, varying across the country. Lacking a centralized standard will make it more difficult for operators to change and test their incident responses to comply with the new federal reporting requirements, cyber professionals said. “Each operator is rowing their own boat and are woefully understaffed,” said Padraic O’Reilly, cofounder of cybersecurity risk firm CyberSaint.

Tens of thousands of operations are fragmented across the country, said Kristina Surfus, managing director of government affairs at the National Association of Clean Water Agencies. “The majority of these systems are small, rural, and under-resourced in many cases. So those are the ones that I think will probably struggle the most,” Surfus said.

Businesses would have some time to prepare before the rules take effect. The Cybersecurity and Infrastructure Security Agency would be required to publish a notice of proposed rulemaking within 24 months of the spending bill’s enactment, and a final rule 18 months after that. Not all companies will be subjected to the requirements as CISA will ultimately decide a final list of covered entities based on the likelihood and effects of disruption through a cyberattack.

“Reporting an attack within 72 hours requires a robust and mature process that is exercised on a regular basis,” McKenney said. Operators can practice responding to incidents to determine the effectiveness of the cybersecurity measures they have in place and which new ones to make

priorities, McKenney said. “This will improve capabilities to reliably detect, respond to, and report incidents within 72 hours.”

Regulated Sectors

In contrast, companies in highly regulated businesses, such as financial services and health care, will be better equipped to handle the new rules, cyber professionals said. A government contract with such companies also will already be subject to robust cyber regulations.

The Gramm-Leach-Bliley Act (Public Law 106–102), enforced by the Federal Trade Commission, requires companies such as banks and brokerage firms to explain to customers their information-sharing practices and to safeguard sensitive data. The act is one of dozens of domestic and international cybersecurity standards financial services firms must adhere to, O’Reilly said. O’Reilly worked with the Bank Policy Institute, an industry lobbying and advocacy group, to help harmonize the sector’s standards with a cybersecurity framework. “Money talks,” Anvilogi’s Gonzalez said about such companies. “So they will have more controls enforced and more auditing in place, which will help ensure they’re up to par to identify and report incidents.”

In addition to having robust internal resources, financial companies also tend to have cybersecurity insurance that comes with external cyber professionals ready to help respond to incidents, particularly with very large ransomware attacks, Gonzalez said. Cyber professionals also said communications businesses would be better prepared for the new rules. Eric Wenger, the senior director for technology policy at Cisco Systems Inc., said the information technology company is already used to adhering to a 72-hour reporting requirement when doing transatlantic business in Europe. The requirement falls under the General Data Protection Regulation, the European Union’s law on data protection and privacy.

“Having a separate, shorter deadline for ransom payment reporting is a novel idea,” compared with the 72-hour reporting requirement, Wenger added. “But it’s one that makes sense given that the requirement has a clear trigger—transmitting funds. Other cyber incidents require longer periods to avoid over-reporting of potential or threatened events that never pan out.”

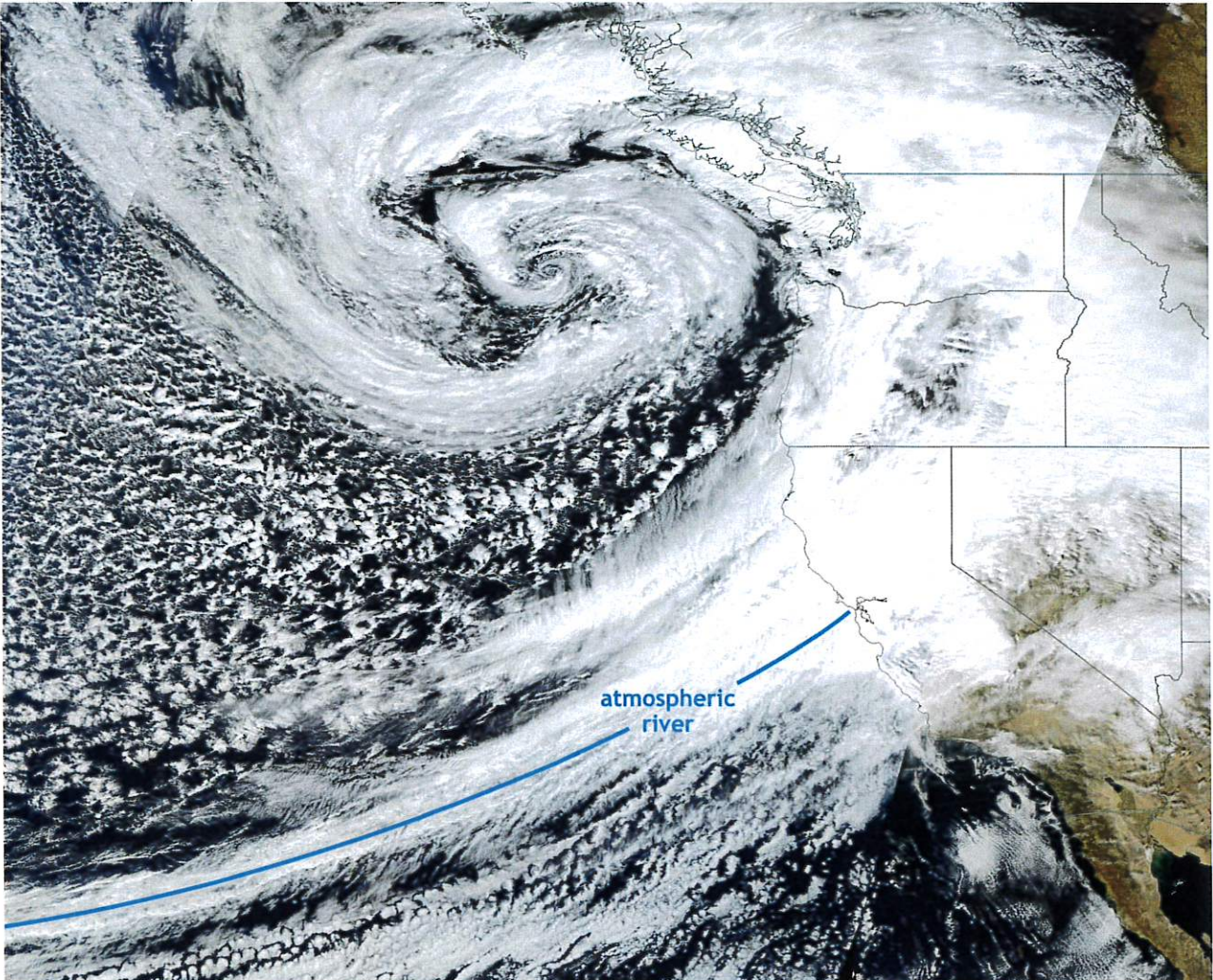
Information Is Currency

Hospitals, nursing homes, and research centers are subject to the Health Insurance Portability and Accountability Act (Public Law 104–191), enforced by the Health and Human Services Department. It requires health-care organizations to keep patient data safe. Under HIPPA, health-care providers must review records regularly to track access to electronic protected health information, detect security incidents, and periodically evaluate the effectiveness of security measures. But even under the blanket regulatory framework, providers have been fined for failing to meet cybersecurity standards.

For many businesses, meeting the new requirements will involve shifting from viewing cybersecurity as a lower priority matter of information technology to a critical business issue, said Bhavesh Vadhani, who leads advisory firm CohnReznick’s global cybersecurity, privacy, and technology risk practice. “It’s a mindset,” Vadhani said. “Why do I need protocols in place? Because we are dealing with information, and information is the new currency in today’s connected economy and global ecosystem.”

NOAA: When Rivers Reach the Sky – What Caused 18-Feet of Snow to Fall on California in December?

WeatherBrains | March 14, 2022



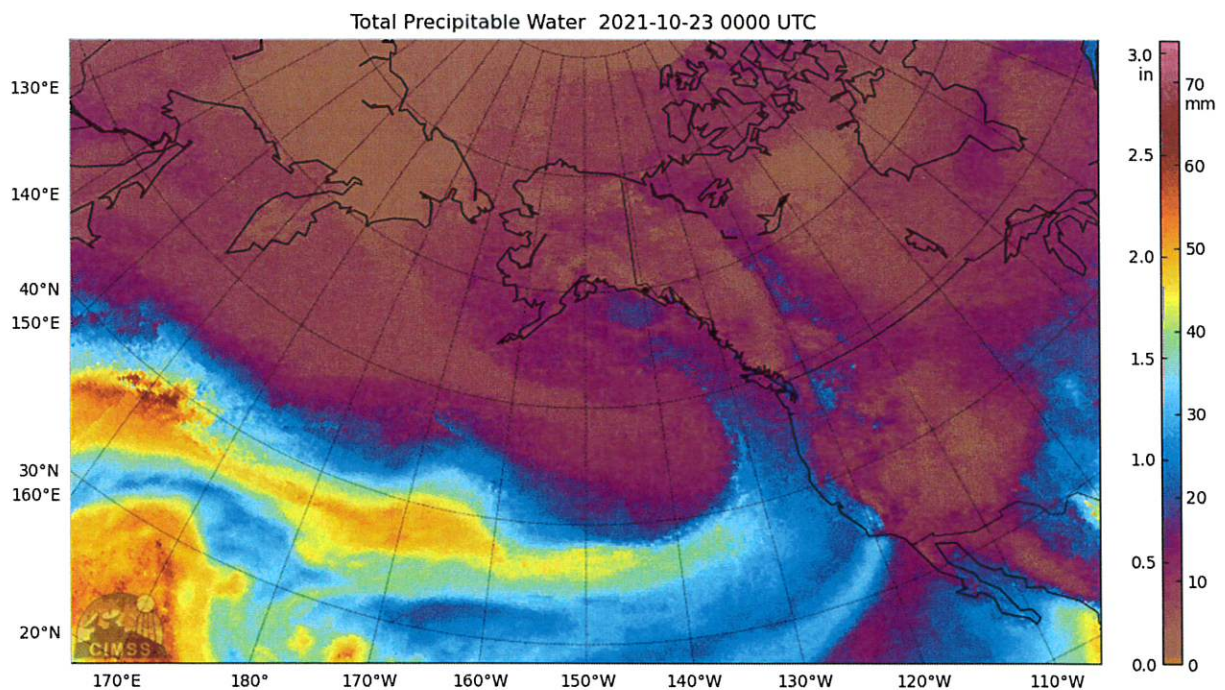
Satellite image taken on October 24, 2021. A powerful storm off the Pacific Northwest coast brought an intense atmospheric river to the San Francisco Bay region of California. NASA MODIS/TERRA satellite image taken from [NASA Worldview](#).

This past December, a mind-boggling 18 feet of snowfall fell in the California Sierra Nevada Mountains! How does so much snow fall in one place in such a short period of time? One of the primary phenomena responsible for such extreme rain and snowfall, particularly in regions like the western U.S., is the atmospheric river. Like their terrestrial counterparts, atmospheric rivers carry tremendous amounts of water over thousands of miles. These aerial versions, however, often bring both severe disruption and great benefit through the heavy rain and mountain snows that they produce. In this blog post, we will give you a brief primer on atmospheric rivers and (of course!) explain how they are affected by ENSO ([El Niño-Southern Oscillation](#)).

Flying Mississippi

Atmospheric rivers are long, narrow corridors of moisture-laden air extending from the tropics to higher latitudes. They can produce heavy rain and snowfall in short periods of time, especially when the air is lifted over high terrain, cooling the air and condensing the moisture into droplets, like wringing out an atmospheric sponge. When you see these impressively long features on satellite imagery, it's no wonder that they are compared to rivers. In fact, an average atmospheric river carries 25 times the amount of water as the Mississippi River!

They form when warm, moist air in lower latitudes is transported poleward like a conveyor belt ahead of a trailing cold front from a powerful mid-latitude storm. Around the globe, atmospheric rivers are responsible for more than 90% of the water vapor that is transported to the mid-latitudes from the tropics and are a critical source of water for many regions, such as California and Nevada. They also can be quite destructive, causing severe flooding and damaging winds, with the strongest atmospheric rivers in the western U.S. typically causing damages in the hundreds of millions of dollars (1).



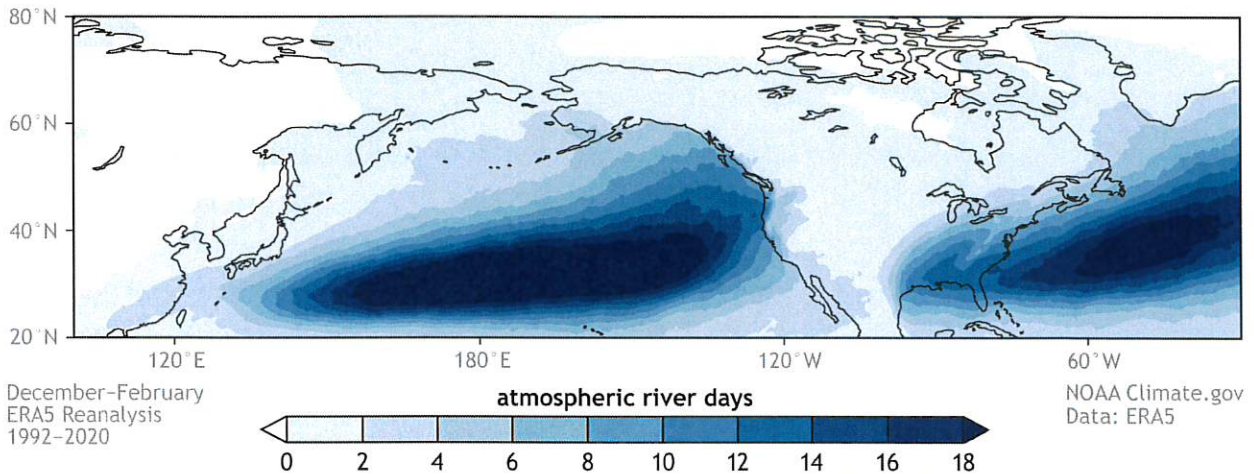
Total precipitable water (the depth of water in a column of the atmosphere, if all the water in that column falls as rain) from October 23-25, 2021, showing the atmospheric river that battered the San Francisco, California region. Animation generated with [MIMIC-TPW](#) data and the [Jupyter notebook](#) provided by the [Seasoned Chaos Blog](#).

Several notable atmospheric rivers have made landfall along the West Coast of the U.S. this past fall and winter. On October 24-25, 2021, an [intense atmospheric river](#) brought high winds and historic rain reaching up to a foot to the San Francisco Bay region, providing a temporary reprieve from an enduring drought (but clearly [not enough](#) to end it). The animation above (2) shows the narrow, river-like corridor of concentrated water vapor that resulted in this historic rainfall. California is no stranger to this “boom or bust” precipitation

pattern. Incredibly, up to half of the annual precipitation in parts of California falls in just 5 to 10 wet days during the year (is it any wonder that seasonal prediction of precipitation is so hard?), and atmospheric rivers are a major source of those few wet days (3). California is unique in terms of such extreme precipitation variability, but other western states, like Washington and Oregon, also rely on atmospheric rivers for water supply.

So, where and how often?

Average number of days with an atmospheric river (December–February)



Average number of days each winter (December–February) with an atmospheric river occurrence over the northeastern Pacific Ocean. Maps calculated with ERA5 Reanalysis data covering the 1992–2020 period and with the [Mundhenk et al. \(2016\)](#) method for detecting atmospheric rivers.

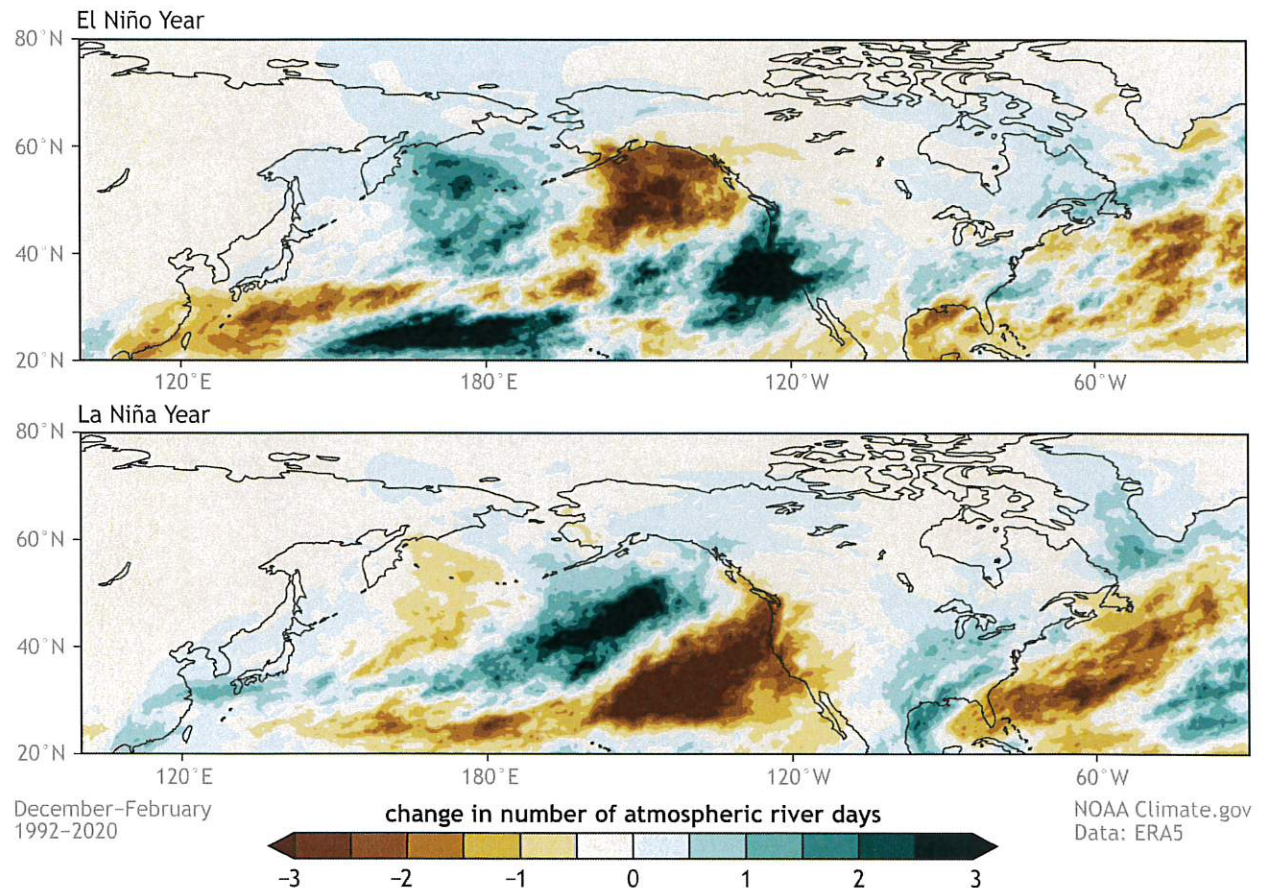
Atmospheric rivers (see footnote 4 for how we define them) occur throughout much of the globe outside of the tropics and in all seasons, but they are most frequent in the storm tracks in the vicinity of jet streams. Their impacts on the U.S. are most pronounced in winter. The figure above shows that in a typical December–February period, atmospheric rivers near North America occur most often offshore in the North Pacific and North Atlantic. Although their importance is emphasized in the western U.S. because of their large contribution to annual rain and snow totals, they also frequently occur in central and eastern U.S. states, where we can expect approximately 10 winter days each year with an atmospheric river occurrence.

This is the ENSO Blog!

Don't worry, we didn't forget about the role of ENSO! Just as ENSO impacts the [seasonal temperature and precipitation patterns](#) over North America, it also affects the frequency of landfalling atmospheric rivers. Over the past 30 years, El Niño has brought more frequent than normal West Coast landfalling atmospheric rivers, whereas La Niña generally has brought less frequent occurrences. This winter has been pretty consistent with typical La Niña conditions, with below-average western U.S. atmospheric river activity. Despite a two-week period in December that brought atmospheric rivers and record snow to California, January was the [second driest](#) on record in California and Nevada.

Departures from the average number of days each winter (December–February) with an atmospheric river occurrence for (top) El Niño and (bottom) La Niña from 1992-2020. During El Niño winters, the number of days with atmospheric rivers is below average along the Alaska and western Canada coastlines, but above average along the U.S. West Coast. La Niña tends to bring the opposite: fewer atmospheric river days along the U.S. West Coast.

Departure from average number of winter days with an atmospheric river



Departures from the average number of days each winter (December–February) with an atmospheric river occurrence for (top) El Niño and (bottom) La Niña from 1992-2020. During El Niño winters, the number of days with atmospheric rivers is below average along the Alaska and western Canada coastlines, but above average along the U.S. West Coast. La Niña tends to bring the opposite: fewer atmospheric river days along the U.S. West Coast.

But how well can we predict atmospheric rivers?

As with all extreme precipitation events, accurate forecasts of individual atmospheric rivers and their impacts are limited to short-range weather forecasts. However, the latest research efforts are advancing our ability to predict regional atmospheric river activity (not individual storms) on subseasonal (roughly 2-4 weeks in advance) and even seasonal time horizons. On subseasonal timescales (5), the sources of atmospheric river predictability are rooted in large-scale climate patterns such as the [Madden-Julian Oscillation](#) and the [Pacific-](#)

North American Pattern. On the seasonal side, a [recent study](#) led by guest co-author Dr. Kai-Chih Tseng indicates that one of the models participating in the [North American Multi-Model Ensemble \(NMME\)](#), [SPEAR](#), can produce skillful seasonal forecasts of atmospheric river activity over some regions, including coastal California and Alaska, up to nine months in advance. The guiding hand of ENSO is one of the main reasons that seasonal atmospheric river forecasts may be possible.

Effects of climate change

Human-caused climate change is likely to increase atmospheric river intensity. Warming oceans lead to increasing available moisture for these powerful storms, enhancing the moisture transport and heavy precipitation that they produce. While several global climate model studies support the increasing intensity of atmospheric rivers with global warming, additional study is needed to better understand how other atmospheric river properties, like size, shape, frequency, and location, will change.

The bottom line is that any increase in atmospheric river intensity will contribute to the growing water resource challenges in the western U.S. Therefore, we can expect that improving our understanding and our ability to predict atmospheric rivers across a range of timescales will remain a major scientific priority.

Footnotes

1. For more information on how destructive atmospheric rivers can be for the western U.S., we recommend [this article](#). Corringham et al. (2019) use a [scale](#) that divides atmospheric rivers into 5 intensity categories, like what we do for hurricanes and tornadoes. Corringham, T. W., Ralph, F. M., Gershunov, A., Cayan, D. R., & Talbot, C. A. (2019). Atmospheric rivers drive flood damages in the western United States. *Science Advances*, 5(12), eaax4631. <https://doi.org/10.1126/sciadv.aax4631>
2. Hat tip to our friends at the [Seasoned Chaos](#) blog for providing the tools to construct this animation. Please check out their awesome [complementary post](#) on atmospheric rivers.
3. For additional information on the link between atmospheric rivers and California's water resources, we recommend [this article](#). Dettinger, M.D., Ralph, F. M., Das, T., Neiman, P.J., & Cayan, D. R. (2011). Atmospheric rivers, floods and the water resources of California. *Water*, 3(2), 445–478. <https://doi.org/10.3390/w3020445>
4. At this point, you may be saying, “Wait, Nat and Kai-Chih, how do I know if an atmospheric river is occurring?” Good question! There is no single, objective method to identify atmospheric rivers, but there are several algorithms that are commonly used. All these algorithms share at least two features in common: (1) atmospheric vapor transport must be unusually strong, and (2) the vapor transport must be concentrated in a feature that is long and narrow. In the analysis of this blog post, we analyze daily fields of vertically summed water vapor transport and use the method of [Mundhenk et al. \(2016\)](#) to identify grid cells where an

RACHEL BECKER, CALMATTERS / MARCH 15, 2022 @ 7:26 A.M. / SACRAMENTO

Californians Used More Water as State Braces for Another Dry Year



Photo by Steve Harvey on Unsplash

Californians used 2.6% more water in January compared to before the drought emergency was declared, a sign that urban residents are ignoring the state's pleas to take the drought seriously and cut back.

The increased water use in California's cities and towns came during [the second-driest January on record](#), as the [Sierra Nevada snowpack continues to dwindle](#) — and another dry summer looms.

The new data, which details urban water use statewide, shows that Gov. Gavin Newsom's repeated pleas for a [15% voluntary cutback in water use](#) are failing to reach people in cities and towns. Yet Newsom has stopped short of issuing a mandatory order.

“With the voluntary call, some areas were doing okay, others not so well. The message gets pretty garbled. With a mandate, it's a very clear message about the need,” said [Heather Cooley](#), research director with the Pacific Institute, a global water think tank.

Newsom spokesperson Alex Stack declined to answer whether Newsom intends to set a mandatory conservation order.

In January, the State Water Resources Control Board adopted emergency regulations allowing water providers to bar certain wasteful water uses, such as hosing down sidewalks with drinking water.

But water use nevertheless ticked up statewide in January compared to January 2020. The biggest increase was 19% in the desert region that includes the Palm Springs area and the Imperial Valley. The South Lahontan region, spanning the Sierra Nevada, mountain communities of Southern California and Death Valley, had the second highest increase, at 9%. Residents of the Los Angeles basin and San Diego County used 1.8% more water, while those in most of the Central Valley used 6 to 7% more.

The only regions that slightly reduced water consumption were the San Francisco Bay Area, which used 1.4% less, and the southern San Joaquin Valley, which used 0.2% less.

Overall, Californians from July of last year through January conserved about 6.5% statewide compared to 2020, according to state data — falling far short of Newsom’s requested 15%.

Several years into the last devastating drought in 2015, Gov. Jerry Brown authorized state regulators to order reductions from water suppliers to conserve 25% more water across California.

Now, a year after Newsom declared a drought emergency in hard-hit northwest counties, some experts say a state mandate is critical to keeping enough water in storage to survive a drought that could last a number of years.

Newsha Ajami, a longtime water researcher, said the mandate should have happened months ago, when reservoirs were low and there was no precipitation in sight. “Having a mandatory water restriction is in everyone’s benefit,” said Ajami, who is the chief strategy and development officer for research at Lawrence Berkeley National Laboratory.

The new state data only includes water use from urban water districts, not rural irrigation districts that serve farms.

At a Sacramento press conference last week, California’s Natural Resources Secretary Wade Crowfoot thanked residents for their efforts but reiterated a plea for voluntary cutbacks.

“I’m also here on behalf of Governor Newsom to ask all of us to do more,” Crowfoot said. “It’s once again time for Sacramentans, residents of this region, Californians to step up and help us navigate through this drought.”

“With the voluntary call, some areas were doing okay, others not so well...With a mandate, it’s a very clear message about the need.”

— Heather Cooley, the Pacific Institute

Under the statewide mandate issued during the last drought, water suppliers were required to conserve 25% statewide — with regions assigned a certain percentage of water depending on their existing use — or face escalating consequences that could result in fines.

Californians responded: They cut their water use by 23.9% between June 2015 and February 2016, compared to the same months in 2013, according to water board staff. Cities and towns still use less water daily than they did before the last drought began: about 17% less per person.

This time, however, many water suppliers have relied on ramping up outreach and rebates rather than imposing new restrictions or fines.

Ordering California's water suppliers to cut back further is likely to be a controversial move.

State Sen. Melissa Hurtado, a Democrat from Hanford, is skeptical that it would work.

“If we're still not even over the (COVID-19) vaccine mandate and the testing mandate, and now you're going to ask people to cut down on water consumption? That you should take less showers and you can't get a new pool or whatever it may be?” she said. “Yeah, no, that's going to make people really angry.”

Hurtado called for structural and technological changes — like developing more drought-resistant crops and fixing canals damaged by subsidence — over behavioral ones. Those, however, take time.

Water providers caution against reading too much into the low January conservation numbers: It's harder for Californians to squeeze out additional savings during the winter, when many already cut back on watering their yards.

In December, which had record-setting storms, Californians used 15.6% less water compared to the previous year, with the greatest savings in southern parts of the state. It was the first time Californians statewide crossed the 15% water conservation target that Newsom urged residents to meet last July.

Since July, the greatest savings came from the hard-hit North Coast and the San Francisco Bay Area. The least, from the inland mountains and deserts of central and southeast California.

Water systems on the North Coast “were the canary in the coal mine,” said Marielle Rhodeiro, research data specialist with the water board's conservation program. “They were the first to start running out of water. I think there's a little bit more awareness up north, probably because we're closer to the immediate problem.”

Some water suppliers crack down, others coax

For some local water agencies, voluntary calls for conservation have come close to meeting their own goals, though not the state's 15% target.

In the Bay Area, the East Bay Municipal Utility District upped its rates to fund improvements and asked residents to voluntarily cut water use by 10%.

The district ramped up rebates for replacing turf in yards and street medians, and launched an advertising campaign on streaming audio platforms and social media recommending five-minute songs for people to listen to while they showered.

It worked, to a certain extent: Water use decreased by more than 10% from July through December compared to last year, the district reported to the state. But now the savings are slipping; water use increased in February, according to water conservation manager Alice Towey.

“Clearly, it’s becoming difficult (to conserve) this time of year, when nature is normally watering our East Bay gardens,” Towey said. February was California’s second driest on record.

Farther south in San Jose, insufficient voluntary conservation prompted the local water company to institute surcharges for those who exceed mandatory limits based on 15% cuts to water used above a minimum threshold in 2019. In November, the California Public Utilities Commission approved the district’s mandate, which took effect in December.

“Clearly, it’s becoming difficult (to conserve) this time of year, when nature is normally watering our East Bay gardens.”

— Alice Towey, East Bay Municipal Utility District

Residents saved 20% more water in November compared to 2019 levels. With little outdoor irrigation to cut back in winter months, however, the savings evaporated in December and January.

The area lost about half of its above-ground water storage capacity due to earthquake retrofits for the region’s largest reservoir.

For Liann Walborsky, San Jose Water’s director of corporate communications, a statewide mandate would reinforce their efforts and drive home the message that conservation is critical. “I think it would just help validate all the work we’ve been doing since June,” she said.

In the aerospace hub of Palmdale in the Mojave Desert, after the area received less than two inches of rain, local water officials faced the possibility of mandatory cuts last summer. Then they bolstered their supplies enough to make it through the dry months.

The district called for 15% voluntary cutbacks to reverse increasing water use as residents weathered the COVID-19 pandemic at home, stepping up outreach and advertising for its rebate program to replace thirsty landscapes. Rebates increased by almost 70% from around \$53,000 in 2020 to more than \$89,000 in 2021.

In the first half of 2021, residents used about 11% more than in 2020. But the latter half ended up about 5% lower.

Still, the water district's director of resources and analytics Peter Thompson is torn about whether it's time for a statewide mandate.

"The momentum of having the state come out with a mandate makes our jobs easier," Thompson said. "But California is huge. And it's diverse in terms of the different water agencies and their available water supplies. So it makes a lot more sense to make that an individual choice for each agency."

Mandates may not be enough

For some water systems, even mandatory calls for conservation haven't been enough to weather water shortages.

By May 2021, in the small coastal hamlet of Mendocino, residents and businesses were required to use 40% less water than their allocations. Wells still went dry, water trucked from other districts climbed in cost when it was available, and restaurants in a town reliant on tourism were forced to weigh whether staying open was worth the expense of washing the dishes.

Ryan Rhoades, supervisor for the Mendocino City Community Services District, said he filled buckets of creek water to keep relatives' toilets flushing. He said most residents managed to stay below the mandatory target, but estimates that about 5% didn't.

The county and state stepped in to help, subsidizing trucks to haul water 60 miles from Ukiah to a reservoir in nearby Fort Bragg to bolster the coastal towns' supplies. And though the conservation mandate was lifted after early winter rains, replaced by a call to voluntarily reduce use by 15% of each well owner's allotment, the city is bracing for another dry summer — and hoping to prevent more shortages ahead.

Rhoades said he's awaiting word from the state on possible funding to tie into the local school district's water supply, drill more wells and increase storage. The wait, he said, is "frustrating and challenging, because people are aware that we have a problem, and we need help."

The state budget last year included \$5.2 billion for drought response and water resiliency. Since the drought began, the Department of Water Resources has awarded more than \$195 million to projects aimed at addressing shortages and bolstering emergency and longer-term supplies, including those supporting disadvantaged communities and tribes with well repairs, securing hauled water, and other efforts.

The State Water Resources Control Board tallies \$9.75 billion in loans and grants for drinking water, wastewater, groundwater cleanup and stormwater capture since 2014, board chair Joaquin Esquivel said at a press conference last week.

Legislation enacted after the last drought called for urban water providers to develop water budgets based on a number of factors, including indoor and outdoor water efficiency standards. Calculating water budgets is expected to take through the end of 2023, but could pave the way for more sophisticated, targeted mandates going forward, said the Pacific Institute's Cooley.

But urban water use is just a small part of California's water supply problem.

Of all the water Californians use, about 20% flows through urban taps, hoses and sprinklers. Almost all of the rest is for agriculture, which pumps water from wells and also gets supplies from rivers as well as state and federal aqueducts.

During the last drought in 2015, Brown was criticized for not imposing conservation orders on agriculture.

"We should be doing more conservation in general, and particularly in drought years," said Jay Lund, a University of California, Davis, professor of civil and environmental engineering. "But the quantities of water that we will save from this conservation will not be enough to take a tremendous amount of pressure off of farmers or off the environment."

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CalMatters environment coverage is supported by the 11th Hour Project and Len and Mary Anne Baker. CALmatters.org is a nonprofit, nonpartisan media venture explaining California policies and politics.

Heat wave shatters records across California, spells trouble for drought-dried state



Beachgoers enjoy the warm weather Wednesday in Santa Monica, where the temperature reached the low 80s. (Genaro Molina / Los Angeles Times)

BY HAYLEY SMITH STAFF WRITER MARCH 23, 2022

California's record-dry start to the year is converging with record-high temperatures as an early spring heat wave settles over large swaths of the state. Multiple temperature records were shattered Tuesday and Wednesday, according to the National Weather Service, including some that were nearly a century old.

In Santa Rosa, a sweltering 89-degree high Tuesday broke the previous record temperature for the date, 86 degrees, set in 1926. In Camarillo, the temperature hit 90 degrees and broke an 88-degree record last seen in 2008 and 1926. "It's a dome of high pressure that's sitting overhead," said David Sweet, a meteorologist with the National Weather Service in Oxnard. "It's a dome of warm air and downward vertical motions."

Other temperature records set Tuesday include 89 degrees in Oxnard; 88 degrees in Red Bluff; 86 degrees in Santa Maria and King City; 85 degrees in Redwood City, downtown Oakland, Gilroy and Salinas; 84 degrees in Santa Barbara, Paso Robles and San Jose; 83 degrees in Stockton; and 82 degrees at San Francisco Airport, officials said. Burbank tied an 86-degree record set in 2008, while downtown Sacramento tied the 1915 record of 82 degrees.

The heat stretched all the way into the northern reaches of the state, with Ukiah recording its hottest day of the year thus far — 90 degrees, just one degree shy of the 1926 record, officials

said. Ukiah's high was only 4 degrees off the hottest temperature in the nation for the day: 94 degrees in Death Valley. Sweet said temperatures across the Southland were 15 to 20 degrees above normal Tuesday.

Wednesday brought more high temperatures to the region, with two broken records and a tie. Burbank's high of 89 broke the previous 88-degree record set in 1953, according to the weather service. In Paso Robles, Wednesday's high of 90 degrees broke the prior record of 82 degrees, also set in 1953. The 84-degree high at Los Angeles International Airport was tied with the previous record set in 2008.

On Thursday, a gradual cooling trend will begin and stretch into Saturday, Sweet said, "but it'll still be above-normal." The heat wave spells trouble for the drought-dried state, which is already experiencing dwindling snowpack and shrinking reservoirs after an arid start to the year. January and February were the driest on record in California, and officials say March could follow suit. The three-month stretch is typically the heart of the state's rainy season.

Statewide snowpack on Wednesday was 52% of normal for the date, while the water level in Lake Shasta, the state's largest reservoir, was 49% of average, according to state data. What's more, the latest U.S. Drought Monitor update, released Thursday, showed 31% of the state had slipped into the "extreme drought" category, up from about 27% one week prior.

Carlos Molina, a meteorologist with the National Weather Service in Hanford, said spring's roaring temperatures typically don't arrive until at least the end of April. "So in a way, we're kind of a month ahead of schedule," he said. Record warmth is expected Wednesday through Friday in most of the San Joaquin Valley, Molina said.

The combination of unusually early heat and deepening dryness has spurred significant concern from state water officials, who last week announced that State Water Project allocations would be slashed to 5% from an already meager 15%. The announcement came on the heels of new data that found that Californians were significantly backsliding in efforts to save water, despite pleas from Gov. Gavin Newsom to voluntarily reduce use by 15%.

On Monday, the State Water Resources Control Board issued a "dry year letter" warning the state's rights holders and claimants that more curtailments are likely should dry conditions continue or worsen. Though spring outlooks issued by the National Oceanic and Atmospheric Administration last week predict the drought will expand, with warmer conditions across the West, officials said at least a bit of moisture may arrive in the coming week.

"We have a chance of rain coming somewhere between Sunday and Tuesday," Sweet said, noting that the highest chance is probably on Monday. "We're hoping for some rain then." Possible rainfall amounts for the L.A. region range from .25 of an inch to 1.25 inches, forecasters said.

Times staff writer Gregory Yee contributed to this report.

MARCH 23, 2022

MAD RIVER UNION

Supes approve Samoa Peninsula Enhanced Infrastructure Financing District

COUNTY OF HUMBOLDT
SAMOA PENINSULA

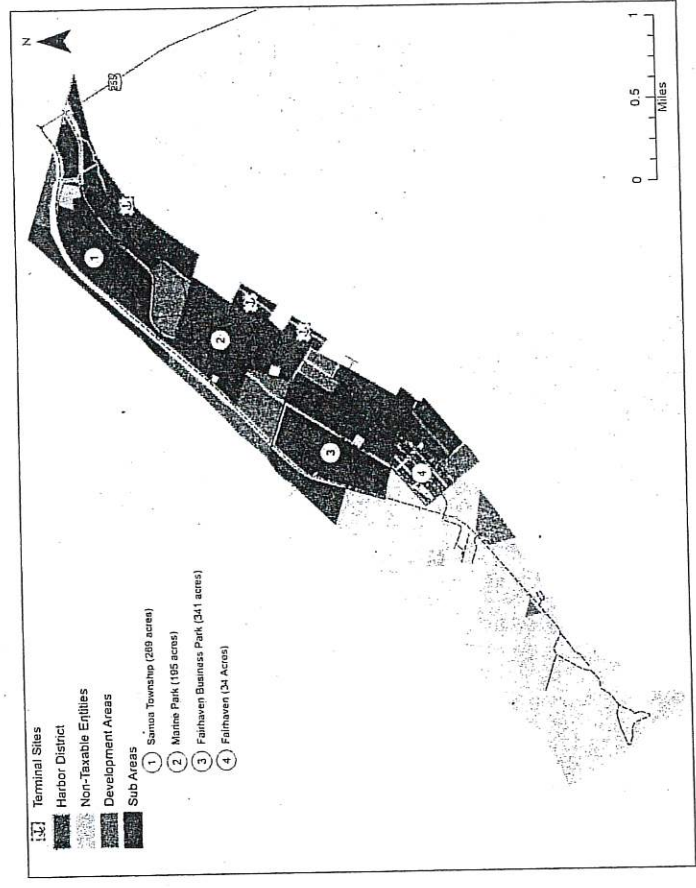
With the goal of creating new jobs and economic growth, the Humboldt County Board of Supervisors recently adopted a resolution establishing the Enhanced Infrastructure Financing District (EIFD) for the Samoa Peninsula.

The EIFD encompasses about 2,400 acres along the Samoa Peninsula, south and west of the Highway 255 bridge. Using the tax increment from large-scale development within the district, the EIFD will be used to fund a variety of projects which will benefit the community and surrounding areas.

"The formation of Humboldt County's first EIFD

has been an endeavor two years in the making," said Humboldt County Economic Development Director Scott Adair. "Our agency is enthusiastic about working with residents and stakeholders alike as we roll out this new initiative, which is aimed at creating jobs, promoting prosperity, and sustaining the livelihoods of people and families in our community."

Humboldt County is well positioned for growth and private sector investments in many areas, particularly on the Samoa Peninsula; however, infrastructure deficiencies and economic barriers have often hindered development. Current planned development areas include offshore wind energy, aqua-



development could result in 198 housing units, 805 direct permanent jobs, 986 indirect and induced permanent jobs, over 700 jobs in construction over the next 10 years, nearly a \$1 billion in economic output from construction alone, and an ongoing annual economic output of \$261.1 million. EIFD funds will be used

culture, international communication, emerging for-product industries, and community development. Conservative estimates anticipate current planned

to support these developments, and others like them, with the goal of promoting environmental sustainability, enhancing community welfare, and producing ongoing economic prosperity.

The State of California created EIFDs in 2014 as a tool for local governments to finance infrastructure projects and improvements as a replacement for state redevelopment funding. EIFD's do not impose new taxes, but instead rely on tax increments from interested agencies and jurisdictions.

Staff will continue to work with community stakeholders and the governing body of the EIFD, known as the Public Financing Authority (PFA), to identify infrastructure projects on the Samoa Peninsula, establish funding procedures, and report out on available fund revenues.

For more information, please review the Resolution Establishing the Samoa Peninsula EIFD or visit the Samoa Peninsula EIFD web page.

As Western Drought Worsens, Governor Newsom Moves to Bolster Regional Conservation Efforts

Published: Mar 28, 2022

Executive order calls on local water suppliers to activate drought contingency plans

Governor orders Water Board to consider ban on watering of decorative grass around commercial, industrial and institutional buildings

SACRAMENTO – Following the driest first three months of a year in the state’s recorded history, Governor Gavin Newsom today took steps to drive water conservation at the local level, calling on local water suppliers to move to Level 2 of their Water Shortage Contingency Plans, which require locally-appropriate actions that will conserve water across all sectors, and directing the State Water Resources Control Board to consider a ban on the watering of decorative grass at businesses and institutions.

In an executive order signed today, the Governor ordered the State Water Resources Control Board (SWRCB) to evaluate the adoption of regulations banning irrigation of “non-functional” turf (or grass), such as decorative grass adjacent to large industrial and commercial buildings. The ban would not include residential lawns or grass used for recreation, such as school fields, sports fields and parks. The Department of Water Resources estimates this ban alone will result in potential water savings of several hundred thousand acre-feet. An acre-foot of water serves the needs of approximately three households for a year.

“While we have made historic investments to protect our communities, economy and ecosystems from the worsening drought across the West, it is clear we need to do more,” said Governor Newsom. “Today, I am calling on local water agencies to implement more aggressive water conservation measures, including having the Water Board evaluate a ban on watering ornamental grass on commercial properties, which will drive water use savings at this critical time. Amid climate-driven extremes in weather, we must all continue to do our part and make water conservation a way of life.”

A copy of the executive order can be found [here](#).

As the drought persists into a third year and conditions worsen amidst dry, hot weather, today’s order called on the SWRCB to consider requiring urban water suppliers to activate, at a minimum, Level 2 of their customized Water Shortage Contingency Plans. These plans, required by state law, are developed by local water agencies to navigate drought and each plan is customized based on an agency’s unique infrastructure and management. Triggering Level 2 of these plans involves implementing water conservation actions to prepare for a water shortage level of up to 20 percent. For example, in many communities, this would mean reducing the number of days that residents can water outdoors, among other measures.

To further conserve water and strengthen drought resiliency in this critically dry year, the Governor is encouraging suppliers, where appropriate, to consider going above and beyond the Level 2 of their water shortage contingency plans, activating more ambitious measures. The Governor has also ordered state agencies to submit funding proposals to support the state’s short- and long-term drought response, including emergency assistance to communities and households facing drought-related water shortages, facilitating groundwater recharge and wastewater recycling, improvements in water use efficiency, protecting fish and wildlife, and minimizing drought-related economic disruption.

Today’s executive order includes several other provisions that will protect all water users:

- **Ensuring Vulnerable Communities Have Drinking Water**
 - Cuts red tape so communities that need access to emergency hauled or bottled water can get it immediately
- **Safeguarding Groundwater Supplies**
 - Requires local permitting authorities to coordinate with Groundwater Sustainability Agencies to ensure new proposed wells do not compromise existing wells or infrastructure, as 85 percent of public water systems rely heavily on groundwater during drought
 - Streamlines permitting for groundwater recharge projects that help to refill aquifers when rains come
- **Protecting Vulnerable Fish And Wildlife**
 - Expedites state agency approvals for necessary actions to protect fish and wildlife where drought conditions threaten their health and survival
- **Preventing Illegal Water Diversions**
 - Directs the Water Board to expand site inspections in order to determine whether illegal diversions are occurring

The Governor’s California Comeback Plan invests \$5.2 billion over three years to support the immediate drought response and build water resilience, including funding to secure and expand water supplies; bolster drought contingency planning and multi-benefit land repurposing projects; support drinking water and wastewater infrastructure, with a focus on small and disadvantaged communities; advance Sustainable Groundwater Management Act implementation to improve water supply security and quality; and support wildlife and habitat restoration efforts, among other nature-based solutions.

Earlier this month, Governor Newsom advanced an additional \$22.5 million to bolster the state's drought response. Of this funding, \$8.25 million will be used to increase educational and outreach efforts, including through the Save Our Water campaign, which is providing Californians with water-saving tips via social media and other digital advertising. The Governor's California Blueprint proposal includes \$750 million in additional drought funding, \$250 million of which was set aside as a drought reserve to be allocated in the spring, based on conditions and need.

More information on the state's response to the drought and informational resources available to the public are available at <https://drought.ca.gov/>.

###

Deadly ‘Smoke Waves’ From Wildfires Set to Soar

New research sees the Pacific Northwest, a future hot spot for dangerous spikes of PM2.5 pollution, getting smoked out every three to five years by late this century.

By [Bob Berwyn](#) March 28, 2022 *Inside Climate News*



Smoke from the East Troublesome Fire fills the sky above buildings in Estes Park on Oct. 22, 2020. Credit: Matthew Jonas/MediaNews Group/Boulder Daily Camera via Getty Images

Along with the surge in deaths and destruction from their flames, smoke from Western wildfires presents a health threat to people far from the fires that will get much worse in the next few decades, scientists reported today. The [study](#), published in the Proceedings of the National Academies of Sciences, largely focuses on tiny particles that go deep into lungs and can even enter the bloodstream to cause sickness and death.

The health risk is caused by particulate matter known as [PM2.5](#) to denote bits of pollution smaller than 2.5 microns—about one-thirtieth the diameter of a human hair—that damages cells and organs. PM2.5 can be composed of many different substances, including dust from soil and construction materials. In most of the West, wildfires are the main source, at least in the summer. The Pacific Northwest is a hotspot for the increase of particulate pollution, with harmful levels of PM2.5 from wildfire smoke likely to double or triple by the end of the century. The research also anticipates spikes in other types of pollution carried by wildfire smoke. Even if all countries followed through on their Paris climate agreement pledges to stop or offset human greenhouse gas emissions by 2050, the emissions will still increase, with Western fires expected to produce 60 to 110 percent more carbon dioxide by late this century.

And near-term projections are also important, said co-author [Meiyun Lin](#). “I was a little surprised to see increasing wildfires and pollution at mid-century no matter which emissions scenario we follow,”

said Lin, an atmospheric researcher with Princeton University and the National Oceanic and Atmospheric Administration. Even with big cuts in human greenhouse gas emissions, the study projects that PM2.5 pollution from wildfire smoke in the West will increase about 50 percent by mid-century, she said. In the past five years, wildfires burning around communities have killed more than 200 people, and since 2005, flames have destroyed 93,000 structures. During the last two summers, smoke from Western fires has blanketed large swaths of the U.S., even reaching the East Coast. Some wildfires have burned so intensely that they pumped smoke into the stratosphere to damage the Earth's ozone shield. Soot from fires, known as black carbon, also speeds melting of the Greenland Ice sheet.

Fine Particles a Global Killer

Researchers estimate that, globally, current PM2.5 pollution contributes to more than 4 million premature deaths annually, including 200,000 in Europe and about 50,000 in the United States. Recent research shows how smoke interacts with other pollutants in urban settings to promote the formation of low-level ozone, another form of air pollution that harms human health and damages plants. Wildfire smoke also damages crops and taints food, triggers asthma attacks and erodes mental health, as vulnerable people are forced to stay inside and forgo their regular routines to protect themselves as well as deal with the stress brought on by the scent and sight of the smoke. But there is little research on the impacts of extreme levels of PM2.5 pollution in some areas during recent large Western wildfires, which have produced readings more than 10, 20 or 30 times as high as the health thresholds set by the EPA.

Lin said the new study also includes the worrisome finding that extreme smoke pollution events like those caused by the megafires of the past few years—what many researchers describe as “smoke waves”—would recur every three to five years by late this century under the most likely “moderate” future emissions path. Previous studies of wildfire smoke pollution were limited by climate models that couldn’t accurately show critical details that determine how much pollution a fire generates, including things like local and regional winds, she said. The new study uses the latest set of earth system models that reproduce the climate at a much finer scale, combined with a statistical model to predict PM2.5 emissions during the rest of this century under three standard emission scenarios used by the Intergovernmental Panel on Climate Change. But the recent succession of four bad fire years suggests that even the latest models are underestimating fire activity, and other recent reports have warned of a major global surge of wildfires.

Time to Rethink Adaptation?

In some regions, wildfire smoke already hangs in the air for weeks during bad fire years. Public health experts note that the only way to eliminate the threat is to avoid breathing the smoke, which, short of wearing a gas mask or staying someplace with purified air, is nearly impossible to do. There are many people who have to work outside, including farmworkers and construction crews, and the smoke disrupts outdoor social activities, including sports. Besides protecting people from smoke during the fires, there’s also a major effort to try to reduce the intensity of fires so they don’t emit so much pollution to begin with. Tactics include thinning some forest types, enacting closures during dangerous fire conditions and even turning off power lines to eliminate one common ignition source. And fire experts, now sometimes guided by Indigenous and local knowledge, have already taken hopeful steps that could help reduce the intensity of some fires and the pollution they produce by trying to introduce more beneficial fire during seasons when the flames are least likely to escape control and less intense burning produces smoke with fewer health threats.

Smoke pollution that spikes to extreme levels during big, intense fires hasn't been studied enough, said [Kristie Ebi](#), an expert on climate change health risks at the University of Washington. "We need to think about these really high exposures," she said. Current air quality monitoring for PM2.5 and other pollution is designed for levels of pollution generated by ongoing human activities, which often stay within consistent ranges, but not for the huge spikes like those caused by recent megafires, she said. The unexpected surges of pollution from wildfires is more evidence that some [global warming impacts are outpacing societal efforts to adapt](#), which was detailed by the most recent Intergovernmental Panel on Climate Change report on impacts, adaptation and vulnerability. The threat reinforces the need to rethink public health protection at a fundamental level in the face of spiraling and often interconnected climate impacts, Ebi said.

[Curtis Noonan](#), a public health expert at the [University of Montana](#), said the new study is discouraging, but not completely unexpected. One thing that experts can do right away to help communities is step up warnings and information about smoke impacts, especially for extreme smoke waves, he said, adding that the increasing availability of low cost portable air sensors could help protect people. The increasing outbreaks of wildfire smoke also raise social questions, he added. "How much do we want to alter the way we live during those events, and what's the trade-off to the impacts from the smoke," he said. In Montana, it's become a contentious issue as smoke limits high school football practices and even games. "Part of that has to do with the [changing duration of the wildfire season](#)," he said. "It used to be a late summer thing. Now it's extending into fall."

Plan for Multiple Simultaneous Impacts

Smoke waves often occur simultaneously with other climate impacts, complicating public health responses. For example, heat waves and smoke waves often happen at the same time in the West, Ebi said, presenting health threats that require somewhat different mitigation efforts. For heat, the advice is for people to stay indoors where it's cool and to open windows and doors for ventilation, but for smoke, the doors and windows should be closed, setting up a vexing dilemma. Air conditioning might not be available if the electricity has been cut to prevent power lines from sparking new wildfires. She advocates for rethinking health warning systems to an "all-hazard, all society approach" that tries to account for different threats that can happen at the same time and affect different populations in different ways. There is no one-size-fits-all answer, she points out.

"Specific responses need to be place based," she said. "And it would be really nice if various state agencies had a place where they could learn from each other. Are there ways we can use information from what happened at the [fires near Boulder](#) for communities in Eastern Washington?" she asked. The fires that burned several hundred homes in the Rocky Mountain foothills near Boulder in late December were probably even more toxic than fires in remote forests because houses and other structures are built with plastics, chemicals and other materials that vaporized in the flames.

"It doesn't smell like a nice campfire, it smells like burning plastic," said University of Colorado, Boulder climate researcher [Max Boykoff](#), a contributing author to the upcoming IPCC report on how to mitigate global warming. Persistent wildfire smoke is an "ominous signal that things are trending in a direction that we don't want to be heading," he said. "The new study on wildfire smoke pollution shows once again how global societies are lagging in making the changes needed to avert the most serious global warming threats." And the fact that smoke can affect communities far from the mortal threat of the flames shows that the threats of climate change are here and now. "It is no longer a distant threat," he said. "It is here and now in all our communities."

Learn to Burn

Scientists estimate that California needs to burn one million acres a year to prevent catastrophic wildfires. That's more than a single agency can manage, but if you teach one million people to burn one acre each ...

by Alastair Bland March 28, 2022 *Bay Nature* magazine

As a ceiling of wet winter fog gives way to the morning sun, about two dozen people gather on a small farm in western Sonoma County. Their attention is focused on a lithe young woman in heavy trousers and leather work boots. “We’re looking at a max temperature of 64, a minimum humidity of 64 percent, a peak wind of 6 miles per hour east-southeast,” says Sasha Berleman, the director of Fire Forward, a prescribed fire program that teaches laypeople to burn overgrown forests and meadows to help prevent extreme wildfires.

This January morning, the ground is damp, but the breeze may yet dry out things enough for fire to catch. Berleman, who holds a PhD in wildland fire science and has been setting fire to landscapes since 2009, points behind her to an incline densely wooded with Douglas fir, tanoak, bay, and madrone. “We’re going to be on that opposite hill, burning down to the road,” she says. The plan is to burn about 15 acres.

A small wildfire torched this hillside last June and miraculously didn’t blow out of control. Instead it fizzled after burning just a little more than two acres, killing only a handful of mature trees. But the owners and residents of Green Valley Farm + Mill in Sebastopol took it as a warning. Collaborating on a pro bono basis with Fire Forward, a project of the nonprofit Audubon Canyon Ranch, and local fire officials, the owners began to draw up a plan, concluding that their land, like so much of California’s open space, had been deprived of fire for decades. The farm’s owners spent months and hundreds of hours clearing overgrown brush, and in January, a month after the last heavy rains, they decided to burn.

Following a 30-minute briefing and introductions among the group, mostly volunteers and locals who have worked together before, the crew don hard hats and backpacks with drinking water for the day. They follow a steep fire road up to a high ridge. The Fire Forward support truck arrives behind them, and eager hands grab shovels, leaf blowers, chain saws, and heavy steel fire rakes. For an hour they scour out fuel breaks—three-foot-wide ribbons of bare earth that run from the valley floor to the ridge. Wildfires can jump freeways, but the gentle flames of the prescribed fire will be contained by these strips. Finally, with shakes of their drip torches—canisters of diesel blend with burning wicks—they begin flinging arcs of fire across the forest floor. Smoke fills the air as small flames eat up leaves and twigs.

Fire of this nature—that is, low-intensity fire, often started by people—frequently visited California’s varied landscapes for thousands of years. But for the last 200 years fire suppression laws and decimation of Indigenous tribes who practiced burning have led to landscapes dense with vegetation. Today, the federal government, state officials, and a growing number of communities are reversing course, holding up prescribed fire as an essential tool in California’s effort to prevent catastrophic wildfires.

In January 2022, the U.S. Forest Service introduced a 10-year plan to clear combustibles from 50 million acres of forest and rangeland using prescribed fire and thinning. The program skims its funds from Congress's trillion-dollar Infrastructure Investment and Jobs Act, passed last November, and could be of particular service in California, where more than half of the forested land is federally owned. President Biden's Build Back Better plan, while its future remains unclear, has also aspired to dedicate billions to improved management of fuel-loaded woodlands.

At the state level, legislators recently passed laws that make prescribed burning—including tribal cultural burns—a hallmark of forest management policy. A sense of urgency has also reached the office of Governor Gavin Newsom, who has budgeted billions toward preventing wildfires and improving forest health. The proposed 2022–23 budget adds \$1.2 billion for fuel reduction, prescribed burning, and other forest management practices. This comes four months after Newsom signed the \$1.5 billion Wildfire and Forest Resilience Package, which dedicated at least \$88 million specifically to prescribed burning programs.

Most of this money will flow through the California Department of Forestry and Fire Protection, or Cal Fire, over the next three years. It will fund Cal Fire's own burning and vegetation thinning work and trickle into the coffers of local entities like prescribed burn associations, resource conservation districts, and tribal-based burning efforts by way of grants.

Berleman's small fire crew, and others like it around the state, are at the leading edge of a neighborhood-level change. "Communities are rallying for this," says Lenya Quinn-Davidson, a prescribed fire community organizer in Humboldt County and the fire adviser with the UC Cooperative Extension program.

But good fire does not burn easily. Despite an infusion of money and enthusiasm, a variety of administrative and logistical fuel breaks have stalled what might otherwise be a rapid increase in prescribed burning activity. Cal Fire has jurisdiction over burning on much private and state land in California and prohibits or discourages burning for a majority of the year, with almost complete bans in summer and fall. Add to these seasonal restrictions the staggering scale of the work: Tens of millions of acres of forest statewide are overloaded with fuel—dried leaf litter, tangles of dead wood, and thickets of seedlings. While prescribed-fire advocates talk a big game about burning a million acres annually, currently the prescribed burning conducted by Cal Fire, private landowners, and several federal agencies totals just a few tens of thousands of acres each year in California. And much of it is grassland, and that does little to address deadly and destructive forest fires.

Grassroots efforts, with neighbors helping neighbors small parcels at a time, are the solution, according to Berleman. "That's how we scale up, that's how we get to that one million acres a year of prescribed fire," she says. Along with her Fire Forward work, Berleman helps run the Good Fire Alliance, a prescribed burn association, or PBA, based in the North Bay. It is one of nearly two dozen PBAs that have formed statewide in the past five years. They offer support and networking to assist landowners in safely using beneficial fire. While private property owners who obtain air quality permits and follow Cal Fire's requirements can legally conduct prescribed burns themselves, working with PBAs or with individuals certified to conduct prescribed burns, called burn bosses, can make it easier. They handle permits, insurance, much of the planning, and liability waivers for volunteers. Collectively, these organizations are leaving their mark on the land. In collaboration with Fire Forward, the Good Fire Alliance members have burned

several hundred acres in Marin and Sonoma counties in the past four years. Quinn-Davidson's group, the Humboldt County PBA, has burned some 2,800 acres since it launched five years ago. At the time, it was the only PBA in California.

"And then they just started popcorning all over the state," Quinn-Davidson says. She runs the California PBA website, a clearinghouse for associations around the state, and reports that 18 PBAs have formally launched statewide and another six, at least, are planning to do so.

"Everyone's interested in this now," says Redbird, a Pomo Indian artist and basket weaver who lives in Sonoma County and has been helping to teach and conduct prescribed burns for about 20 years. He says he was almost overwhelmed with requests to lead prescribed burning seminars shortly after the 2017 North Bay fires. "People used to laugh at me," he says. "Now, they're listening."

Sonoma County resident Tessa Rissacher, who attended the Green Valley Farm burn, took Fire Forward's prescribed burning training course, which can be completed mostly online, a year ago. She says it was an informed reaction to the surging wildfire crisis that has forced her to evacuate her home more than once. "I was tired of feeling helpless and confused," says Rissacher, who has now volunteered with Fire Forward on two burns.

Chris Morales of Fairfax drove an hour to join the Green Valley Farm burn. Though he lives on a large rural property, regulations prohibit any burning for fuel reduction and wildfire prevention in his neighborhood. He hopes—maybe even anticipates—this will change in the future and it's partially why he took Fire Forward's training course. He sees prescribed fire knowledge as "a tool in the tool kit" of basic homesteading skills.

Up on the mountainside at the Green Valley Farm, Morales and the rest of the volunteers walk through the woods, waving their drip torches and dropping splotches of fire on the ground. But the mat of leafy, twiggy debris won't light. The small spots of fire shrink and fizzle out, burning little more than diesel. "It's not even creeping," one man observes. Berleman radios her teammates down the mountainside, and, after most of a day's work, they decide to quit and save their fuel. Next steps will include meeting with state fire officials to discuss the challenges of burning this north-facing slope in the winter months and to possibly gain Cal Fire's approval to return here during summer. "I'm hoping we can do this in July," Berleman says.

Just a valley and a ridge to the southwest of Green Valley Farm, burning conditions are better, and three days later, the Fire Forward pickup truck lumbers up the dirt driveway of the Occidental Arts and Ecology Center (OAEC), a nonprofit research and education organization. Property co-owner and co-director of the center's Wildlands Program Brock Dolman has spent decades restoring native ecosystems on the 80-acre site, and fire has been an important tool. He models his burning after traditional Indigenous practices, even starting his fires with a hand-powered wood drill. During a quick pep talk with the team, he nods his respect toward two Indigenous community members, including Redbird, who have come to help burn today.

"To your ancestral heritage, your DNA," Dolman tells them. He then briefly outlines the history of the property, stating that tribes lived and burned here for millennia, and "then some white folk knuckleheads came along and clear-cut the shit out of it, vineyarded it, plowed it."



Flames from prescribed burns and Indigenous burns typically creep close to the ground with occasional larger flare ups. (Photo by Sashwa Burrous)

To undo some of that ecological damage, OAEC residents burn the property's meadows every few years. On grasslands, low-intensity fire fixes soil nutrients and resets germination cycles. It also offers human stewards the chance to plant desired native seeds, giving them an edge over invasive competitors. Dolman says this burn-and-seed strategy has encouraged, among other species, blue wild rye and purple needlegrass to flourish.

Today, the Fire Forward crew, plus about 10 helpers, will burn a four-acre patch of mixed woodland—mostly oaks, bay, and fir—where there's been no fire in more than a century. It's Dolman's first woodland burn, placing him among the students. The Fire Forward crew hands out drip torches. "What do I do?" asks Dolman, inspecting the red canister and quipping that he's just a "fossil fool."

But using a drip torch is easy: You loosen a knob, allowing the diesel blend inside to trickle out, then light the wick and start tossing fire. Torches lit, the crew breaks into four squads—Alpha, Bravo, Charlie, and Delta—that disperse along the fire road, the uphill fuel break. When the topography permits, people usually ignite prescribed fires at an area's highest point, just inches below the fuel break. Especially important in dry conditions, this technique lessens the fire's ability to run away. A second line of fire burns about six feet below the first, and after a few minutes, these bands of flame meet and fizzle, leaving a beautiful six-foot ribbon of smoking black ash. Repeated downhill a strip at a time, the beneficial fire massages the forest.

Smoke clouds the woods, and one participant straps a disposable N-95 ventilating mask over her face. A moment later, a Fire Forward crew member suggests she take it off. The trouble is, it's synthetic and could easily catch fire. Otherwise, nobody appears very concerned about the smoke—at least, no more than they would be while sitting at a campfire. “Alpha, how's it going?” a crew member asks into the radio. A voice bounces back: “Burning. Fuels are a little too wet. Could be better.” The dry leaves and needles crunch underfoot, but residual moisture in the soil slows the fire. It takes babying to move the flames along, and the crews are using more diesel than they'd like to. “We're just wasting fuel at this point,” says Garrett Gradillas, Berleman's right hand on the Fire Forward team.

Across the road from the Occidental Arts and Ecology Center, Sashwa Burrous has also restored fire cycles to his shared 10-acre parcel of mixed woodland. Like others recently introduced to good fire, he learned the basic dos and don'ts of prescribed burning through a Fire Forward training program two years ago. He is now a core member of the local fire community, friends with Dolman, Berleman, and her crew, and an experienced burner. “You couldn't walk through this forest a little bit ago, maybe three months ago,” Burrous says, pointing into a tidy grove of Douglas fir and oak trees a long stone's throw from his home. Now, he suggests, one could hunt here, collect huckleberries, or forage mushrooms from the charcoal-black forest floor. Burrous has also helped landowners on either side of him to thin and burn their properties, and they, in turn, are getting stoked. “One of my neighbors just bought a drip-torch,” Burrous says. “He's super excited. He's been texting me, saying, ‘Conditions look good! Let's burn!’”

The era of American fire suppression may have formally begun with the Weeks Act of 1911, which commanded state and federal agencies to religiously fight fire on public land. However, its origins stem from the colonial genocide of Indigenous Californians, whose population plummeted from an estimated 300,000 in the 1700s to roughly 15,000 by 1900. This all but extinguished Indigenous burning traditions, and that any deep understanding of tribal burning survived through the 20th century is a wonder. And yet it did.

Scattered embers of Indigenous fire knowledge remain in far-flung corners of the state. Margo Robbins, a Yurok tribal member who lives in a community beside the Klamath River, is among the few bearers of the torch. When she was a child in the 1960s and '70s, her elders continued burning small areas “under the radar,” she says. Tribal burning in that era was an act of defiance as well as a pragmatic effort to coax food and fiber from the landscape.

Today, Indigenous communities often distinguish their cultural burning from other types of intentional fire; they're igniting small areas to thin out dead grass, facilitate acorn gathering, and prompt growth in plants used for basket-weaving material, for example. Reducing fuel loads that contribute to mega wildfires is not the primary goal, but a secondary benefit of cultural burning—exactly why the state wants to promote its use. And today, Robbins is passing on the skills she retained. “We're teaching the next generation,” she says.

In 2014, she established the Cultural Fire Management Council, a collaboration with other tribal members in the Klamath Basin to rebuild burning traditions among communities and families. Robbins says an uptick in cultural burning has noticeably affected the ecosystem. Deer have returned to areas where just a few years ago thick brush kept them out. Collecting berries and mushrooms is easier, and the soil moisture and stream flow, good for salmon and food-producing plants, have also visibly improved.

The Cultural Fire Management Council, working with Bill Tripp, a member of the neighboring Karuk Tribe, advised lawmakers in drafting SB-332 and AB-642, legislation intended to ease the administrative and legal hurdles currently impeding cultural and prescribed burning. Tripp has been burning around his community since age 4 and without adult supervision since age 8. He says his community currently burns just a few hundred acres each year, mostly around homes and structures, but he wants to “scale that up” and deploy good fire into large woodland areas, the way his ancestors did. He envisions a collaborative burning program of “prescribed fire with cultural objectives,” supported by state money and tribal knowledge.

Much in the way cultural burning takes place close to homes and roadways, good fire advocates believe prescribed burning should be initiated in and around suburban communities statewide—even in places as densely cluttered with residences as the East Bay Hills. “It belongs there, too,” says Don Hankins, a Plains Miwok tribal member and professor in the Department of Geography and Planning at California State University, Chico. Hankins says bare-earth fuel breaks and defensible spaces around homes can set the stage for safely burning within communities, so that fire can go “creeping through neighborhoods” without damaging structures or mature trees.

New state policies aim to prep communities for such a close relationship with fire, and recent legislation authored by Senator Bill Dodd, SB-332, protects anyone conducting a prescribed burn from liability except those “whose conduct constitutes gross negligence.” Another recent state action created a \$20 million insurance claims fund to back up landowners whose prescribed burns cause damage. Advocates say the dangers of controlled burns are sometimes exaggerated. A published review of 23,050 prescribed burns across the U.S. over many years reported an escape rate of just 1 percent. It also noted one minor injury and a single legal case resulting from fires that got away. But it does happen. The Colorado wildfire in Big Sur that burned 700 acres in January 2022 started due to embers from a recent pile burn—a collected heap of vegetation—according to investigators.

Even as prescribed fire becomes a mandate of state policy, with cash flow and community cheer fanning the flames, a good fire revolution seems years away. Many burning advocates claim Cal Fire’s restrictive permitting procedures impede rather than facilitate prescribed burning. Most years, starting in May and running through summer and fall—roughly the season when megafires have engulfed the state—the agency prohibits most intentional burning, pausing much of its own burning activity, too. At this time of year, often called the “burn ban” season, Cal Fire’s regulatory framework technically allows burning, but barely so. Landowners must apply for a free Cal Fire permit to burn, and typically the agency rejects the request. Only after significant rainfalls does Cal Fire lift the ban, for an interlude often referred to as the “open burning season,” making it so that almost any landowner can legally burn without a Cal Fire permit. While private landowners still need a 12-month permit from the local air quality management office that usually costs a few hundred dollars or less, it’s easy to get in most cases.

But during this season, even three or four weeks into a dry spell, lighting a fire in the woods is almost impossible. “By the time Cal Fire is willing to say yes [to a private prescribed burn], it’s likely that it’s going to be too wet to burn,” says Rob York, a professor of forestry at UC Berkeley with two decades of prescribed fire experience. York, among others, has publicly recommended that Cal Fire streamline its permitting procedures to accommodate more prescribed burns.

State officials seem to be listening. In 2020, the Newsom administration signed an agreement with the U.S. Forest Service to reduce fuels on a million acres of land each year, and Cal Fire is helping to orchestrate a collaboration with landowners, tribes, and federal agencies to substantially increase the intentional use of fire by 2025. State fire officials kicked off a program last spring to train and certify burn bosses: fire professionals qualified to help landowners safely burn on their properties. However, the program, mandated by 2018 legislation, has so far skunked: Nearly two dozen people took the course and not one has been certified by Cal Fire—a point of frustration for Quinn-Davidson, who helped design the program in hopes it would promptly produce a crop of eager burn leaders. And yet another new initiative, outlined in AB-642, requires the state fire marshal “to develop a proposal to establish a prescribed fire training center.” The proposal is due by July 2023.

Michael Wara, for one, is not satisfied with this pace of progress. “That’s not fast enough,” says Wara, the director of the Climate and Energy Policy Program at the Stanford Woods Institute for the Environment. Wara and his colleagues have estimated that between 10 and 30 percent of California’s approximately 100 million acres could benefit from fuel reduction programs, including approaches like prescribed fire. Wara recently drafted a detailed plan, funded by the Resources Legacy Fund, that erases California’s wildland fuel surplus in two decades or less, at the pace of a million acres and a billion dollars per year. A long shot to begin with, and there’s a kicker: thinning and burning must be repeated in several years, and then again, and again, and again. “This is a treadmill that you never get off,” says Scott Stephens, a UC Berkeley wildland fire scientist.

The state budget’s promised funds include \$20 million between 2020 and 2022 earmarked for “tribal engagement.” Cal Fire plans to dole out this money in the form of “Tribal Wildfire Resilience & Forest Health Grants across the state to implement forest health and fire prevention activities, including prescribed fire to promote traditional ecological knowledge,” according to an emailed statement from Christine McMorrow, a Cal Fire spokesperson.

Tripp remains dubious this will stoke cultural burns. “Twenty million doesn’t go a long way,” he says. He speculates it could go toward the prescribed fire training center required by AB-642. “We think that should be built here,” he says. Placing the training center in the town of Orleans, on Karuk territory, in Humboldt County, would give a boost to fuel reduction and prescribed burning projects on tens of thousands of acres now in the planning stages, Tripp says. Doing so would also serve as a mitigation for past atrocities. “Having fire taken from us was one of the great systemic injustices tribes have endured, and this would help remedy that,” he says.

Construction alone, plus a year of staffing, could burn through most of the \$20 million, according to Tripp. More money would help, and Tripp says tribal leaders are making “a pitch for including \$20 million in the California state budget this year” specifically to assist Karuk cultural burning programs, the training center included.

But the other law being celebrated as a boost to prescribed burning has run up against a problem—a legal loophole that Tripp says effectively cripples SB-332 when it comes to tribal land. The law protects from liability those who conduct prescribed fires in a reasonably responsible manner, but it requires, among other things, that a protected burn be authorized by specific sections of state law. That’s a legal impossibility, Tripp says, because these code sections do not recognize tribal approval to burn. It’s a complicated problem that Tripp says was

an unforeseen accident and that “some lawyer-type folks” are now trying to fix with some language tweaks for the next legislative cycle.

The state budget also allocated \$50 million over two years for “prescribed fire and hand crews.” Much of the money will support Cal Fire’s own prescribed fire work, but prescribed burn associations can tap into it through grant applications, according to Cal Fire’s McMorrow. However, groups that receive Cal Fire prescribed burning grants will be subject to the California Environmental Quality Act, which can require costly environmental analyses for project planners. That’s a hurdle some prescribed burn associations are reportedly reluctant to tackle, preferring to take private funding instead.

The biggest barrier to a prescribed burning revolution may simply be the immense labor involved in returning fire to neglected forests. These woodlands usually need “treatment” with chain saws, clippers, and chippers before fires can safely burn. Such work is slow, cumbersome, dangerous, extremely arduous, and expensive—at least \$1,000 an acre on average, by Wara’s estimates. On many small projects, like at Green Valley Farm, volunteers gladly do this work. Still, it takes a village to treat and burn just a few acres. These events require coordination, leadership, and planning, and at the last minute, unexpected weather conditions can cause cancellations and delays lasting an entire year.

Advocates frequently refer to “scaling up” their burns to the “landscape level”—ostensibly hundreds or thousands of acres. Berleman says drones could drop small firebombs into the middle of large forest areas while hand crews work the perimeters, a strategy that could allow large swaths to burn in a day. Tentatively planning such a burn, Berleman has her eye on the seaward slope of Mount Tamalpais, where the organization she works for, the Audubon Canyon Ranch, owns a vast and overgrown property. “I really want to get in there before a wildfire does,” she says.

Tripp maintains that in the Klamath Valley, nighttime fog and humidity in the summer can make for safe burning most of the year. He describes how parcels of woodland a few hundred acres in size could be lit in the evening, then essentially left to fizzle out after dark as the fog rolls in.

Others see a chance to go big by leveraging the impacts of recent wildfires. In 2020 alone, more than four million acres burned across the state, much of it by relatively low-intensity flames that left mature trees standing and the ground beneath charred but tidy and free of dangerous fuel—essentially achieving the effects of a massive prescribed fire.

“That’s a huge opportunity,” Wara says. Prescribed burning alone, without mechanical and manual thinning, is cheap and easy, with estimates ranging between \$50 and \$300 an acre. In fact, Wara’s forest treatment plan gets a lot more palatable when wildfires constitute part of the workforce: they’ve burned through about 10 million acres of forest in the past decade—land where wildfire risk has been effectively erased, at least for a while. Quinn-Davidson also sees opportunity in the ashes. “The August Complex burned a lot of area just like we’d want a prescribed fire to burn,” she says, referring to the 2020 fires of northwest California. “It would have taken us 20 years to achieve that ourselves.”

Some experts say California needs a specialized prescribed fire workforce—a shift from the current system of employing state firefighters to double as prescribed fire applicators. Instead,

says Chris Field, a researcher with the Stanford Woods Institute for the Environment, the state must develop a workforce “of people whose job description is fire-risk reduction.”

Developing economic incentives to thin forests, he says, would help in reaching this goal. Field suggests creating new markets for wood products made from small-diameter trees to generate lasting interest in thinning overgrown forests. His colleague Wara envisions a system in wildfire-prone areas where communities pay into funds that support work crews. “We need to build a different kind of rural economy in California where stewardship is a business opportunity.”

No matter how swiftly this all plays out, and even though some wildfire has been beneficial, great swaths of conifer forest will be lost. UC Berkeley’s Stephens says more than 50 percent of the Dixie Fire, which burned nearly a million acres in the summer and fall of 2021 in northeast California, burned at a high intensity, killing essentially everything in its path. Contiguous “patches” of forest larger than San Francisco were left an ashy wasteland. Much of this acreage, Stephens says, will become dominated by shrubs that outcompete many tree species. Once this happens, he adds, the transformation will be very difficult to reverse. “How do you get a forest back?” he asks. “That will be one of the biggest challenges in the coming century.”

From miles away, a plume of smoke can be seen spewing from the woods at the Occidental Arts and Ecology Center. Years’ worth of vegetation fuel buildup vaporized in a few hours, and the job will hopefully deflect any wildfire that passes through the area. In a few years, the community will do it again, and with less laborious prep work the second time around.

To finish the day, the burn team gathers beneath a midsize redwood tree, probably about a century old, and lights a ring of fire around its base. Given the chronology of tribal genocide and fire suppression, it’s unlikely this tree has ever felt fire. For several minutes, this monarch of the property towers over a dreamy haze of smoke and glowing coals.

“Don’t worry,” one of the volunteers says cheerfully to the tree as flames kiss its toes. “You’re going to be here for a long time.”

In this patch of forest, good fire is back.

Sites Reservoir project awarded more funding

By Robert Summa March 30, 2022 *SunHerald.com*

After being formally invited last week to apply for a \$2.2 billion low-interest loan through the Water Infrastructure Finance and Innovation Act (WIFIA), officials with the Sites Reservoir project announced Thursday that additional funding was made available.

The California Water Commission (CWC) recently announced an increase in funding for Proposition 1 bond recipients including \$38 million for Sites Reservoir. This additional funding increases the total amount in Proposition 1 funds to \$875 million for the water storage project.

Officials with the project said more funds became available after another project withdrew from the bond program. As a result, CWC was able to increase the investment for all projects to partially account for inflation and for projects like Sites Reservoir to make up for previous funding shortages. The Sites Reservoir project was eligible for Proposition 1 funds because of its significant public benefit, officials said.

The Sites Reservoir project, which has been in the works for more than 60 years, is expected to turn the Sites Valley, located 10 miles west of Maxwell where Colusa and Glenn counties meet, into a state-of-the-art off-stream water storage facility that captures and stores stormwater flows in the Sacramento River – after all other water rights and regulatory requirements are met – for release in dry and critical years for environmental use and for communities, farms and businesses statewide to utilize when it is needed, the Appeal previously reported.

“Sites Reservoir has some real momentum right now with the recent announcement of a WIFIA loan and now additional Proposal 1 funding,” Fritz Durst, chairman of the Sites Project Authority, said in a statement. “We’re grateful the California Water Commission was able to give Sites Reservoir and all of the storage projects a funding boost and we look forward to delivering substantial benefits for California.”

Officials stressed Thursday that Sites Reservoir would not dam any major river system or block fish migration or spawning.

Last week, the Sites Project Authority said the \$2.2 billion WIFIA loan, if approved, also could “dramatically reduce the costs to participants, making it more affordable for cities, farms, and resource managers to have access to more water in dry years.”

The Sites Project Authority said that Sites Reservoir is a “beneficiary pays project,” which it said means the loan will be repaid by project participants, the Appeal previously reported.

“The significance of this opportunity cannot be overstated,” Durst said in a previous statement. “We thank our federal partners and the Biden Administration for supporting Sites Reservoir in such a meaningful way.”

Jerry Brown, executive director for Sites Project Authority, previously said that the loan from WIFIA would cover about 49 percent of the project's total cost. He said this specific loan would cover a large portion of the local cost share. Brown said state and federal cost share is separate and apart from the WIFIA loan.

He confirmed with the Appeal that the Sites Project Authority will apply for the loan within the year.

"It's an 18-24 (month) process to close on the loan and start receiving funds to pay project costs," Brown previously said in an email. "The loan interest rate is established at close, so given the current interest rate environment there is a strong desire to act quickly to limit interest rate risk."

He said money from the WIFIA loan would be a tremendous boost for the project.

"The impact is immediate because this loan is a significant portion of the local dollars needed to support the project. It makes the project more affordable for our participating agencies," Brown said. "It equates to a ~10 percent cost savings, which for a project this size, is hundreds of millions of dollars. Affordability is critical to advancing Sites."

One Last Climate Warning in New IPCC Report: ‘Now or Never’

The world will probably burn through its carbon budget before the global climate panel issues its next update on mitigation.

By Bob Berwyn April 5, 2022 *Inside Climate News*



A local resident gestures as he holds an empty water hose during an attempt to extinguish forest fires approaching the village of Pefki on Evia island in Greece on Aug. 8, 2021. Credit: Angelos Tzortzinis/AFP via Getty Images

Whatever words and phrases the Intergovernmental Panel on Climate Change may have been parsing late into Sunday night, its new report, issued Monday, boils down to yet another dire scientific warning. Greenhouse gas emissions need to peak by 2025 to limit global warming close to 1.5 degrees Celsius (2.7 degrees Fahrenheit), as targeted by the Paris Agreement, the report says.

In a way, it's a final warning, because at the IPCC's pace, the world most likely will have burned through its carbon budget by the time the panel releases its next climate mitigation report in about five or six years.

Even with the climate clock so close to a deadline, it's not surprising that the IPCC struggled to find consensus during the two-week approval session, said Paul Maidowski, an independent Berlin-based climate policy researcher and activist. The mitigation report may be the most

challenging of the three climate assessments that are done every five to seven years under the United Nations Framework Convention on Climate Change, he said.

The first two reports of each IPCC assessment cycle, one on the physical basis of climate science, and another about impacts and adaptation, are mostly based on unyielding physics, like how much global temperature goes up for every added increment of CO₂, and how fast and high sea level will rise based on that warming.

But the mitigation report, which outlines choices society can make to affect the trajectory of climate change, has to reconcile those scientific realities with economic and political assumptions that are not constrained by physics, Maidowski said. Other researchers have described the IPCC report as a mechanism to determine what is politically possible, he added. If those assumptions—for example about future availability of carbon dioxide removal technology—don't materialize, “then you are left with illusions, essentially,” he said.

The IPCC has “blinded itself” to deeper questions of sustainability and is thus asking the wrong questions, like how to decouple economic growth from greenhouse gas emissions, he added. Instead, it should be more up front about acknowledging the physical limits of the planet, and start asking how to downscale current resource consumption to a sustainable level.

The report found that “without immediate and deep emissions reductions across all sectors, limiting global warming to 1.5°C is beyond reach.”

On the hopeful side, the panel noted that renewable energy costs have dropped by as much as 85 percent in the past decade, and that new policies in many countries have accelerated deployment of wind and solar power.

Deforestation rates are dropping in some regions, which leaves more trees to take up carbon dioxide from the atmosphere, showing that improved agriculture and forestry practices can deliver “large-scale” emissions reductions. However, “land cannot compensate for delayed emissions reductions in other sectors,” the panel warned.

An Unrealistic Leap of Faith

The contradictions between scientific reality and hopeful political assumptions identified by Maidowski are clear in the new report, which says, on the one hand, that greenhouse emissions need to peak in the next three years, while also finding that average annual greenhouse gas emissions from 2010 to 2019 were higher than in any previous decade.

Believing that emissions can peak by 2025 on that trajectory requires an enormous and unrealistic leap of faith, and many climate scientists, including NASA researcher [Peter Kalmus](#), are not buying it. “This IPCC report is absolutely harrowing. Wake up everyone,” [Kalmus](#) wrote on Twitter. “Brief summary of the new IPCC report: We know what to do, we know how to do it, it requires taking toys away from the rich, and world leaders aren't doing it,” he continued.

[Kalmus](#) supports [Scientist Rebellion](#), researchers who say the climate crisis requires much more drastic action than world leaders have been willing to take so far. The group marked release of the report with scientist-led protests at universities worldwide. University protests are part of a

growing wave of activism aimed at disrupting normalcy to try and generate more public awareness of the need for transformative change, according to the Climate Emergency Fund, a nonprofit that funds climate protests.

Kalmus also focused on how much more carbon dioxide can be emitted before missing the Paris Agreement target. He said there are only about 400 gigatons left in the carbon budget, and the new report shows that the world is on a path to produce more than twice as much, with projected emissions from energy production, industry, transportation, development and land use adding up to about 850 gigatons of carbon by 2100. "If just the currently planned stuff is built and used, we'll blow past that budget by a factor of two," he said. "The numbers are there, the policy makers are completely ignoring them. They're saying, 'we have to listen to the scientists,' but they're not. And actually, they've stopped saying that now."

Since Russia invaded Ukraine, the messaging has changed, he added. "They are talking about building more fossil fuel infrastructure," he said. "The way it's going right now, we're equally dead with Republicans or Democrats. What that says is, we need an uprising. This report doesn't quite spell that out, but you only have to read between the lines a little bit."

The most optimistic path identified in the new report shows that it is possible to limit global warming, but only with deep emissions cuts in all economic sectors and in all parts of the world, said climate scientist Bill Hare, who has worked on IPCC reports for decades and is now CEO of Climate Analytics, a nonprofit international climate think tank.

The global temperature will stabilize when carbon dioxide emissions reach net zero, said IPCC Working Group III co-chair Jim Skea. To cap global warming at 1.5 degrees requires reaching net zero carbon dioxide emissions globally in the early 2050s; for 2 degrees Celsius (3.6 degrees Fahrenheit), it is in the early 2070s, he said. "It's now or never, if we want to limit global warming to 1.5 degrees Celsius," Skea said. "Without immediate and deep emissions reductions across all sectors, it will be impossible."

But even with 1 to 1.5 degrees Celsius of warming, the world faces a great acceleration and intensification of climate impacts like killer hurricanes and wildfires, Hare said. "We shouldn't fool ourselves and think we can escape all that stuff, but it will be better the more we limit warming," he said, reviewing the three IPCC reports released in the past year.

"Working Group I showed the rapidly increasing risks with every increment of warming," he said. "There are nonlinear risks, like rapid ice sheet disintegration that could raise sea level very quickly." The Working Group II report "shows that natural systems and vulnerable people are facing massive catastrophes," he added.

"It's deeply frustrating that we're not further advanced," he said. "I can understand the people who are deeply scared. I can understand people being deeply concerned and panicking about it, but we have to stick with it. It's all around politics, isn't it? All of the technology is already there, and we know what to do with it. But at every step, there is pushback from carbon interests," he said, defining the main problem as the "capture of government by fossil fuel interests."

New financing district will propel development

By **Sonia Waraich** swaraich@times-standard.com Saturday, April 2, 2022

Offshore wind, a sustainable fish farm and a high-speed fiber optic cable are just a few projects expected to come to the Samoa peninsula's shores in the coming years, and the community is preparing to capitalize on that development.

Last month, the county established the Samoa Peninsula Enhanced Infrastructure Finance District, which will capture tax revenue generated from new development within about 2,243 acres of land south of the Samoa Bridge for 45 years. Those funds will be used for infrastructure improvements on the peninsula for years to come and isn't reserved exclusively for traditional infrastructure such as roads and bridges, Humboldt County Economic Development director Scott Adair told the Times-Standard. "It could also be trails, bicycle lanes, fire hydrants," Adair said. "It could be parks and green spaces."

The state of California established the infrastructure finance district as a tool local governments could use to fund economic development and infrastructure project within the boundaries of a district. It does this by freezing the amount that goes to the county government at a base rate and anything generated over and above that in subsequent years will go to the district for improvements.

Without the district, additional tax revenue generated on the peninsula would go into the county's general fund and could be used anywhere in the county. With the district, it obligates the county to reinvest a portion of the new tax growth into the area where it was generated.

The total assessed value of the Samoa peninsula area in 2021 dollars once its fully built out is expected to be \$724.7 million. The proposed Nordic Aquafarm alone is expected to have a minimum assessed value of \$350 million once constructed. The county conservatively estimates that development that's already in the works could lead to 198 housing units, over 700 construction jobs and nearly \$1 billion in economic output from construction over the decade. It's also estimated to result in almost 200 new housing units, almost 2,000 jobs and an ongoing annual economic output of \$261.1 million.

Adair said the investment in Humboldt County in the next decade could be far greater than that, reaching into the billions. Those funds can be used for the planned development as well as a variety of other projects, from creating a public park to building affordable housing. For example, the city of Redondo Beach established an enhanced infrastructure district to revert a closed power plant into a park, wetlands and private development, while the city of Fresno established one for a transit area for transportation improvements.

Samoa's finance district will disburse the funds through a grant program with a public process for reviewing requests, Adair said. The district will also have a board that makes recommendations to the Humboldt County Board of Supervisors, which would be the ultimate authority on deciding the projects that get funded.

"It's really going to be rooted in public process," Adair said. "And there will be opportunities for public input at various points along the way." *Sonia Waraich can be reached at 707-441-0504.*



CAL FIRE NEWS RELEASE

California Department of Forestry and Fire Protection

Humboldt-Del Norte Unit

CONTACT: Connie Ward
Fire Prevention Specialist
(707)726-1285

RELEASE
DATE: April 1st, 2022

Ruth Lake Fuels Reduction

Projects protect communities, reduce fire threat, and greenhouse gases

As part of CAL FIRE's wildfire preparedness strategy, the department has awarded a \$500,000 contract with the Humboldt Bay Municipal Water District (HBMWD) to implement fuels reduction on District property in Trinity County. CAL FIRE has partnered with the District in the area of Ruth Lake focusing on areas that did not burn in the August Complex Fire of 2020. HBMWD's mission includes protecting the environment of the Mad River watershed to preserve water rights, water supply and water quality interests of the District. Protecting the environment aligns with CAL FIRE's goals in fuels reduction. These fuel reduction activities, supported by CAL FIRE, will reduce the volume of flammable vegetation thereby reducing the risk of adverse wildfire impacts in the Ruth Lake area. These activities will also promote safer ingress/egress for fire crews and provide fire control features to aid in firefighting efforts while protecting the environment.

This project seeks to create a fire safe community by reducing fire hazard through removal of excess vegetation in the Wildland Urban Interface around Ruth Lake, California. The funding goals of this contract are: support direct defensible space assistance to a multitude of structures, provide 2 miles of forest fuel treatment along access roads, and implement 20 acres of additional fuel reductions designed to benefit forestlands and infrastructure managed by HBMWD. HBMWD Board President Sheri Woo said this about the partnership, "We appreciate and value our relationship with CAL FIRE and their financial support to improve our forest health and environment around Ruth Lake."

The funding is a part of CAL FIRE's Wildfire and Forest Resilience Funding for Fire Prevention Projects. These projects come from the CAL FIRE Unit Fire Plans, which contain priority fuel reduction projects unique to each CAL FIRE Unit. The Plans are living documents, updated annually with the input of local Unit staff and partners. These strategic fuel breaks and reduction in hazardous fuels reduce the severity of wildfires, while reducing the fire risk to vulnerable communities. They enable firefighters to approach a fire, take a stand, establish containment lines, and create evacuation routes.

For information on CAL FIRE's wildfire preparedness activities, visit <https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/>.

###

CORRESPONDENCE



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MICHELLE FULLER, DIRECTOR
DAVID LINDBERG, DIRECTOR

GENERAL MANAGER

JOHN FRIEDENBACH

March 15, 2022

VIA: eFile on FERC website

Frank.Blackett@ferc.gov
Mr. Frank L. Blackett, P.E.
Federal Energy Regulatory Commission
Office of Emergency Projects
Division of Dam Safety and Inspection-San Francisco Regional Office
100 First Street, Suite 2300
San Francisco, CA 94105-3084

RE: Extension Request for Submitting 2016 Dam Safety Surveillance and Monitoring Report for R.W. Matthews Dam (FERC Project No. 3430-CA)

Dear Mr. Blackett,

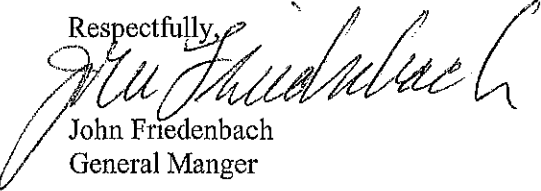
The purpose of this letter is to request an extension for submitting our 2021 Dam Safety Surveillance and Monitoring Report (DSSMR) for R.W. Matthews Dam, FERC Project No.3430.

We received our annual dam survey data and final report on March 10, 2022. Typically, this report is received by the District in December which allows sufficient time for our internal review, data analysis and incorporation into our annual DSSMR by the due date of March 31st. As you know, the annual dam survey data is a critical component to the safety data that is collected and compiled for the safe operations of the R. W. Matthews dam.

Therefore, we respectfully request a 45-day extension to May 15, 2022 in order to file a complete and accurate DSSMR 2021 report with FERC.

Thank you for your consideration of our request. Please contact us if you have any questions.

Respectfully,


John Friedenbach
General Manger

cc: Bill Rettberg, GEI Consultants Inc.
Nate Stevens, GHD
Sharon K. Tapia, Chief of the Division of Safety of Dams



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DAVID LINDBERG, DIRECTOR

GENERAL MANAGER

JOHN FRIEDENBACH

March 24, 2022

United States Environmental Protection Agency
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Re: Letter of Support for Humboldt State University Sponsored Programs Foundation/
Schatz Energy Research Center's Proposal: **"Establishing the Klamath Region Community Air
Monitoring Network: A Rural Community and Tribal Knowledge Sharing Platform."**

To Whom it May Concern,

On behalf of the Humboldt Bay Municipal Water District (HBMWD), it is my pleasure to provide this letter of support for the Schatz Energy Research Center's (Schatz Center) application to the United States Environmental Protection Agency to support the project "Establishing the Klamath Region Community Air Monitoring Network: A Rural Community and Tribal Knowledge Sharing Platform." The project's goal is to establish air monitoring infrastructure and technical capacity to enable rural communities and tribes in the Klamath region and Mad River basin to assess their air quality and use this information to inform programs and decision making.

At HBMWD we work to reliably deliver high quality drinking water sourced from the Mad River to the communities and customers we serve in the greater Humboldt Bay Area at a reasonable cost; reliably deliver untreated water to our wholesale industrial customer(s) at a reasonable cost; and protect the environment of the Mad River watershed to preserve water rights, water supply and water quality interests of the District.

When funded, we look forward to working with the Schatz Center, Karuk Tribe, and Blue Lake Rancheria to inform the development of the air monitoring network. The monitoring domain includes areas of the Mad River Watershed where several facilities are located and we would be happy to consider hosting several sensors on our property.

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

Respectfully,


John Friedenbach
General Manager

Establishing the Klamath Region Community Air Monitoring Network: A Rural Community and Tribal Knowledge Sharing Platform

A Proposal to the US Environmental Protection Agency (RFA EPA-OAR-OAQPS-22-01)

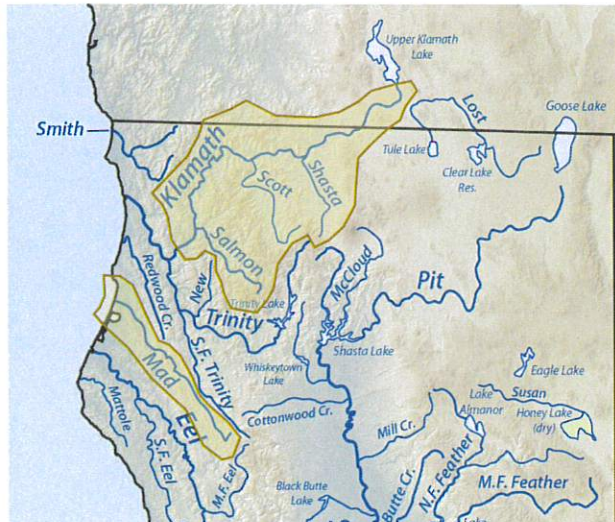
Applicant: Schatz Energy Research Center

Project Partners: Karuk Tribe, Blue Lake Rancheria Tribe

Communities in the Klamath region face extreme and worsening air quality from uncontrolled wildfires and industrial activities. While this region experiences some of the highest levels of wildfire smoke nationwide, air quality monitoring coverage is sparse. The gaps in coverage leave community members and groups guessing during times of hazardous smoke conditions.

This project will establish the Klamath Region Community Air Monitoring Network - a community led network of real-time air quality monitors – emphasizing particulate matter (PM) - with supporting calibration and data management infrastructure to serve communities in the Klamath region of Northern California.

Our project will fill air monitoring gaps with strategic sensor deployment and establish technical resources that support regional knowledge sharing, sustained technical capacity, and the use of data within community-specific programs. This includes the deployment of 100 low-cost PM sensors and four near-reference grade PM_{2.5} monitors to complement existing regulatory and non-regulatory air monitors in the region. We will also adapt data management and visualization tools developed by the Schatz Center to bridge the data to insight gap and lower the barrier to using network data community decision making, including QA/QC of sensors/instruments across the network.



As an organizing framework, we propose to use watershed-based domains for community air quality management, with tribal governments identified as critical stewards of the lands, waters, and air to guide deployment. This will be coupled with a regional consortium approach to build capacity for sustained maintenance of sensors and monitors and the technical capacity to use the data to support community decisions. This approach will serve our region well and help to address historic barriers to establishing sustained air monitoring programs/infrastructure in our communities. If successful, this model could be scaled to reach and serve the needs of other rural areas and tribes.

The first year of the project is organized around two watershed regions, each associated with one of the project partners. First, associated with the Karuk Tribe, a portion of the Klamath River watershed of Northern California, upstream from the confluence with the Trinity, to Upper Klamath Lake; second, associated with the Blue Lake Rancheria Tribe, the entire reach of Baduwa't (the Mad River). The Schatz Center, based in the region along Humboldt Bay, will provide network-wide technical capacity. The entire proposed network domain encompasses all or parts of Humboldt, Siskiyou County, Del Norte, and Trinity counties.

The figure above right shows the Klamath region over which the community air network will be established, highlighting the watershed areas where air monitoring will be deployed in the first year.

The project is being designed and implemented in collaboration with both the Karuk Tribe through the Department of Natural Resources (KNDR), and Blue Lake Rancheria Tribe (BLR). Together, we will work with over a dozen participant organizations from these communities to help shape air monitor network design and knowledge dissemination. In the second year of the project, KNDR and BLR will serve as community knowledge hubs to expand network infrastructure to two new communities within the larger monitoring domain.

Our project prioritizes real-time monitoring of fine particulate matter (PM2.5) given its reliability as a broad indicator of health risk and wildfire smoke, but flexibility to expand to include other pollutants will be considered, in responds to the needs and concerns of communities and availability of funds. The California Department of Public Health Air Quality Division will serve as a network partner to support periodic assessment of pollutant hazards for which reliable real-time assessment is unavailable, such as volatile organic compounds (VOCs), metals, and polycyclic aromatic hydrocarbons.

Our project will create channels through which knowledge can flow across the Klamath region communities to address the challenges identified as barriers by community partners:

- **Resilient Technical Capacity** - high staff turnover is a feature of many rural community and tribal organizations the region impacting technical capacity specific to air monitoring. The Schatz Center will bolster capacity across the entire network by serving as a regional technical lead and - in collaboration with partners - develop training resources and adapt open-source data tools that streamline community workflows (saving resources in the long run). Community organizations in the network will serve as knowledge hubs to others in the network.
- **Streamlined Sensor Deployment & Calibration** - It can be costly to manage and maintain a large network of air quality sensors. This project will define standard procedures and strategies for deployment and management by community-serving organizations, including sensor redundancy to avoid maintenance visits, supporting remote setup by site hosts, and mobile reference-grade sensors to support regular calibration of low-cost sensors.
- **Integration of Indoor & Outdoor Air Monitoring** - This project will deploy indoor and outdoor sensors in strategic locations to serve community needs, with a particular focus on indoor air in community buildings (e.g., schools, libraries, senior centers). These co-deployments will support understanding of the interplay between outdoor and indoor air, and support efforts to maintain clean air indoors through smoke events.
- **Data Management & Accessibility** - Low-cost sensors have lowered the barrier to owning air quality equipment but translating data to the knowledge products (e.g. bulletins, reports) remains a barrier. Meetings facilitated by KNDR and BLR with community participant organizations will inform updates to open-source dashboards to the needs of specific program activities and goals. The framework is flexible to expand to changes and expansion of the sensor network.
- **Funding** - Sustained funding to support community air monitoring is a persistent challenge. Our consortium approach and project outputs - sensor deployments, training, tools – will establish capital and technical infrastructure that will extend beyond the lifetime of this

project. Meetings, websites, and training will help to bridge communities and work towards reducing barriers to collaboration across the region and reduce the overall cost of monitoring.



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DAVID LINDBERG, DIRECTOR

GENERAL MANAGER

JOHN FRIEDENBACH

March 28, 2022

To: Karen Diemer and Rachel Hernandez, City of Arcata
 Amanda Mager, City of Blue Lake
 Miles Slattery, Brian Gerving, and Michael Hansen, City of Eureka
 Rick Hanger and Rebecca Crow, Fieldbrook Glendale CSD*
 TK Williams, Humboldt CSD
 Pat Kaspari, McKinleyville CSD
 Christopher Drop, Manila CSD

Draft
Re: Humboldt Bay Municipal Water District – 2021 Consumer Confidence Report

Enclosed is a hard copy of the HBMWD's Consumer Confidence Report for the year 2021. We will also email you an electronic copy.

If you have any questions about the report, please feel free to call our office at (707) 443-5018.

*Note for Fieldbrook Glendale CSD: Fieldbrook Glendale CSD Consumer Confidence Report for the year 2021 is also attached.

Sincerely,

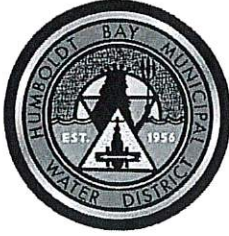
Sherrie Sobol
 Program and Regulatory Analyst

cc: *via email only*

Brenda Franklin, Humboldt CSD

Glenn Bernald, City of Blue Lake

Dale Davidsen, HBMWD



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JOHN FRIEDENBACH

March 24, 2022

The Honorable Henry Stern
Chair, Senate Committee on Natural Resources and Water
1021 O Street, Room 3220
Sacramento, CA 95814

RE: SB 1157 (Hertzberg) – Indoor Residential Water Use – OPPOSE UNLESS AMENDED

Dear Chair Stern:

The Humboldt Bay Municipal Water District is respectfully opposed unless amended to SB 1157 (Hertzberg). This bill incorporates joint recommendations by the Department of Water Resources (DWR) and State Water Resources Control Board (State Water Board), which do not account for the adverse impacts or significant costs to which these revised standards will lead. We seek amendments that would delay the implementation of a 2030 standard and require additional quantitative analysis of an appropriate standard for 2030 and beyond.

AB 1668 (Friedman) and SB 606 (Hertzberg) were a package of bills signed in 2018 that called for the creation of new urban water use efficiency standards for indoor residential use, outdoor use, water loss, and variances for unique conditions. Many public water agencies worked intently on this issue with all the interested parties, including legislators, staff, and other stakeholders, during the long negotiations on these bills in 2017-18.

A critical component in the outcome of these negotiations was that DWR would conduct studies and investigations to identify a standard for indoor residential water use that appropriately reflects best practices for indoor water use with broad input from all stakeholders. DWR and the State Water Board released their Final Report in November 2021. While a study was completed, the analysis of adverse impacts and other relevant information, including affordability and changing populations and patterns, were not quantitatively considered; nor did they inform the final recommendations.

The Final Report indicates that, on average, current indoor residential water use is 48 gallons per capita daily (GPCD). Given this finding, the recommended standard for 2025-2030 of 47 GPCD, which is included in SB 1157, is very close to existing statewide average water use. Even so, many suppliers will still need to make significant investment to achieve the proposed 2025 standard. The reduction to 42 GPCD in 2030, however, is significantly lower than current water use, and there will be substantial negative impacts to water providers, sanitation agencies, and recycled water providers. In addition, the impacts to affordability are likely to be serious and detrimental.


The California Water Efficiency Partnership estimated during the regulatory process that the “the total anticipated cost range for reasonably complying with a 2030 standard in which all providers achieve a residential indoor per capita volume of 42 GPCD by 2030 is likely between \$2.8 and \$4.6 billion.” While the indoor residential water use standard is only one component of the overall water use objective, given the separately enforceable component of water loss, it is anticipated that public water agencies will need to make significant additional investments to reduce indoor residential use to meet the overall objective. Ultimately this substantial financial investment will only save 354,000 acre feet of water per year over the current 2030 standard – approximately half a percent of statewide water use.

In addition to these direct costs, there will be substantial secondary costs. The Final Report indicates that the adverse impacts to wastewater and recycled water providers could be significant. A few examples of potential impacts include increased sewer gas production, accelerated rate of corrosion of pipes and manholes, increased occurrences of sewer blockages and overflows, degradation of wastewater influent quality, and reductions in recycled water quantity. Mitigating these impacts will require considerable investment.

The Legislature has repeatedly endorsed and asked for evidence-based decision making. While the Final Report has the appearance of evidence-based recommendations, additional analysis is necessary to truly understand the impacts of the 2030 standard. The Final Report itself acknowledges some of these shortcomings, stating that detailed saturation and end-use studies could better inform how much active and passive conservation is available and that the standards will have an unknown effect on affordability and the human right to water.

For these reasons, Humboldt Bay Municipal Water District has serious concerns regarding the 2030 standard SB 1157 would implement and requests amendments that would require quantitative analysis of these impacts prior to the implementation of the 2030 standard. Without these amendments, we respectfully request your "No" vote when the bill is heard in the Senate Committee on Natural Resources and Water.

Respectfully,



John Friedenbach
General Manager

Cc: Senator Brian W. Jones, Vice Chair
Senator Benjamin Allen
Senator Susan Talamantes Eggman
Senator Shannon Grove
Senator Robert M. Hertzberg
Senator Ben Hueso
Senator John Laird
Senator Monique Limón
Todd Moffitt, Committee Republican Consultant
ACWA Public Affairs Committee



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GENERAL MANAGER

JOHN FRIEDENBACH

March 24, 2022

The Honorable Chris R. Holden
California State Assembly
P.O. Box 942849
Sacramento, CA 94249-0041

RE: AB 1717 (Aguiar-Curry) – Prevailing Wage for Forestry Fuel Reduction – OPPOSE

Dear Assembly Member Holden:

The Humboldt Bay Municipal Water District (HBMWD) is respectfully opposed to AB 1717 (Aguiar-Curry). This bill would expand the definition of “public works” to include fuel reduction work paid for in part or whole by public funds, thereby, requiring payment of prevailing wage.

Over the past several years, California's wildfire seasons have grown both longer and more severe each year, as climate change has exacerbated the decades-overdue need for better vegetation management and fuels treatment strategies around communities in the wildland urban interface (WUI). Many of these communities are socioeconomically disadvantaged, with all 26 of California's economically disadvantaged counties containing lands designated as high or very high fire hazard severity zones, and depend on public funding such as grants from the Greenhouse Gas Reduction Fund (GGRF) to implement community fuels treatment and fire mitigation projects to safeguard their communities from wildfires. One of the most impacted counties is Trinity County, which suffered the disastrous August Complex Wildfire, yet has precious little resources to dedicate to fire mitigation efforts.

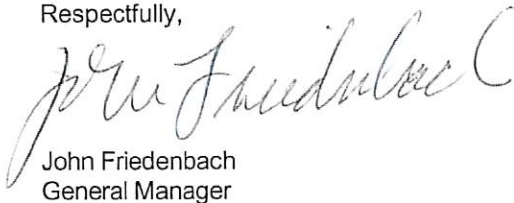
The ability to utilize GGRF and other public dollars through programs like California Climate Investments has afforded rural local governments the ability to undertake such vital projects as clearing dead and dying trees from critical infrastructure and residential properties during California's recent tree mortality epidemic, as well as completing community wildfire mitigation projects in concert with local fire prevention organizations to help safeguard residents from the impacts of devastating wildfires. AB 1717 would greatly reduce HBMWD's grant-funded efforts to conduct fuel reduction on District property in Trinity County.

As fire-prone counties continue to seek ways to maximize their ability to safeguard their residents from the devastation of wildfires, it seems ill-timed to introduce additional barriers to implementation of fire mitigation projects in communities that desperately need public funds to complete these projects. AB 1717 would increase the cost of crucial fire mitigation projects around communities and critical infrastructure by including these

projects in the definition of "public works," thus subjecting them to prevailing wage. AB 1717 would simply drive up costs of the scarce forest workforce currently in place, while shrinking the pace and scale of vegetation treatment projects on the ground, particularly in disadvantaged communities.

For these reasons, HBMWD opposes AB 1717 and respectfully requests your "No" vote when the bill is heard in the Assembly Committee on Appropriations.

Respectfully,



John Friedenbach
General Manager

Cc: The Honorable Cecilia Aguiar-Curry, Member of the State Assembly
Members of the Assembly Committee on Appropriations
Jay Dickenson, Chief Appropriations Consultant
Natasha Collins, Principal Appropriations Consultant: Jobs and Economic Development
Kimberly A. Horiuchi, Principal Appropriations Consultant: Public Safety
Irene Ho, Principal Appropriations Consultant: Emergency Management; Labor
Allegra Kim, Principal Appropriations Consultant: Business and Professions
Jennifer Swenson, Principal Appropriations Consultant: Business and Professions; Local Government
ACWA Public Affairs Committee

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY

GAVIN NEWSOM, Governor

DEPARTMENT OF WATER RESOURCES

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

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

Notification of Annual Schedule of Fees – Effective July 1, 2022
California Dam Safety Program
March 25, 2022

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

In March 2021, DSOD sent a billing notification letter that informed dam owners of a one-time reduction in annual fees for Fiscal Year (FY) 2021/22 and projected that annual fees for Fiscal Year 2022/23 would revert to FY 2020/21 rates with an upward rate adjustment. To cover DSOD's reasonable regulatory costs, including cost of living increases, FY 2022/23 fees reflect an upward adjustment of approximately five percent from the FY 2020/21 fees.

Enclosed is the FY 2022/23 Annual Schedule of Fees that will be used to issue billing invoices by April 30, 2022. Annual fees for FY 2022/23 are due July 1, 2022. DSOD may impose penalties and interest for fees received more than 30 days after the deadline, as set forth in Water Code section 6307.

If a paper invoice is not received by April 30, 2022, or to request an electronic copy of the invoice by email, contact Administrative Officer Marcelino Alcantar at (916) 565-7804 or at Marcelino.Alcantar@water.ca.gov by May 16, 2022.

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

Sincerely,

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

Sharon K. Tapia, P.E.
Division Manager
Division of Safety of Dams

Enclosures

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY

GAVIN NEWSOM, Governor

DEPARTMENT OF WATER RESOURCES

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



H.B.M.W.D. MAR 29 2022

**CALIFORNIA DAM SAFETY PROGRAM
 ANNUAL SCHEDULE OF FEES
 FISCAL YEAR 2022/23**

Effective July 1, 2022

Annual fees are assessed in accordance with Article 3, Chapter 1, Division 2, Title 23 of the California Code of Regulations (CCR) to cover projected costs of the California Dam Safety Program. The critical appurtenant structure (CAS) fee component only applies to dams with critical appurtenant structures (e.g., saddle dams and spillway) that meet the definition of section 335.2 of the CCR and does not apply to dams classified with a Low downstream hazard potential. Inoperative dams are only charged the Administrative (Admin) Fee component of the applicable rate category¹. Rates used in computing each of the fee components of the annual fees billed are rounded to the nearest dollar.

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

- Admin Fee = Flat fee per dam
- Dam Fee = Dam Rate x Dam Height
- CAS Fee = CAS Rate x Dam Fee x Number of CAS (not to exceed two)
- CAS Rate = 0.3839

General Rate²

$$\text{Annual Fee (CAS)} = \frac{\$1,066}{\text{Admin Fee}} + \frac{\$249 \text{ per foot of height}}{\text{Dam Fee}} + \frac{0.3839 \times \$249 \text{ per foot of height} \times 1 \text{ or } 2 \text{ CAS as applicable}}{\text{CAS Fee}}$$

Reduced Rate: Farm and Ranch or Small and Privately Owned Dams³

$$\text{Annual Fee (CAS)} = \frac{\$213}{\text{Admin Fee}} + \frac{\$50 \text{ per foot of height}}{\text{Dam Fee}} + \frac{0.3839 \times \$50 \text{ per foot of height} \times 1 \text{ or } 2 \text{ CAS as applicable}}{\text{CAS Fee}}$$

Rw matthews Dam Fee '22/23 \$42K ↑ #8K
 ✓ '21/22 \$34K

¹ Division 3, Part 1, Chapter 6, section 6307(d) of the California Water Code and Title 23. Waters, section 316 of the California Code of Regulations

² Division 3, Part 1, Chapter 6, section 6307(a) of the California Water Code

³ Division 3, Part 1, Chapter 6, sections 6307(e & f) of the California Water Code



HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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

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

FAX 707-443-5731 707-822-8245

EMAIL OFFICE@HBMWD.COM

Website: www.hbmwd.com

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DAVID LINDBERG, DIRECTOR

GENERAL MANAGER

JOHN FRIEDENBACH

March 29, 2022

LL Holder

Address

Address

RE: HBMWD / CalFire Fuels Reduction Program, Ruth Lake

Dear _____,

This letter is to inform you that your Lease Lot (LL # _____) at Ruth Lake has been selected as a possible candidate for the Fuel Reduction Program funded by CalFire and managed by Humboldt Bay Municipal Water District (HBMWD).

After the devastation of the August Complex Wildfire in 2020, the District is working proactively to increase the fire safety and fire response accessibility around Ruth Lake. The intent of the Fuel Reduction Program is to increase the defensible space around structures at Ruth Lake as well as increase ingress/egress access for fire response vehicles. Based on Ruth Lake Community Services District (RLCSD) policies, the lease lot owner is responsible to create and maintain defensible space. In cooperation with HBMWD and CalFire, selected Lease Lot Holders have a one-time opportunity to receive defensible space fuel reduction assistance at no cost.

While the Fuel Reduction Program is currently in the preliminary phases, **you are invited to meet with the District's onsite representative, Adam Jager (contact information below)**, to discuss your specific lease lot and how the Fuel Reduction/Defensible Space program may impact it. HBMWD is very interested in getting your input as the Lease Lot holder. It is our desire to work in conjunction with your wishes as well as CalFire's defensible space requirements for the success of all parties involved.

The CalFire explanation for defensible space is attached. Please note, defensible space does not mean clear-cutting or removing all trees. While some trees may need to be removed, many times defensible space can be achieved by limbing-up trees, removing shrubs within proximity to structures, and keeping leaves and needles raked and cleared.

Lease Lot holder's that do not meet with HBMWD staff will have defensible space created according to CalFire recommendations. HBMWD is looking forward to working with you to help make your lease lot as safe and defensible as possible.

Thank you,

Chris Harris

Business Manager- HBMWD

707-443-5018 (office)

harris@hbmwd.com

Adam Jager

Watershed Restoration Supervisor, HBMWD

707-497-9578 (cell)

ajager@hbmwd.com

Humboldt Community Services District

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

March 31, 2022

Board of Directors for
Humboldt Bay Municipal Water District
PO Box 95
Eureka, CA 95502

H.B.M.W.D. APR 04 2022

Subject: Upcoming Election for Special District Members to Serve on LAFCo

Dear Board Members,

My Name is Heidi Benzonelli, and I am seeking selection as a Special District Alternate Member for the Local Agency Formation Commission.

I am the Vice President of the Humboldt Community Services District Board of Directors; I have lived in Humboldt for 39 years and moved here after discovering the natural beauty and unique culture of our community. I have worked in Energy Conservation and Renewable Energy for the Redwood Coast Energy Authority, in Water, Wastewater for the Manila Community Services District and have spent the last 10 years in Community Improvement helping found the Westside Community Improvement Association where we remain the feedback loop focusing on the residents' desires for a healthy, safe and livable community.

I am uniquely qualified because I am "playing the long game". Resident's visions for the future of their community and government requirements such as RHNA must be balanced with environmental stewardship and economic development in order to assure the long-term sustainability of these plans. If we are planning for 5-10 years or the next iteration of a general plan, we are not considering problems we may be creating for the future of our community and the planet. With a background in Environmental Resources Engineering, a Masters of Business Administration, a passion for community organizing, and a commitment to present and future residents. I am a fit for LAFCo.

When you receive your ballot, please consider voting for me as a LAFCo Special District Alternate Member.

In Service,



Heidi Benzonelli
HCSD Board Vice-President



HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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BOARD OF DIRECTORS

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DAVID LINDBERG, DIRECTOR

GENERAL MANAGER

JOHN FRIEDENBACH

April 8, 2022

Humboldt County Board of Supervisors
825 5th Street
Eureka, CA 95501

Dear Supervisors,

On behalf of Humboldt Bay Municipal Water District (HBMWD), I am contacting you to respectfully request assistance for our District's unmet needs stemming from the COVID-19 pandemic, sourced from the American Rescue Plan Act's (ARPA)'s Coronavirus Local Fiscal Recovery Fund.

As you and fellow County leaders discuss priorities for the second and final tranche of the Local Fiscal Recovery Fund, I ask that you consider utilizing the authority granted to the County in ARPA to transfer a portion of those funds to address HBMWD's ongoing COVID-19 impacts and ensure continuation of the essential local services we provide to our shared constituency.

ARPA gives counties the authority to transfer Fiscal Recovery Fund monies to special purpose units of state and local government for the same eligible uses as cities and counties. Among others, these uses include:

- pandemic-related expenditures
- revenue losses
- premium pay for essential workers
- necessary investments in water, wastewater, and broadband services.

HBMWD provides approximately 90,000 residents in Humboldt County with domestic drinking water, which represents approximately 2/3rds of our county's population. To date, HBMWD has experienced **\$160,000** in fiscal impacts eligible under the ARPA's Section 9901, Coronavirus State and Local Fiscal Recovery Funds. Unfortunately, special districts were not directly included in Coronavirus Relief Fund allocations to state and local governments. While the 2021-2022 State Budget provided some important new avenues for COVID-19 relief to California's special districts, HBMWD still has **\$160,000** in unmet needs that are eligible for the Fiscal Recovery Fund.

The District's request takes all available funding into consideration. We have no remaining avenues to request relief and are not receiving other state or federal funding for these purposes. Moreover, if we are not able to recover some funding, HBMWD will need to recover these funds from our local rate payers. ARPA grants definitive authority to counties to transfer Local Fiscal Recovery Fund monies to special districts to address these needs for the communities we serve.

We look forward to working with you and your staff on this issue and appreciate your consideration. Please contact me at friedenbach@hbmwd.com or 707-443-5018 to speak further about this request to help HBMWD continue providing essential public services to your constituents. I stand ready to be a resource and answer questions or provide additional information.

Respectfully,

John Friedenbach,
General Manager

cc: Elishia Hayes, CAO

CONTINUING BUSINESS

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HUMBOLDT BAY MUNICIPAL WATER DISTRICT

To: Board of Directors
From: John Friedenbach
Date: April 7, 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 – See Notice of Public Hearing from Humboldt County Planning Dept. for April 21, 2022 meeting at 6:00 pm.
- ii) Trinidad Rancheria mainline extension. HBMWD’s district counsel is preparing the draft MOU between McKinleyville CSD and HBMWD concerning the details for “wheeling” water through MCSD from HBMWD to the Rancheria. Staff expects to present the draft document to the board in May.

Wheeling water means: the conveying of water through the unused capacity in a pipeline or aqueduct by another water provider. The use of utility conveyance facilities by other than the owner.

The Rancheria continues to move forward with its funding efforts for the project.

b) Transport

No update.

c) Instream Flow Dedication

A grant performance extension request to September 2023 was approved by the Wildlife Conservation Board. Governor Newsom’s Executive Order N-7-22 section 6 directs the Water Board to expeditiously consider petitions that add a fish and wildlife beneficial uses. In addition, the EO waives the 1707 permit fees for those applications. Staff will be discussing this provision with the Water Board staff.

NOTICE OF PUBLIC HEARING
HUMBOLDT COUNTY PLANNING COMMISSION

On Thursday, April 21, 2022, at 6:00 p.m., or as soon thereafter as the matter can be heard, the Humboldt County Planning Commission will hold a public hearing in the Board of Supervisors' Chamber, Humboldt County Courthouse, 825 Fifth Street, Eureka, California, and virtually via Zoom to consider the matter listed below.

HOW TO LISTEN OR WATCH THE PLANNING COMMISSION MEETING:

Listen or Watch the live stream of the Planning Commission Meeting in three ways:

1. <https://zoom.us/j/87544807065> Password: 200525
2. Call in via telephone at 346 248-7799, enter meeting id 875 4480 7065 Password: 200525
3. A live stream of the meeting can be found by using the following link:
<https://humboldt.legistar.com> or by watching Access Humboldt on cable channel 11

PUBLIC COMMENT INSTRUCTIONS DURING THE MEETING:

Participate in the public comment period of the meeting in the following three ways:

1. **In Person:** Any person may appear and present testimony in regard to this matter at the hearing located in the Board of Supervisors' Chamber, Humboldt County Courthouse, 825 Fifth Street, Eureka, California. The Planning Commission needs 15 COPIES of any materials submitted at the meeting.
2. **Via Computer as an attendee:** To raise your hand click the Raise Hand icon on the bottom of the Zoom window. When you click the Raise Hand icon, a hand icon will appear next to your name that will notify the host your hand is raised. You will also see the hand icon turn green. When you want to lower your hand, you can click the hand icon again and your hand will be lowered. When you are called upon to speak the Zoom platform will ask you for permission to unmute your mic. **If you encounter any issues, please use the call-in option below.**
3. **Via phone call using cellphone or landline:** When the Planning Commission meeting begins, call in to the conference line. When the Planning Commissioner starts to discuss the item you wish to comment on, **Press *9 to raise your hand.** When you are called upon to speak, you will be prompted to unmute your mic, press ***6 to unmute.**

PUBLIC COMMENT PRIOR TO THE MEETING:

Public comments may be submitted via email to Planningclerk@co.humboldt.ca.us. Please provide the project title, record or case number and date of the hearing. The deadline for submitting written comments is **12:00 p.m. Wednesday, April 20, 2022.** After the deadline, written comments may be submitted to the commission in person during the meeting. Verbal comments may be made in person, or on zoom. Comments received after the agenda is posted on **Friday, April 15, 2022,** can be found at the "Attachments" section of the "Meeting Details" link next to the posted Agenda at: <https://humboldt.legistar.com>, and will be included with the administrative record. If you do not have access to email, contact the planning clerk at 707-268-3702. Please note that each Zoom meeting has a unique meeting ID and password. Any item on this agenda that is continued to a future date will use the meeting ID and password applicable to the date the agenda item is to be heard again.

Nordic Aquafarms California, LLC; Samoa area; Record Number PLN-2020-16698 (filed 10-05-20); Assessor's Parcel Number: 401-112-021. The applicant (Nordic Aquafarms California, LLC. (NAFC)) is requesting a Coastal Development Permit and Special Permit for the demolition and remediation of the Freshwater Tissue Samoa Pulp Mill facility and the construction of a land-based finfish recirculating

aquaculture system (RAS) facility. This includes the development of five buildings totaling approximately 766,530 square feet and the installation of 4.8 megawatt (MW) solar panel array mounted on building rooftops, covering approximately 690,000 square feet. A Special Permit is required pursuant to Section 313-109.1.5.2 for an exception to the loading space requirements. The height of the tallest proposed building is 60 feet. The facility would have an annual production capacity of approximately 25,000-27,000 metric tons of Head on Gutted (HOG) fish once complete. The aquaculture facility would produce fresh head on gutted fish and fillets for delivery to regional markets. The species to be produced at the facility is intended to be Atlantic Salmon, pending approval from CDFW. The project will include ancillary support features such as paved parking, fire access roads, security fencing, and stormwater management features. The project would require approximately 2.5 million gallons per day (MGD) of freshwater and industrial water provided by the Humboldt Bay Municipal Water District, sourced from the Mad River. Existing on-site water service supplied by the Humboldt Bay Municipal Water District would be connected to the new buildings for potable use, fire sprinklers, and irrigation. The project would require approximately 10 MGD of salt water, which will be provided via existing sea chest infrastructure located adjacent to the NAFC Project Site, which will be modernized and operated by the Humboldt Bay Harbor, Recreation, and Conservation District. Treated wastewater would be discharged utilizing the existing Redwood Marine Terminal II ocean outfall pipe, which extends one and a half miles offshore. A total volume of 12.5 MGD is anticipated to be released daily. Wastewater discharge is permitted by the North Coast Regional Water Quality Control Board. This project is located in Humboldt County, in the Samoa area, on both sides of Vance Avenue, approximately 2,000 feet north from the intersection of Vance Avenue and Bay Street, on the property known as 364 Vance Avenue. This project is not being heard for decision. This will be an informational workshop to allow for the Planning Commission and the public to become familiar with the project. The project hearing date for decision will be noticed and held at a later date. Questions regarding this project can be directed to the assigned Planner, Cade McNamara at 707-268-3777 or via email at cmcnamara@co.humboldt.ca.us.

Consistent with the above instructions for public comment, any person may appear and present testimony regarding this matter during the hearing. If you challenge the nature of the proposed action in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the Planning Commission at or prior to the public hearing. The Planning Commission's decision will become effective if an appeal is not filed within the appropriate filing period. An appeal may be filed by any aggrieved person who has testified in person or in writing on the project and must be submitted in writing with the required fees to the Planning Division of the Humboldt County Planning and Building Department at 3015 H Street, Eureka, California 95501, before the end of the appeal period. If appealed, the decision will not become effective until the appeal is resolved.

General questions regarding the Planning Commission, the permit process, submission of materials and other information not specific to this project may be obtained from the Planning Division of the Humboldt County Planning and Building Department, 3015 H Street, Eureka, California 95501, or email planningclerk@co.humboldt.ca.us. Telephone (707) 268-3702.

The County of Humboldt is committed to providing equal access to all county programs, services, and activities through the provision of accommodations for individuals with disabilities as required under the Americans with Disabilities Act (ADA). With 72 hours prior notice, a request for reasonable accommodation or modification can be made. Please contact the Planning Commission clerk at 707-445-7541 or by email planningclerk@co.humboldt.ca.us or the ADA Coordinator at 844-365-0352 or by email at ada@co.humboldt.ca.us.

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

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

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EMAIL OFFICE@HBMWD.COMWebsite: www.hbmwd.com**BOARD OF DIRECTORS**

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DAVID LINDBERG, DIRECTOR

GENERAL MANAGER

JOHN FRIEDENBACH

March 21, 2022

John P. Donnelly
Executive Director
Wildlife Conservation Board
PO Box 944209
Sacramento, CA 94244-2090

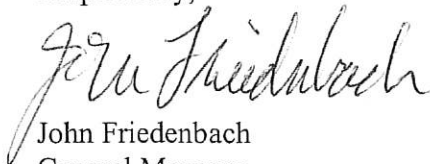
RE: Grant Agreement Number WC-1739BC

Dear Mr. Donnelly,

As we have discussed with your staff, there have been unforeseen delays in completing the tasks under the Work Plan for our grant agreement WC-1739BC. Covid-19 being one of the major contributors. Despite this, the District has met with the California Waterboard staff in Sacramento two times to review the project, tasks, and timeline. In addition, we have met several times with our local National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife (CDFW) representatives to review the project and operations implications for our proposed instream flow dedication on the Mad River. Although meaningful progress has been achieved, we respectfully request an extension to our grant Work Plan as indicated on the attached revised Exhibit D to the grant agreement to achieve an accurate and complete 1707 application to the State Water Resource Control Board. We respectfully request a new grant completion date of September 30, 2023 with the attached revised deliverables schedule.

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

Respectfully,



John Friedenbach
General Manager

Encl.

Cc: Alyssa Persau

WORK PLAN

Project Overview

This project will facilitate the necessary studies and permitting to improve flow conditions in the mainstem Mad River from Matthews Dam to the ocean, by allowing the Humboldt Bay Municipal Water District (HBMWD) to release water in ways that create more and improved habitat at critical times for salmonids and other special status species. Flows which could provide the desired habitat enhancement are in peril due to future changes in HBMWD's diversion and storage rights, and increased demand from legal and illegal cannabis operations. The Mad River supports state and federally listed species, and was added to the US EPA's List of Impaired Waters for sedimentation and turbidity in 1992, and the North Coast Regional Water Quality Control Board identified water temperature as an additional impairment in 2006.

Ecological studies, along with Operational Analyses such as Consumptive Use Analysis and a review of reservoir operations methodologies, will provide the information and data necessary to revise reservoir operations. HBMWD will apply for a Petition for Change to their water right so that releases for environmental benefit can continue or be modified at appropriate times. The Project Team consists of the Humboldt Bay Municipal Water District, H. T. Harvey & Associates, Stillwater Sciences, GHD Group, and the Mad River Alliance.

Task 1: Project Management

HBMWD is the Grantee and will act as the lead agency for project management and administrative tasks. Staff will manage subcontractor agreements and ensure that project timelines are met for securing permits and providing necessary documentation to the WCB. Work on this task will be ongoing throughout the project term.

Task 2: Public Outreach

HBMWD will also be the lead agency for continuing public engagement with the project through its existing Water Resources Planning process. Meetings are held twice a year with the Citizens Advisory Committee, and District public meetings are held monthly. Work on this task will be ongoing throughout the project term.

Task 3: Environmental and Operational Analyses

Ecological Surveys

Information on listed species and baseline water quality conditions will be compiled and evaluated. This will include time to gather existing datasets; collect new field data; glean information from local agencies, tribes and NGOs; and

coordinate with GHD hydrologists and engineers on flow studies. These subtasks are outlined below and work will take place between June 2018 and June 2019.

- a) Compile and evaluate existing data on state listed species present in the project area (e.g. longfin smelt, foothill yellow-legged frog).
- b) Compile and evaluate existing data on federally listed species present in the project area (e.g. coho and Chinook salmon, steelhead, eucaloon, and green sturgeon).
- c) Compile, evaluate and synthesize existing water quality data by reach (e.g. estuary, lower and upper reaches downstream of the dam). MRA will gather additional temperature data for the first year of the project term. Temperature modelling will be used to predict the effects of flows on temperatures under pre-HBMWD operation, current flow, and enhanced flow conditions. This data will support decision-making for the revised reservoir operations.

Reservoir Operations Revision

The work involved in the operations analysis and planning is expected to be complete in mid-2019. The Project Team will take into consideration competing demands, reservoir inflow data, historical operational data, and the ecological data and temperature models generated in Task 1, when reviewing HBMWD's operation methodology.

- A Consumptive Use Analysis will be completed for the Mad River from Ruth Lake to the Essex Reach. Information on the existing water rights holders on the Mad River will be obtained, along with their maximum allotted consumptive right. This may result in preparing a Water Balance, which will then be used to determine if the Mad River is over-allocated during the summer months under various District water diversion, storage, and hydropower rights scenarios.
- It is known that there are also illegal water diversions along the Mad, mainly associated with cannabis cultivation operations. A Sensitivity Analysis will be performed to assess the impacts of these illegal diversions.
- An Injury Analysis will also be included to determine if water rights holders downstream would be adversely affected under a stream flow enhancement dedication and/or loss of water right scenario.

Based on findings from the above analyses, final recommendations will be made for revisions to the District's operational model and Habitat Conservation Plan (HCP) for Ruth Lake, Matthews Dam and the hydroplant. The flow release quantities and schedule will be defined for varying water year types. The Team will also seek input from the Department of Water Resources, the State Water Board, CDFW, National Marine Fisheries Service, and U.S. Fish and Wildlife Service. A major amendment will be added to the HCP to include changes to flows, effects on listed species, and possible mitigation efforts.

Task 4: Petition for Change

The Team will compile required documentation for a Petition for Change for instream flow dedication (Water Code section 1707). HBMWD will receive support and guidance from HTH and SWS in completing required Federal and State environmental review processes. The following steps will be completed in order to file a 1707 petition with the State Water Resources Control Board (SWRCB):

- Consult and coordinate with SWRCB's representative for WCB-funded projects to keep the petition process on schedule.
- Prepare a NEPA Environmental Assessment (EA), which is required with the HCP. This task will include a draft EA, and will address public and agency comments to prepare a final EA/Finding of No Significant Impact.
- Revise HBMWD's existing Long-term Streambed Alteration Agreement (LTSAA). The team will identify sections needing changes and submit them for agency review to CDFW.
- Prepare State California Endangered Species Act Permits and a Consistency Determination.
- Prepare a Monitoring and Adaptive Management plan, compiled from the amended HCP and LTSAA into a single document for the CEQA process and Section 1707 Petition for Change and "Environmental Information for Petitions."
- Conduct the CEQA process; write a Draft Mitigated Negative Declaration document, write notices, circulate drafts, attend public meetings and address public and agency comments.
- Produce a Final Mitigated Negative Declaration document.
- Prepare a Draft Project Description and Draft Project Map, as well as site photos.
- Fill out the Petition for Change form and Environmental Information Form.
- Submit documentation to the State Water Board (SWRCB) along with the filing fees, and provide a copy of the petition to the Department of Fish and Wildlife.

Mad River Enhancement, Humboldt and Trinity Counties
 Grant Agreement Number WC-1739BC
 Project ID: 2018019

Deliverables Schedule – updated March 2022

Task/ Subtask	Deliverables	Due Date
1. Project Management	Invoices and Progress Reports	Ongoing as needed
	Final Report to WCB	March 2022 <u>September 2023</u>
2. Public Engagement	Monthly public meeting minutes	Include with progress reports
3. Ecological Surveys	Listed species and habitat quality report	June 2019
	Effects of flows on water quality report / temperature model output	June 2019
3. Reservoir Operations	Technical memo	December 2018
	Revised Operations Plan	June 2019
	Consumptive Use Analysis report (incl. Injury Analysis)	June 2019
4. Habitat Conservation Plan and Environmental Assessment	Draft HCP amendment and draft EA	June 2020 <u>October 2022</u>
	Final HCP amendment and final EA / FONSI	December 2020 <u>April 2023</u>
4. California Endangered Species Act	Draft Consistency Determination	June 2020 <u>October 2022</u>
	Final Consistency Determination	December 2020 <u>April 2023</u>
4. Lake and Streambed Alteration Agreement	Draft LT (long-term) SAA	June 2020 <u>October 2022</u>
	Final LTSAA	December 2020 <u>April 2023</u>
4. Adaptive Management and Monitoring Plan	Adaptive Management and Monitoring Plan	December 2022 0
4. CEQA and Mitigated Negative Declaration	Draft CEQA documents	June 2022 4
	Final CEQA documents	December 2022 4 <u>2</u>
4. Petition for Change	File complete petition with SWRCB	March 2022 <u>August 31, 2022</u>



GAVIN NEWSOM, Governor
NATURAL RESOURCES AGENCY
DEPARTMENT OF FISH AND WILDLIFE
WILDLIFE CONSERVATION BOARD
Mailing Address: P. O. Box 944209
Sacramento, California 94244-2090
www.wcb.ca.gov
(916) 445-8448

3/23/2022

John Friedenbach
General Manager
Humboldt Bay Municipal Water District
828 7th Street,
Eureka, CA 95501
friedenbach@hbmwmd.com

MAD RIVER ENHANCEMENT
HUMBOLDT COUNTY
AMENDMENT NO. 1 TO GRANT AGREEMENT NO. WC-1739BC
PROJECT ID: 2018019

Dear Mr. Friedenbach:

Enclosed for your review and signature is Amendment No. 1 to Grant Agreement WC-1739BC for the above-described project. This amendment will extend the termination date of this agreement to September 30, 2023. Please sign this amendment on behalf of the Grantee and have the landowner's representative with a DocuSign electronic signature.

After the amendment is approved, we will send you a fully executed copy.

The Wildlife Conservation Board project manager is Alyssa Persau. Please coordinate all project activities or any questions you might have regarding this agreement or procedures through Ms. Persau. She can be reached at (916) 212-0691.

Sincerely,

DocuSigned by:
Shannon Lucas
032538784F7B416...

Shannon Lucas, Supervisor
Restoration and Development

Enclosure(s)

ec: Tina Bartlett, Regional Manager
CDFW, Northern Region (1)



GAVIN NEWSOM, Governor
NATURAL RESOURCES AGENCY
DEPARTMENT OF FISH AND WILDLIFE
WILDLIFE CONSERVATION BOARD
Mailing Address: P.O. Box 944209
Sacramento, California 94244-2090
www.wcb.ca.gov
(916) 445-8448

Date: 3/26/2022

John Friedenbach
General Manager
Humboldt Bay Municipal Water District
828 7th Street,
Eureka, CA 95501
friedenbach@hbmwmd.com

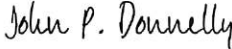
MAD RIVER ENHANCEMENT
HUMBOLDT COUNTY
AMENDMENT NO. 1 TO GRANT AGREEMENT NO. WC-1739BC
PROJECT ID: 2018019

Dear Mr. Friedenbach:

Enclosed for your records is the fully executed Amendment No. 1 to Grant Agreement WC-1739BC for the above project located in Humboldt County. Please make note of the following deadlines for submission of invoices and receipts for labor and materials: all materials must be ordered and work completed by September 30, 2023. Bills for materials ordered and work completed prior to September 30, 2023, may be submitted up to 30 days past that date. Please keep one copy of the fully executed Amendment for your records and forward the additional copy to the landowner.

Please coordinate all project activities or any questions you might have regarding the agreement or procedures through the WCB project manager, Alyssa Persau. She can be reached at alyssa.persau@wildlife.ca.gov or (916) 212-0691.

Sincerely,

DocuSigned by:

FFB2B729029842B...

John P. Donnelly
Executive Director

Enclosure(s)

ec: Celina Tran, Accounting Officer Specialist
CDFW, Accounting Services Branch/Claims Unit

Tina Bartlett, Regional Manager
CDFW, Northern Region (1)

**AMENDMENT NO. 1 TO GRANT AGREEMENT WC-1739BC
BETWEEN THE
STATE OF CALIFORNIA/WILDLIFE CONSERVATION BOARD
AND
HUMBOLDT BAY MUNICIPAL WATER DISTRICT
FOR
MAD RIVER ENHANCEMENT, HUMBOLDT COUNTY
Project ID: 2019028**

THIS AMENDMENT TO AGREEMENT is made and entered into this 23rd day of March, 2022, by and between the State of California, acting by and through the WILDLIFE CONSERVATION BOARD, hereinafter called GRANTOR and HUMBOLDT BAY MUNICIPAL WATER DISTRICT, hereinafter called GRANTEE.

WHEREAS, the parties hereto entered into Grant Agreement WC-1739BC, dated July 9, 2018, to implement the MAD RIVER ENHANCEMENT project in HUMBOLDT County, and

WHEREAS, due to unforeseen delays arising from Covid-19, work cannot be completed by the Grant expiration date MARCH 31, 2022, and

WHEREAS, the Grantor finds a grant extension to SEPTEMBER 30, 2023 is reasonable and appropriate.

NOW THEREFORE, the expiration date of MARCH 31, 2022, on said agreement as shown on Page i and Page 4 is hereby changed to SEPTEMBER 30, 2023.

Except as amended herein, all terms and conditions of said agreement will remain unchanged and in full force and effect.

COUNTERPARTS

This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which together shall constitute one, and the same instrument.

ELECTRONIC SIGNATURES

The Parties agree to accept electronic signatures (as defined in Section 1633.2 of the California Civil Code), faxed versions of an original signature, or electronically scanned and transmitted versions (e.g., via pdf) of an original signature.

GRANTOR
State of California
Wildlife Conservation Board

DocuSigned by:
John P. Donnelly
By: _____ Date: 3/26/2022
FFB2B729029842B
John P. Donnelly, Executive Director

GRANTEE
Humboldt Bay Municipal Water District

DocuSigned by:
John Friedenbach
By: _____ Date: 3/23/2022
F72132C1B93F489...
John Friedenbach, General Manager

I certify that (a) budgeted funds are available for the extended period stated above; and (b) Grant Funds shall not be disbursed unless and until sufficient proceeds become available to Grantor to disburse.

DocuSigned by:
Steve Bouthillier
_____ Date: 3/23/2022
B2474E4CA197485...
Fiscal Officer

Grant Amount: \$693,408.00
Fund Source: Water Quality, Supply and Infrastructure Improvement Fund of 2014, Section 79733
Appropriation Item: Chapter 14, Statutes of 2017
Line Item: 3640-101-6083
Reappropriation Item: CH 6/20 B.A. IT 3640-490(2)
Expenditure Code: 0117101588



March 7, 2022

Nelline Kowbel, P.E.
Division Chief (C.E.A.)
Site Mitigation and Restoration Program, Northern California Division
Department of Toxic Substances Control
California Environmental Protection Agency
nelline.kowbel@dtsc.ca.gov

Re: Private Well Contamination near McNamara & Peepe Lumber Mill (12240115),
Arcata, California (Humboldt County)

Dear Ms. Kowbel,

I am writing on behalf of Humboldt Baykeeper to inform you of lab results from recent sampling of a private domestic well in close proximity to the McNamara & Peepe Lumber Mill (12240115), a contaminated site under DTSC oversight.

Humboldt Baykeeper works to safeguard our coastal resources for the health, enjoyment, and economic strength of the Humboldt Bay community, and is a member of the California Coastkeeper Alliance and the international Waterkeeper Alliance. The former McNamara & Peepe Lumber Mill site is a high priority for our organization due to the threat it poses to the drinking water supplies for nearly 90,000 residents as well as fish and wildlife habitat in the Mad River and its tributary Hall Creek. We have closely followed DTSC's actions since the cap was decertified in 2018. We are deeply concerned with slow progress to date, especially given that the site was declared an Imminent and Substantial Endangerment to public or the environment in 2008. On June 3, 2020, we submitted comments on the Soil and Groundwater Monitoring Results and Recommendations, but this comment letter was never uploaded to EnviroStor.

On July 23, 2020, the Thomas Law Group, writing on behalf of the Humboldt Bay Municipal Water District, called for sampling of private wells in the vicinity of the site. In light of the results of surface water and groundwater monitoring done in 2021, and the lack of any indication from DTSC staff that private wells would be sampled, Humboldt Baykeeper commissioned Matt Hagemann, P.G., C.Hg., QSD, QSP with Soil/Water/Air Protection Enterprise (SWAPE) to collect water samples from a private well at a residence. Samples were collected on Jan. 19, 2022 from a private domestic well at 1551 Glendale Drive well located approximately 200 feet south of the concrete cap. Lab results (attached) detected pentachlorophenol at 0.54 ug/L, nearly twice the Public Health Goal, and two congeners of dioxins (OCDD and 1,2,3,4,6,7,8-HpCDD). These congeners are consistent with a pentachlorophenol source.¹

600 F Street, Suite 3 #810
Arcata, CA 95521
(707) 499-3678
www.humboldtbykeeper.org



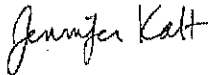
These results indicate that contaminated ground water has not only moved well beyond the cap that was installed in 1998, but has also contaminated a private well on an adjacent private property, illustrating a direct pathway to adverse human health impacts on neighboring parcels.

When we informed the private well owner of these results, we were told that neighbors in the vicinity have been drilling new wells due to the high cost of municipal water from the Community Service District that serves the area. We are not aware at this time of which homeowners may have had new wells drilled, but we are concerned that people may be unknowingly using contaminated water for domestic purposes.

We implore DTSC to take decisive action to protect human health and the environment by prioritizing the remediation of the McNamara & Peepe Lumber Mill, as well as the McNord Lumber Mill (12240047) at 1610 Glendale Drive.

Thank you for your consideration.

Sincerely,



Jennifer Kalt, Director
jkalt@humboldtbykeeper.org

Attachment:

January 26, 2022 laboratory results, North Coast Laboratories, Arcata, CA

Cc:

John Friedenbach, General Manager, Humboldt Bay Municipal Water District

¹ Johnson, Glenn. W. 2017. *Chlorinated Dioxin and Furan Congener Profiles from Pentachlorophenol Sources*. Journal of Environmental Protection, 2017, 8, 663-677.
<https://www.scirp.org/journal/paperinformation.aspx?paperid=77199>



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

March 16, 2022

Mr. Erik Nielsen
SHN Consulting Engineers & Geologists, Inc.
812 West Wabash Avenue
Eureka, California 95501
enielsen@shn-engr.com

Dear Mr. Nielsen:

The Department of Toxic Substances Control (DTSC) has completed its review of the Stormwater Sample Results Letter (Letter), dated March 2, 2022, for the Former McNamara and Peepe Lumber Mill in Arcata, California (Site). The Letter presents the results of the surface water sampling event which took place at the Site on December 15, 2021 in accordance with the sampling plan approved by DTSC on February 9, 2021. DTSC provided comments on the previous of the Letter and the revised Letter satisfactorily addresses DTSC's comments.

DTSC has no further comments and hereby approves the Letter.

If you have any questions, please contact me at (510) 540-3881 or via email at Nicole.Yuen@dtsc.ca.gov.

Sincerely,

Nicole Yuen
Project Manager
Site Mitigation and Restoration Program – Berkeley Office
Department of Toxic Substances Control

cc: John Friedenbach
Humboldt Bay Municipal Water District
friedenbach@hbmwd.com



UNITED INDIAN HEALTH SERVICES, INC.

Healthy mind, body, and spirit for generations of our American Indian Community

March 22, 2022

Nelline Kowbel, P.E.
 Division Chief (C.E.A.)
 Site Mitigation and Restoration Program, Northern California
 Department of Toxic Substance Control
 California Environmental Protection Agency
nelline.kowbel@dtsc.ca.gov

Re: McNamara & Peepe Lumber Mill (12240115), Humboldt County

On behalf of United Indian Health Services, Inc. (UIHS), I am writing to urge the Department of Toxic Substances Control (DTSC) to take immediate action to address industrial contamination at the former McNamara & Peepe Lumber Mill (12240115) near the Mad River in Arcata (Humboldt County).

UIHS is a consortium of nine federally-recognized Indian Tribes whose ancestral lands include what is now Humboldt and Del Norte Counties on the far North Coast of California. UIHS provides primary health care services to more than 11,000 Indian patients and their families on the North Coast via its network of six clinics stretching from Potawot in Arcata, Eureka, Weitchpec, Klamath, Elk River, Crescent City and Smith River. UIHS is governed by a Board of Directors that includes representatives from each of its nine tribes and rancherias: Bear River Band of Rohnerville Rancheria, Big Lagoon Rancheria, Blue Lake Rancheria, Cher-Ae Heights Indian Community of the Trinidad Rancheria, Elk Valley Rancheria, Resighini Rancheria, Table Bluff Reservation - Wiyot Tribe, Tolowa Dee-Ni' Nation, and Yurok Tribe of the Yurok Reservation, as well as elected Indian community representatives from each of the five different regions in our service area. We regard our commitment to the health and wellbeing of our 11,000+ Indian clients as a sacred and inviolable trust.

Thousands upon thousands of our staff and the patients we serve live in the Humboldt Bay region and rely on municipal drinking water sourced from the Mad River. This water is provided by the Humboldt Bay Municipal Water District (HBMWD) to the cities of Eureka, Arcata and Blue Lake and to four community services districts, which collectively serve 94,000+ individuals with their drinking water, comprising more than two-thirds of all Humboldt County residents.

MAIN OFFICE ~ Potawot Health Village, 1600 Weeot Way, Arcata, CA 95521-4734; (707) 825-5000 (Operator); Fax (707) 825-6747 Adm.

Other UIHS Clinics or Offices, Phone and Fax Numbers
 Elk Valley Office, Crescent City (707) 464-2918; Fax (707) 464-8218
 Eureka Health Clinic, Eureka (707) 442-0380; Fax (707) 442-0381
 "Hop'ew Puel" Health Clinic, Klamath (707) 482-2381; Fax 482-3655
 "Libby Nix" Health Clinic, Weitchpec (530) 825-4300; Fax (530) 825-4308

"Taa-At-Dvn" Medical Clinic, Crescent City (707) 464-2750; Fax (707) 464-2668
 "Xaa-wan-k'wvt" Elder Nutrition Office, Smith River (707) 487-4463; Fax (707) 487-0918
 "Xaa-wan-k'wvt" Health Clinic, Smith River (707) 487-0216, Fax 487-3008

Additionally, those of our clients in outlying areas who are not themselves directly served by HBMWD drink and use HBMWD-sourced water each time they visit, shop and dine in the Humboldt Bay area and also when they utilize UIHS clinics in Eureka and Arcata.

McNamara & Peepe (M&P) is a former lumber mill site where the dioxin-containing wood preservative pentachlorophenol (PCP) was used until 1987. These toxic chemicals continue to contaminate groundwater and surface water, both on and adjacent to the site. Recent monitoring has detected PCP and dioxin contamination in surface water that flows off-site into Hall Creek, a salmon-bearing stream that flows into the Mad River approximately 1.1 mile upstream of HBMWD's drinking water intake wells.

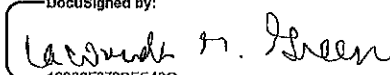
In 2008, DTSC declared the M&P site an Imminent and Substantial Endangerment to public health and the environment. In 2018, DTSC announced it would develop a new plan to contain this contamination after acknowledging the failure of an existing concrete cap at the site that had been intended to contain the site contamination. DTSC has since detected contaminants even close to Hall Creek and the Mad River. This is completely unacceptable.

We implore you to protect public health and the environment, including those of our patients and staff, by expediting the remediation of this site to ensure that the contamination does not reach the Mad River and our region's drinking water supplies, and demand that ***all contaminated soil immediately be fully and completely excavated and remediated safely.***

Respectfully,



Elizabeth Lara-O'Rourke
Chief Executive Officer

DocuSigned by:

12938F079BEE40C...

LaWanda Green
Board Chairperson

cc: Senator Mike McGuire
Assemblymember Jim Wood
Wade Crowfoot, Natural Resources Secretary
Meredith Williams, Natural Resources Secretary
John Friedenbach, Humboldt Bay Municipal Water District

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

To: Board of Directors
 From: Sherrie Sobol
 Date: March 23, 2022
 Subject: 2020 Census and Division Boundaries

Background:

The Board has reviewed several scenarios and indicated a current preference for Scenario 2. Staff will still provide three scenarios for discussion.

Current:

Below is comparative information regarding the population of each Division from the 2010 and 2020 census. The 2020 census shows Division 1 and 4 with a decrease in population while Divisions 2, 3 and 5 show an increase in population compared to the 2010 census.

	2010				2020			
	Pop	Variance	Division % Difference	Population % Difference	Pop	Variance	Division % Difference	Population % Difference
Division 1	17,839	-268	-1.50%	-0.30%	17,651	-1,206	-6.83%	-1.28%
Division 2	17,335	-772	-4.45%	-0.85%	18,709	-148	-0.79%	-0.16%
Division 3	16,823	-1,284	-7.63%	-1.42%	17,355	-1,502	-8.65%	-1.59%
Division 4	17,796	-311	-1.75%	-0.34%	17,789	-1,068	-6.00%	-1.13%
Division 5	20,743	2,636	12.71%	2.91%	22,779	3,922	17.22%	4.16%
Grand Total	90,536				94,283			
Avg	18,107				18,857			

The Humboldt County Elections Department requires the District finalize it's redistricting by April 17, 2022.

As noted previously, the requirement is to "...adjust the boundaries of any divisions so that the divisions are, as far as practicable, equal in population..."

Scenario 0 is the current map of division boundaries. **Exhibit 1** shows the Precincts for this option.

Scenario 2 depicts changes where Division 5 is reduced and shares a portion of Arcata with Division 1 and Division 2. Division 3 now includes the Blue Lake area. The Board seemed to like this scenario as the populations for each division are equalized. **Exhibit 2** shows the Precincts for this option.

Scenario 4 , Figure 3 depicts changes where Division 5 is reduced, Division 1 expands north up the coast and borders Division 2, Division 2 expands south on the eastern boundary, Division 3 expands eastward, Division 4 moves north and encompasses portion of the Arcata Bottoms. This is the starting point for the Board to move precincts around and if desired, establish an alternate scenario. **Exhibit 3** shows the precincts for this option.

Final Public Hearing

The regular Board Meeting on April 14th, 2022 is the second and final Public Hearing to consider and finalize division boundaries.

The Board President will open the Public Hearing and receive any comments from the public. Once public comment has been received, the Board President will close the Public Hearing and the Board will consider the input, discuss the options and if changes are made, finalize a new Division Boundary map.

Once a decision has been agreed upon regarding the District boundaries, this will be confirmed via Resolution with the agreed upon Exhibit being attached to the Resolution.

Next Steps:

The Resolution and Exhibit will be provided to the Humboldt County Elections Department by the April 17th deadline with the .

RESOLUTION NO. 2022-05

**Resolution of the Board of Directors of the Humboldt Bay Municipal Water District
Adjusting Division Boundaries based on 2020 Census**

WHEREAS, the Humboldt Bay Municipal Water District is a political subdivision of the State of California; and

WHEREAS, pursuant to Section 71540 of the California Water Code, the Humboldt Bay Municipal Water District Board may relocate the boundaries of any division in order to equalize as nearly as practical the population in the respective divisions; and

WHEREAS, the Board of Directors of the Humboldt Bay Municipals Water District has reviewed the current status of the population based on the 2020 Census within the existing divisions of the District and has determined that it is necessary to relocate the boundary lines in order to equalize the populations in the respective divisions;

NOW, THEREFORE, BE IT RESOLVED as follows:

The boundary lines of the five (5) divisions of the Humboldt Bay Municipal Water District are hereby relocated as hereinafter set forth;

BE IT FURTHER RESOLVED, that all of the geographical references hereinafter contained are within the County of Humboldt, State of California, and the divisions herewith established are more particularly described in the attached precinct listings by Division.

Adopted and approved this 14th day of April, 2022, by the following votes:

AYES:

NOES:

ABSENT:

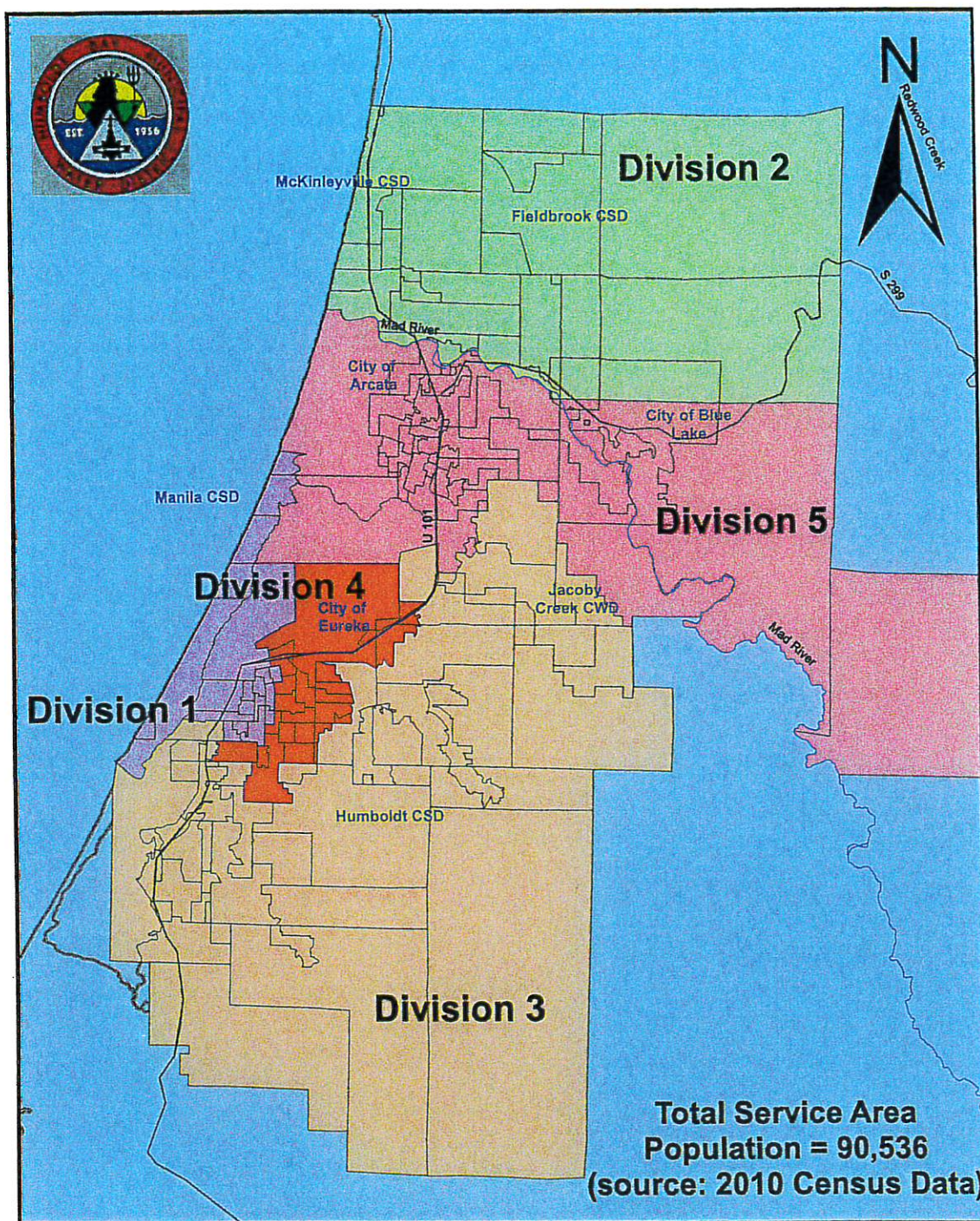
ABSTAIN:

Attest:

Sheri Woo, President

J. Bruce Rupp, Secretary/Treasurer

SCENARIO 0

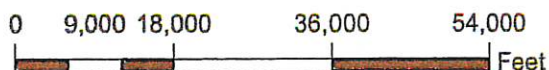


HBMWD Divisions Map

Legend

Divisions

- Division 1- Neal Latt
- Division 2- Sheri Woo
- Division 3- David Lindberg
- Division 4- J. Bruce Rupp
- Division 5- Michelle Fuller



1 inch = 15,113 feet

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

Exhibit 1

PRECINCT	Population	Division
1E-26	70	Division 1
1E-30	177	Division 1
1E-35	713	Division 1
1E-36	377	Division 1
3MA-1	588	Division 1
3MA-2	183	Division 1
3PA-5	0	Division 1
3PESF	36	Division 1
4E-11	1642	Division 1
4E-12	1047	Division 1
4E-13	1793	Division 1
4E-14	347	Division 1
4E-15	93	Division 1
4E-20	135	Division 1
4E-21	841	Division 1
4E-22	933	Division 1
4E-24	978	Division 1
4E-25	1147	Division 1
4E-31	169	Division 1
4E-32	1564	Division 1
4E-42	22	Division 1
4E-49	0	Division 1
4E-51	375	Division 1
4E-53	1103	Division 1
4E-54	1167	Division 1
4E-56	1381	Division 1
4E-58	182	Division 1
4PE	150	Division 1
4PEF	438	Division 1
<hr/>		
	17,651	Division Population
3AS-7	176	Division 2
3PAE	156	Division 2
5AS-4	2	Division 2
5AS-5	106	Division 2
5AS-5A	0	Division 2
5AS-6	86	Division 2
5AS-7	52	Division 2
5BL-1	0	Division 2
5BLF-1	84	Division 2
5BLF-2	217	Division 2
5BLFS-1	310	Division 2
5BLS	216	Division 2
5FB	35	Division 2
5FBS	822	Division 2
5MK-1	2056	Division 2
5MK-2	1342	Division 2

Exhibit 1

PRECINCT	Population	Division
5MK-3	990	Division 2
5MK-4	834	Division 2
5MK-4A	1126	Division 2
5MK-4B	1077	Division 2
5MK-5	1512	Division 2
5MK-5A	1526	Division 2
5MK-6	2023	Division 2
5MK-6A	1210	Division 2
5MK-7	1261	Division 2
5MK-8	1193	Division 2
5MK-9A	44	Division 2
5MK-9B	5	Division 2
5MKS8-1	42	Division 2
5MKS9	12	Division 2
5PA-3	37	Division 2
5PAS	157	Division 2

18,709 Division Population

1CS-2	1288	Division 3
1CS-3	1027	Division 3
1CS-4	1479	Division 3
1E-27	97	Division 3
1E-28	4	Division 3
1E-29	38	Division 3
1SB-1	46	Division 3
1SB-2	1393	Division 3
1SB-3	919	Division 3
1SB-3A	0	Division 3
1SB-4	293	Division 3
1SB-5	0	Division 3
1SB-6	1669	Division 3
1SB-7	106	Division 3
1SB-7A	0	Division 3
1SB-8	302	Division 3
1SB-8A	67	Division 3
1SB-9	461	Division 3
1SB10	1418	Division 3
1SB11	23	Division 3
1SB11A	3	Division 3
1SB12	170	Division 3
1SB13	8	Division 3
1SB14	128	Division 3
1SB15	35	Division 3
1SB17	0	Division 3
3A-J3	206	Division 3
3A-J4	30	Division 3
3A-J5	0	Division 3

Exhibit 1

PRECINCT	Population	Division
3A-JWA	10	Division 3
3ES-10	6	Division 3
3ES-11	140	Division 3
3ES-12	0	Division 3
3ES-6	39	Division 3
3ES-9	48	Division 3
3ESS6	413	Division 3
3FW	351	Division 3
3FWF	259	Division 3
3FWF-A	866	Division 3
3FWS	828	Division 3
3FWW	0	Division 3
3GF	38	Division 3
3GFF	27	Division 3
3GFF-A	299	Division 3
3JC-R	57	Division 3
3JCFR	670	Division 3
3JCFRA	134	Division 3
3JCFRB	9	Division 3
3JCFRC	5	Division 3
3JCM	31	Division 3
3JCM-2	0	Division 3
3JCW	139	Division 3
3JCWF	0	Division 3
3JCWR	648	Division 3
3JCWRA	86	Division 3
4E-23	1042	Division 3
		17,355 Division Population
1CS-1	1427	Division 4
1E-37	1178	Division 4
1E-38	1151	Division 4
1E-39	88	Division 4
1E-47	1229	Division 4
1E-48	154	Division 4
1ES-1	526	Division 4
1ES-2	1457	Division 4
1ES-3	17	Division 4
1ES-4	231	Division 4
3E-4J	0	Division 4
3ES-7	445	Division 4
4E-33	155	Division 4
4E-34	473	Division 4
4E-41	1511	Division 4
4E-43	720	Division 4
4E-44	1099	Division 4
4E-45	189	Division 4

Exhibit 1

PRECINCT	Population	Division
4E-46	393	Division 4
4E-4F	4	Division 4
4E-4FW	0	Division 4
4E-4J	14	Division 4
4E-52	813	Division 4
4E-55	18	Division 4
4E-57	108	Division 4
4ES-3	873	Division 4
4ES-4	946	Division 4
4ES-5	904	Division 4
4ES-6	1474	Division 4
4ES-8	192	Division 4
4FW	0	Division 4
4FWS	0	Division 4

17,789 Division Population

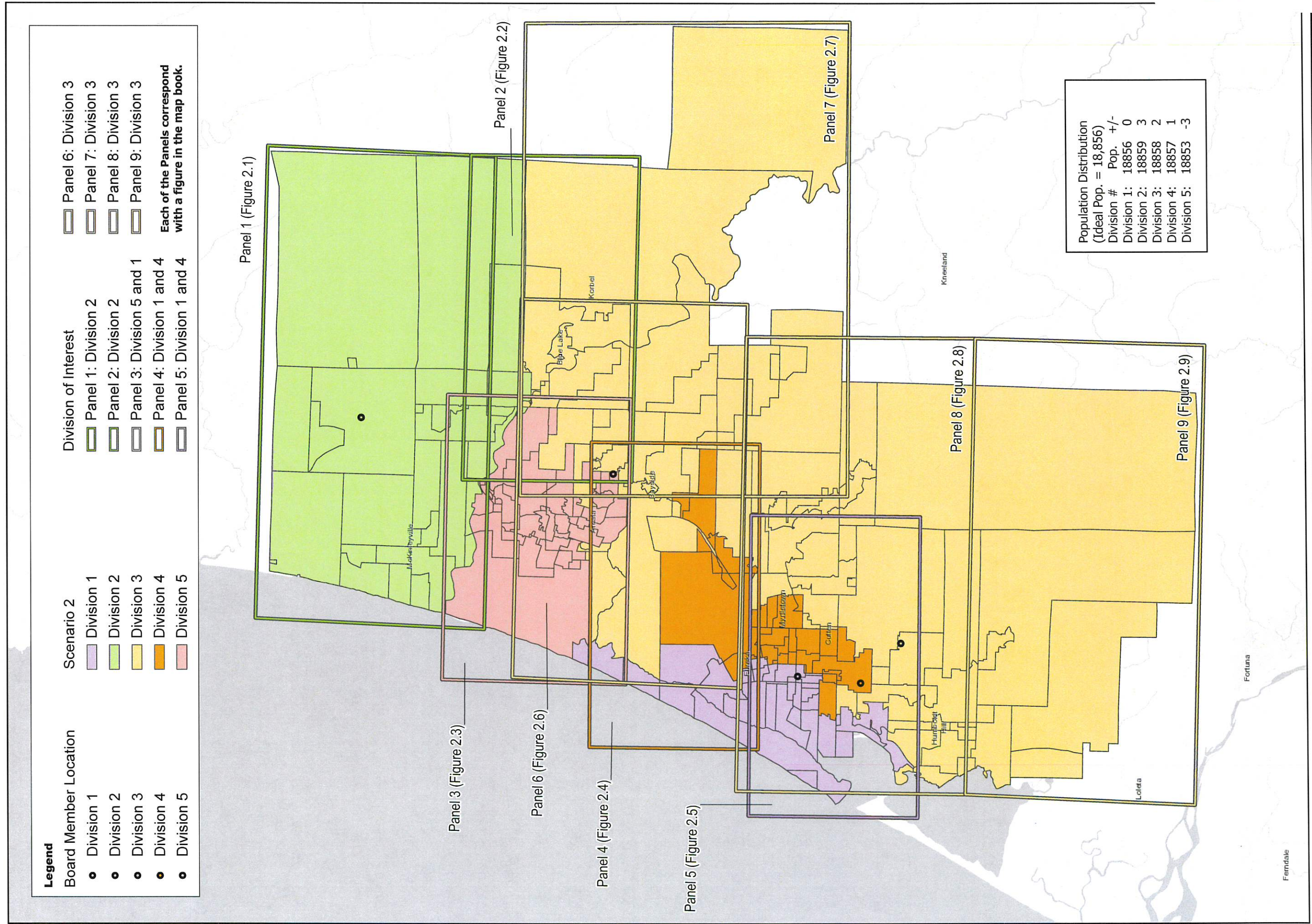
3A--1	673	Division 5
3A--2	1119	Division 5
3A--3	863	Division 5
3A--3A	415	Division 5
3A--4	1398	Division 5
3A--5	485	Division 5
3A--5A	674	Division 5
3A--6	600	Division 5
3A--7	972	Division 5
3A--8	369	Division 5
3A--9	940	Division 5
3A-10	532	Division 5
3A-11	1166	Division 5
3A-12	1087	Division 5
3A-13	1131	Division 5
3A-14	1264	Division 5
3A-J1	480	Division 5
3A-J2	264	Division 5
3A-JW	186	Division 5
3A-P1	0	Division 5
3A-P10	0	Division 5
3A-P2	1014	Division 5
3A-P2A	1422	Division 5
3A-P3	327	Division 5
3A-P4	464	Division 5
3A-P5	10	Division 5
3A-P6	469	Division 5
3A-P7	0	Division 5
3A-P8	402	Division 5
3A-P9	91	Division 5
3AS-1	4	Division 5

Exhibit 1

PRECINCT	Population	Division
3AS-11	0	Division 5
3AS-12	38	Division 5
3AS-2	15	Division 5
3AS-3	82	Division 5
3AS-4	36	Division 5
3AS-5	113	Division 5
3AS-8	211	Division 5
3AS-9	121	Division 5
3AS10	4	Division 5
3B--1	1174	Division 5
3BLF	0	Division 5
3BLFS	0	Division 5
3JCF	52	Division 5
3JCM-1	4	Division 5
3MA-3	6	Division 5
3PA-1	142	Division 5
3PA-2	422	Division 5
3PA-3	48	Division 5
3PA-3A	176	Division 5
3PA-3B	137	Division 5
3PA-4	401	Division 5
3PA-6	12	Division 5
5AS-9	174	Division 5
5BL	84	Division 5
5BLF	410	Division 5
5BLF-3	17	Division 5
5BLFS	27	Division 5
5MCK	29	Division 5
5PA-3A	23	Division 5
		22,779 Division Population
Grand Totals	94,283	94,283

SCENARIO 2

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Legend

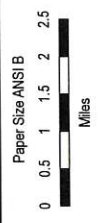
Board Member Location	Scenario 2	Division of Interest	Panel 6: Division 3
● Division 1	■ Division 1	■ Panel 1: Division 2	■ Panel 7: Division 3
● Division 2	■ Division 2	■ Panel 2: Division 2	■ Panel 8: Division 3
● Division 3	■ Division 3	■ Panel 3: Division 5 and 1	■ Panel 9: Division 3
● Division 4	■ Division 4	■ Panel 4: Division 1 and 4	
● Division 5	■ Division 5	■ Panel 5: Division 1 and 4	

Each of the Panels correspond with a figure in the map book.

Population Distribution (Ideal Pop. = 18,856)	
Division #	Pop. +/-
Division 1:	18856 0
Division 2:	18859 3
Division 3:	18858 2
Division 4:	18857 1
Division 5:	18853 -3

Project No. 12572230
 Revision No. A
 Date Mar 2022

Humboldt Bay Municipal Water District
 Division Boundary Redistricting

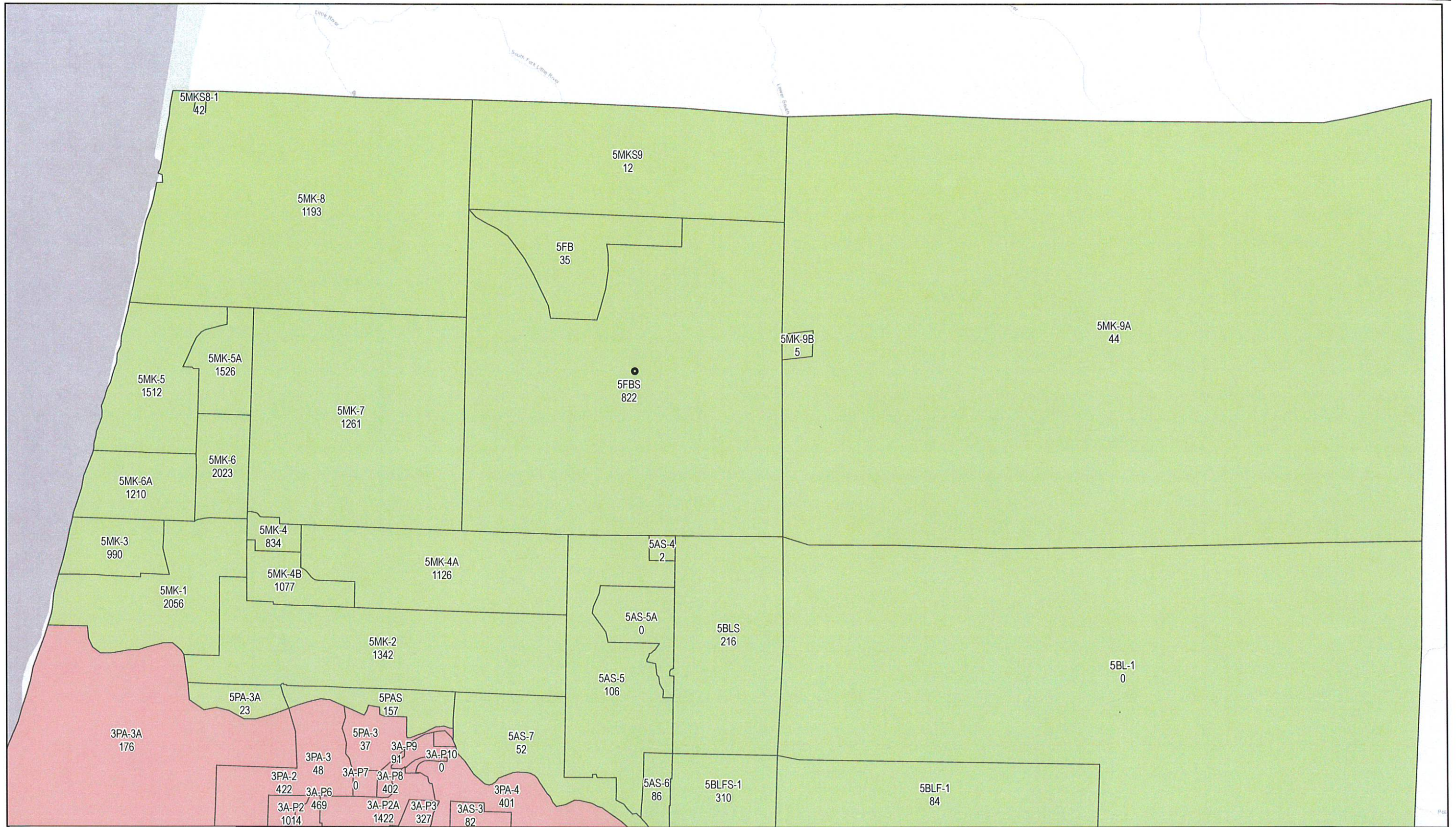


Map Projection: Lambert Conformal Conic
 Horizontal Datum: North American 1983
 Grid: NAD 1983 StatePlane California I FIPS 0401 Feet
 Print date: 18 Mar 2022 - 08:21

Division Boundary Redistricting
Scenario: 2 Overview

FIGURE 1

Data source: World Light Gray Reference: Enr, HERE, IPS, HERE, Garmin, USGS, EPA, NPS. Created by gisn3



- Legend**
- Board Member Location
- Div 1 - Pre 1E-36
 - Div 2 - Pre 5FBS
 - Div 3 - Pre 1CS-4
 - Div 4 - Pre 1E-38
 - Div 5 - Pre 3A-J2

- Scenario 2
- Division 1
 - Division 2
 - Division 3
 - Division 4
 - Division 5

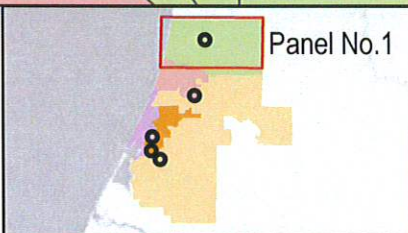
Population Distribution
(Ideal Pop. = 18,856)

Division #	Pop. +/-
Division 1:	18,856 0
Division 2:	18,859 3
Division 3:	18,858 2
Division 4:	18,857 1
Division 5:	18,853 -3

Precinct Label Example

5MK - 2 — Precinct No.

1342 — Population



Paper Size ANSI B

0 0.25 0.5 0.75 1 Miles

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

Print date: 16 Mar 2022 - 09:55



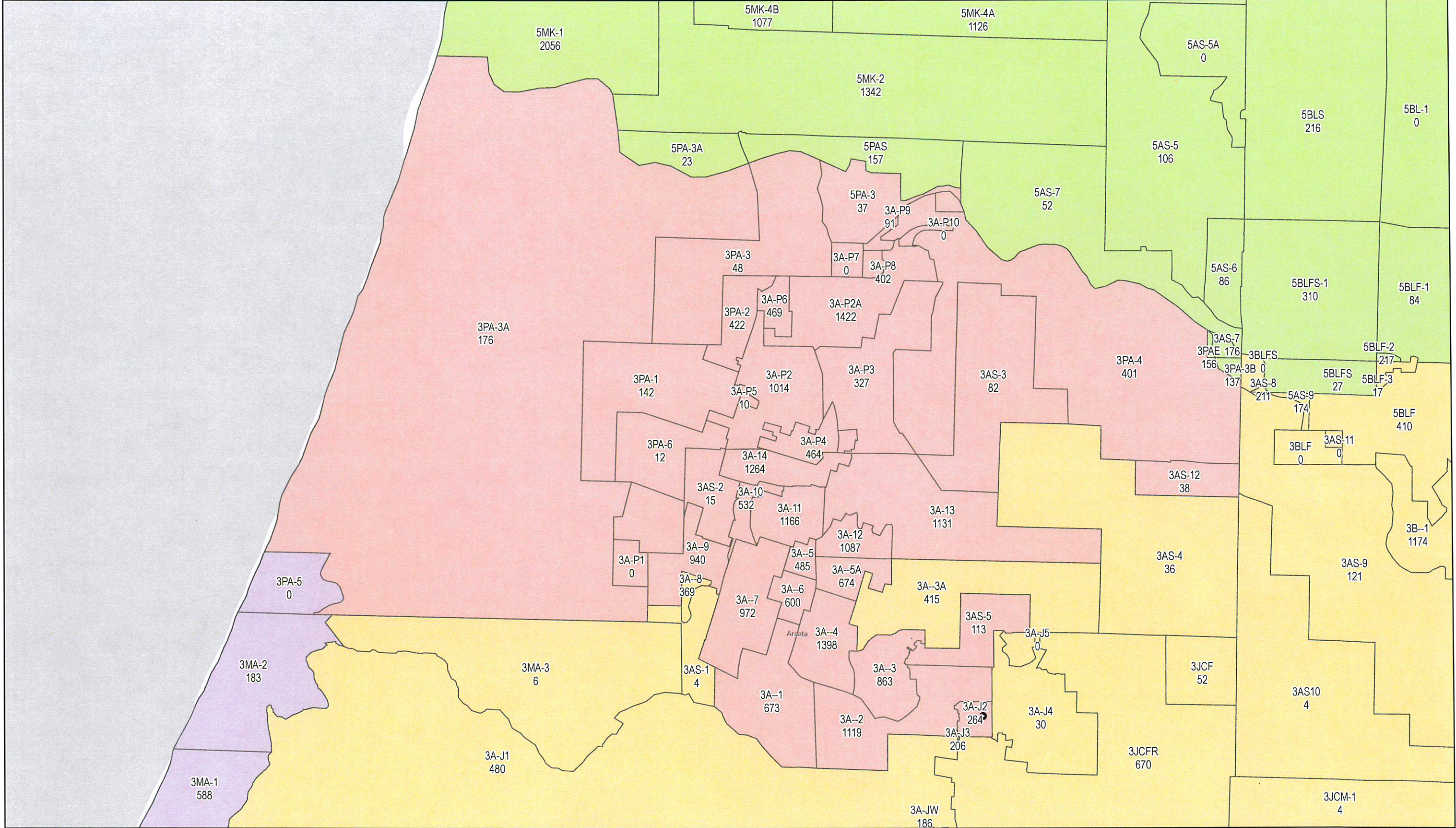
Humboldt Bay Municipal Water District
Division Boundary Redistricting

**Division Boundary Redistricting
Panel Map for Scenario: 2**

Project No. 12572230
Revision No. A
Date Mar 2022

FIGURE 2.1

Data source: World Light Gray Canvas Base: Esri, HERE, Garmin, USGS, EPA, NPS
World Light Gray Canvas Base: Bureau of Land Management, Esri, HERE, Garmin, USGS, EPA
World Light Gray Reference: Esri, HERE, Garmin, USGS, EPA



- Legend**
- Board Member Location
- Div 1 - Pre 1E-36
 - Div 2 - Pre 5FBS
 - Div 3 - Pre 1CS-4
 - Div 4 - Pre 1E-38
 - Div 5 - Pre 3A-J2

- Scenario 2
- Division 1
 - Division 2
 - Division 3
 - Division 4
 - Division 5

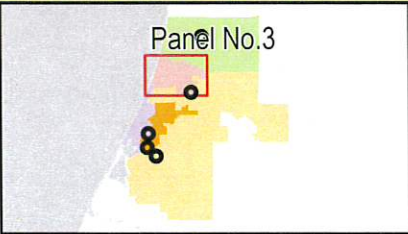
Population Distribution (Ideal Pop. = 18,856)

Division #	Pop.	+/-
Division 1:	18,856	0
Division 2:	18,859	3
Division 3:	18,858	2
Division 4:	18,857	1
Division 5:	18,853	-3

Precinct Label Example

5MK - 2 ——— Precinct No.

1342 ——— Population



Paper Size ANSI B

0 0.15 0.3 0.45 0.6 Miles

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet



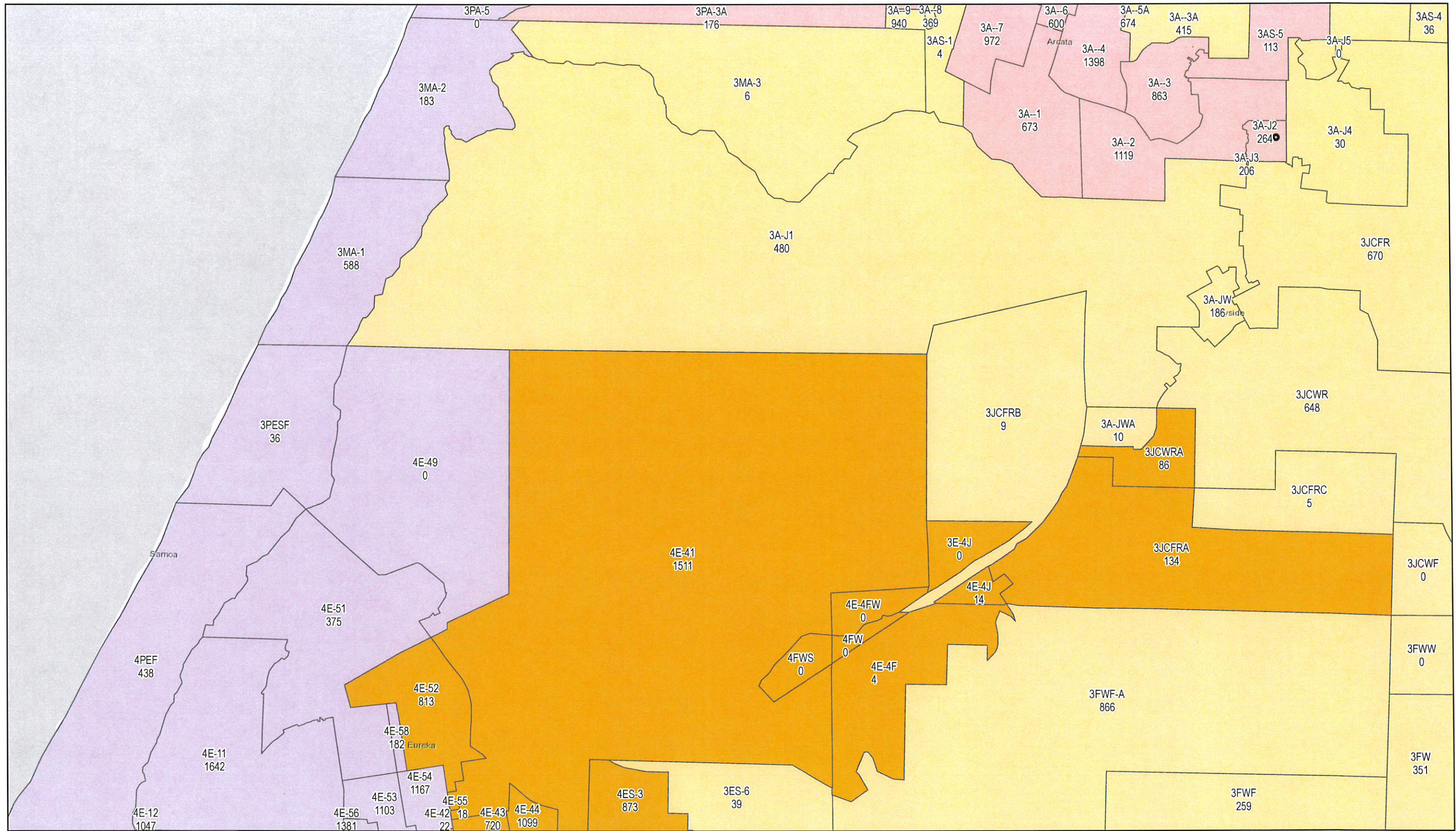
Humboldt Bay Municipal Water District
Division Boundary Redistricting

**Division Boundary Redistricting
Panel Map for Scenario: 2**

Project No. 12572230
Revision No. A
Date Mar 2022

FIGURE 2.3

Data source: World Light Gray Canvas Base Esri, HERE, Garmin, USGS, EPA, NPS, World Light Gray Canvas Base, Bureau of Land Management, Esri, HERE, Garmin, USGS, EPA, World Light Gray Reference, Esri, HERE, Created by djones3



- Legend**
- Board Member Location
 - Div 1 - Pre 1E-36
 - Div 2 - Pre 5FBS
 - Div 3 - Pre 1CS-4
 - Div 4 - Pre 1E-38
 - Div 5 - Pre 3A-J2

- Scenario 2**
- Division 1
 - Division 2
 - Division 3
 - Division 4
 - Division 5

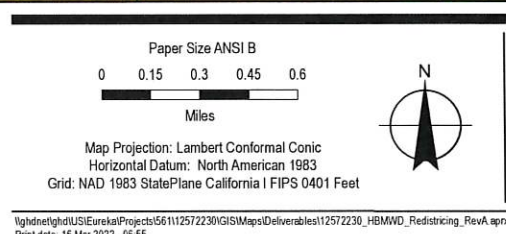
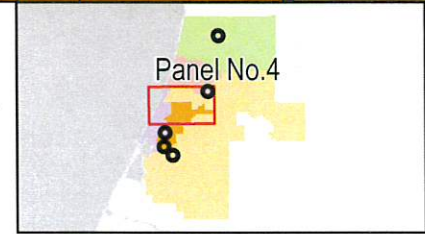
Population Distribution (Ideal Pop. = 18,856)

Division #	Pop. +/-
Division 1:	18,856 0
Division 2:	18,859 3
Division 3:	18,858 2
Division 4:	18,857 1
Division 5:	18,853 -3

Precinct Label Example

5MK - 2 — Precinct No.

1342 — Population



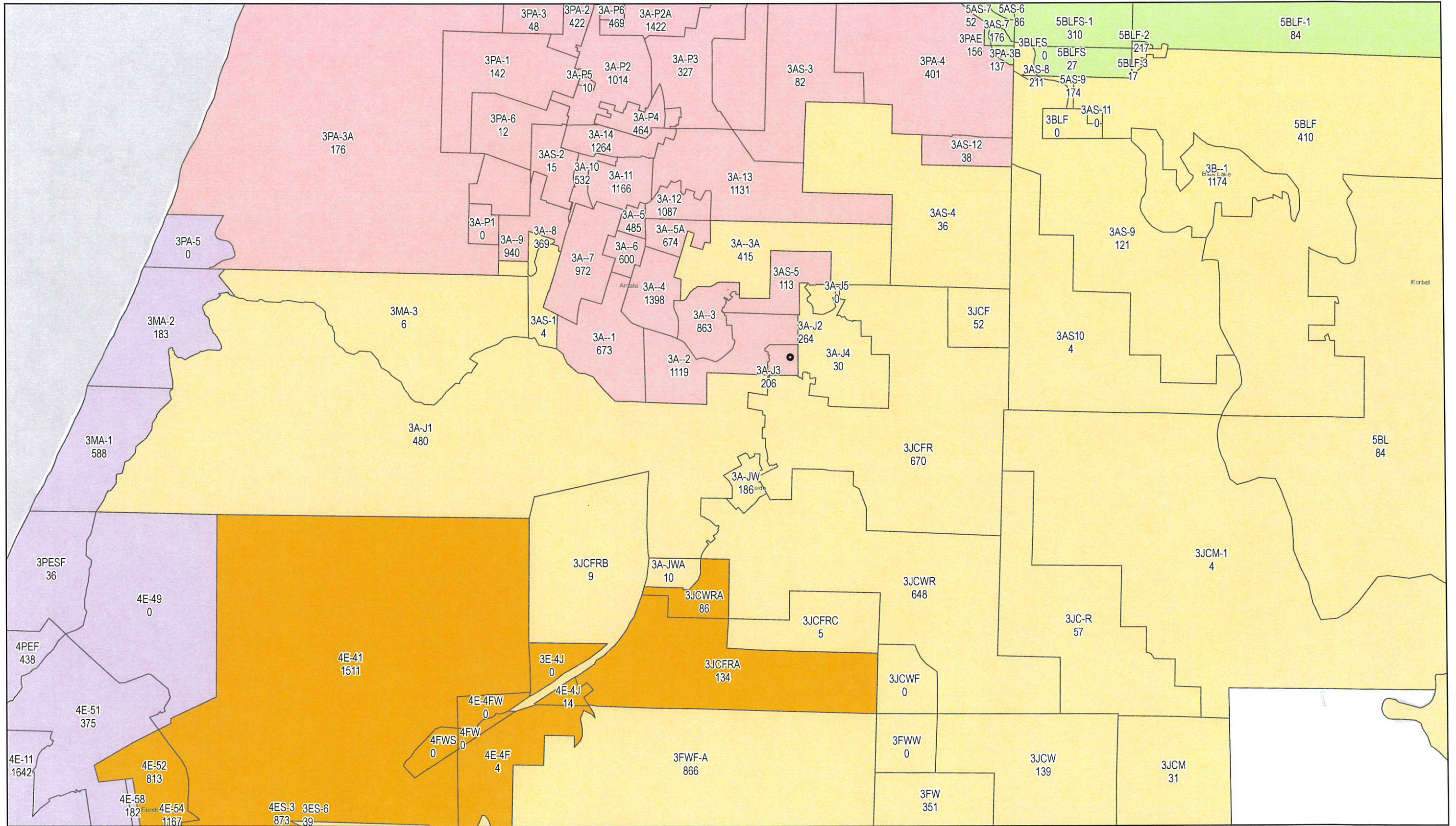
Humboldt Bay Municipal Water District
Division Boundary Redistricting

**Division Boundary Redistricting
Panel Map for Scenario 2**

Project No. 12572230
Revision No. A
Date Mar 2022

FIGURE 2.4

Data source: World Light Grey Canvas Base, Esri, HERE, Garmin, USGS, EPA, NPS, World Light Grey Canvas Base, Bureau of Land Management, Esri, HERE, Garmin, USGS, EPA, World Light Grey Reference, Esri, HERE, Created by diones3
Print date: 16 Mar 2022 - 06:55



- Legend**
- Board Member Location
- Div 1 - Pre 1E-36
 - Div 2 - Pre 5FBS
 - Div 3 - Pre 1CS-4
 - Div 4 - Pre 1E-38
 - Div 5 - Pre 3A-J2
- Scenario 2
- Division 1
 - Division 2
 - Division 3
 - Division 4
 - Division 5

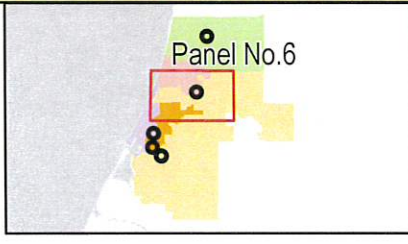
Population Distribution (Ideal Pop. = 18,856)

Division #	Pop. +/-
Division 1:	18,856 0
Division 2:	18,859 3
Division 3:	18,858 2
Division 4:	18,857 1
Division 5:	18,853 -3

Precinct Label Example

5MK - 2 — Precinct No.

1342 — Population



Paper Size ANSI B

0 0.2 0.4 0.6 0.8 Miles

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California 1 FIPS 0401 Feet



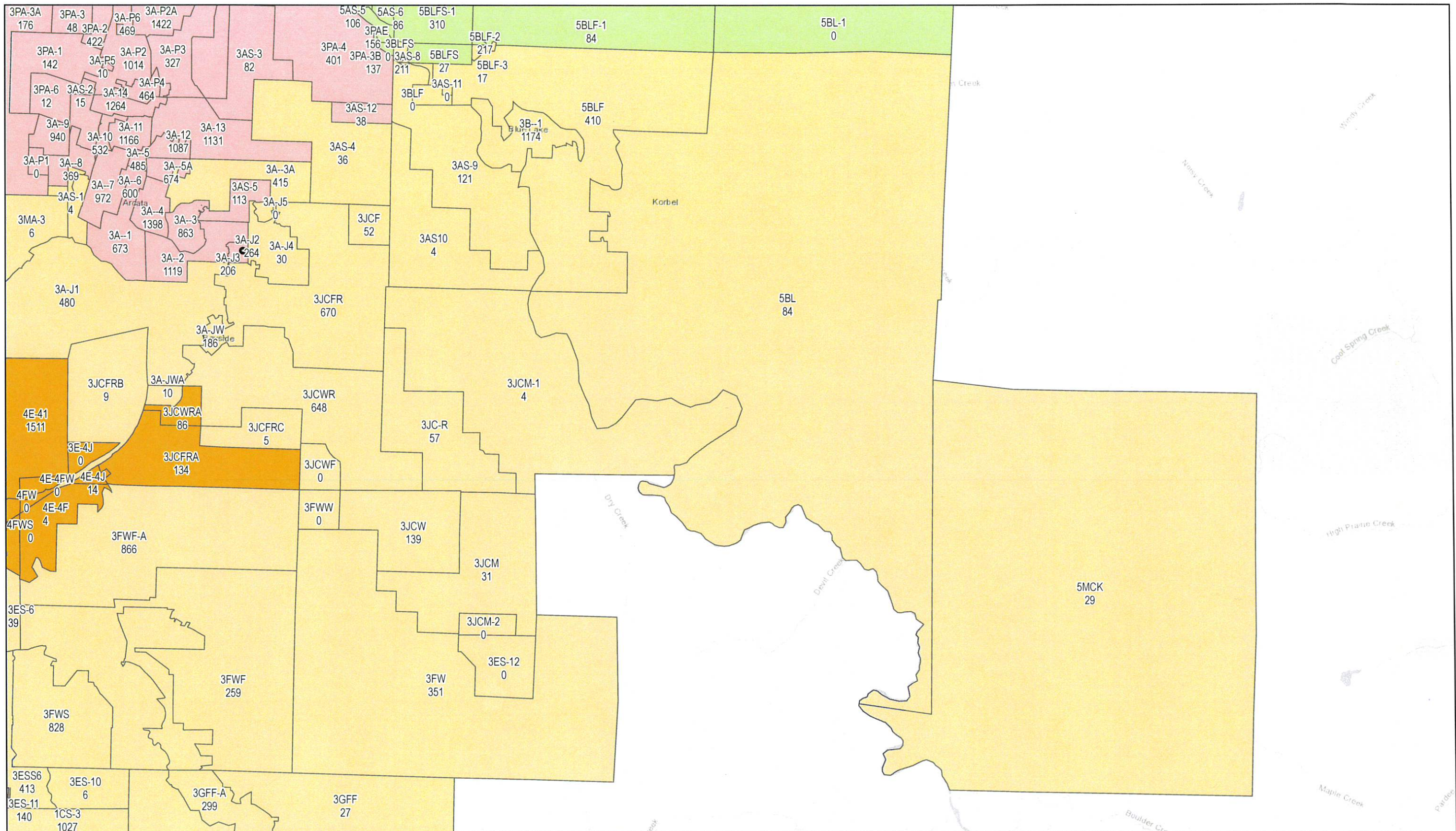
Humboldt Bay Municipal Water District
Division Boundary Redistricting

**Division Boundary Redistricting
Panel Map for Scenario: 2**

Project No. 12572230
Revision No. A
Date Mar 2022

FIGURE 2. 6

Data source: World Light Gray Canvas Base: Esri, HERE, Garmin, USGS, EPA, NPS
World Light Gray Canvas Base: Bureau of Land Management, Esri, HERE, Garmin, USGS, EPA
World Light Gray Reference: Esri, HERE, Garmin, USGS, EPA, NPS
Print date: 16 Mar 2022 - 06:55



- Legend**
- Board Member Location
 - Div 1 - Pre 1E-36
 - Div 2 - Pre 5FBS
 - Div 3 - Pre 1CS-4
 - Div 4 - Pre 1E-38
 - Div 5 - Pre 3A-J2

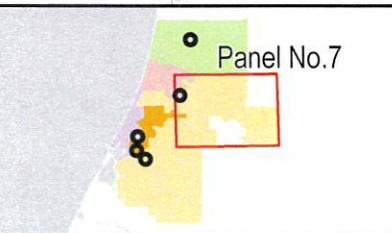
- Scenario 2**
- Division 1
 - Division 2
 - Division 3
 - Division 4
 - Division 5

Population Distribution
(Ideal Pop. = 18,856)

Division #	Pop. +/-
Division 1:	18,856 0
Division 2:	18,859 3
Division 3:	18,858 2
Division 4:	18,857 1
Division 5:	18,853 -3

Precinct Label Example

SMK - 2 — Precinct No.
1342 — Population



Paper Size ANSI B

0 0.3 0.6 0.9 1.2 Miles

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

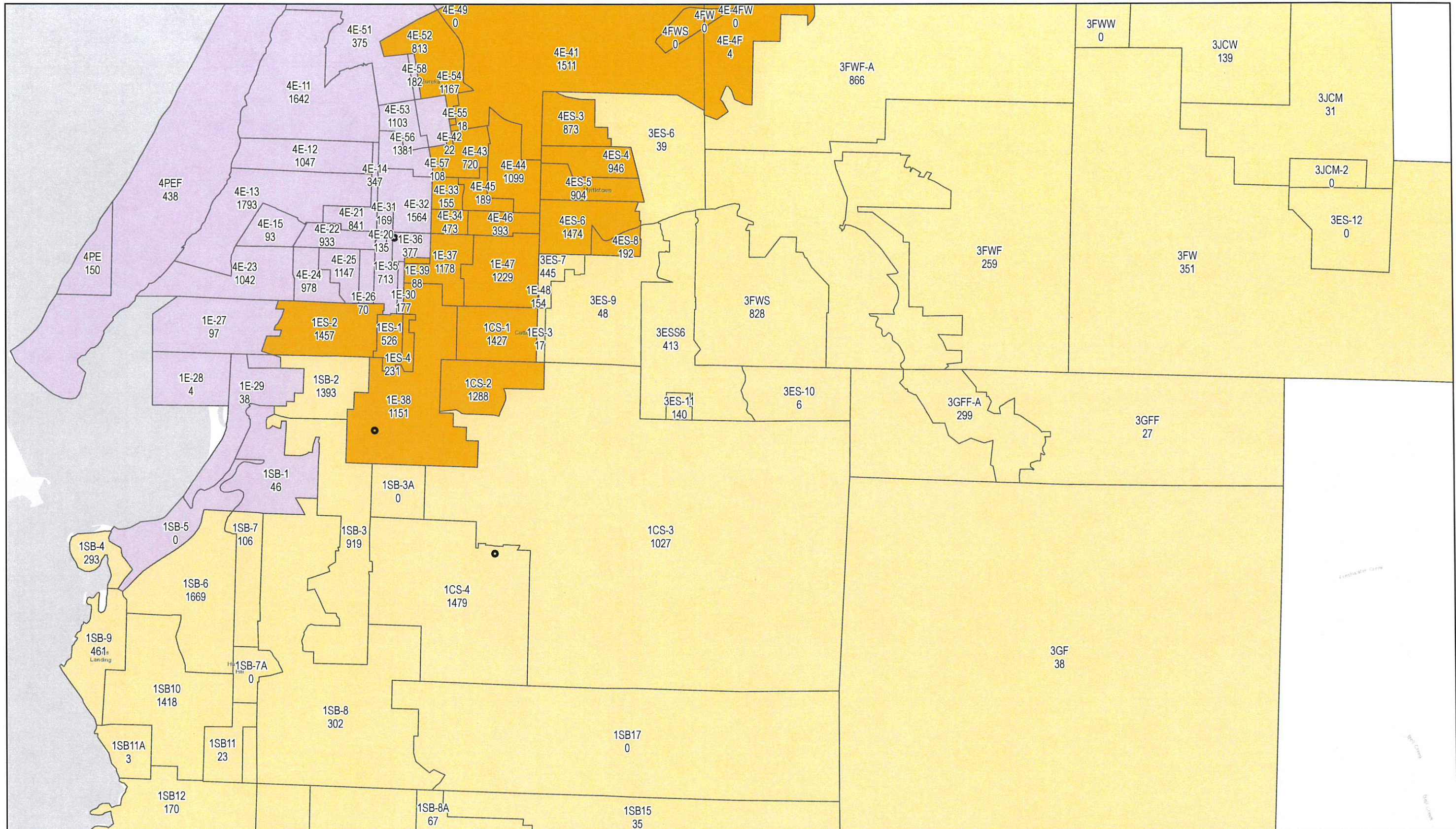
Humboldt Bay Municipal Water District
Division Boundary Redistricting

Project No. 12572230
Revision No. A
Date Mar 2022

Division Boundary Redistricting
Panel Map for Scenario: 2

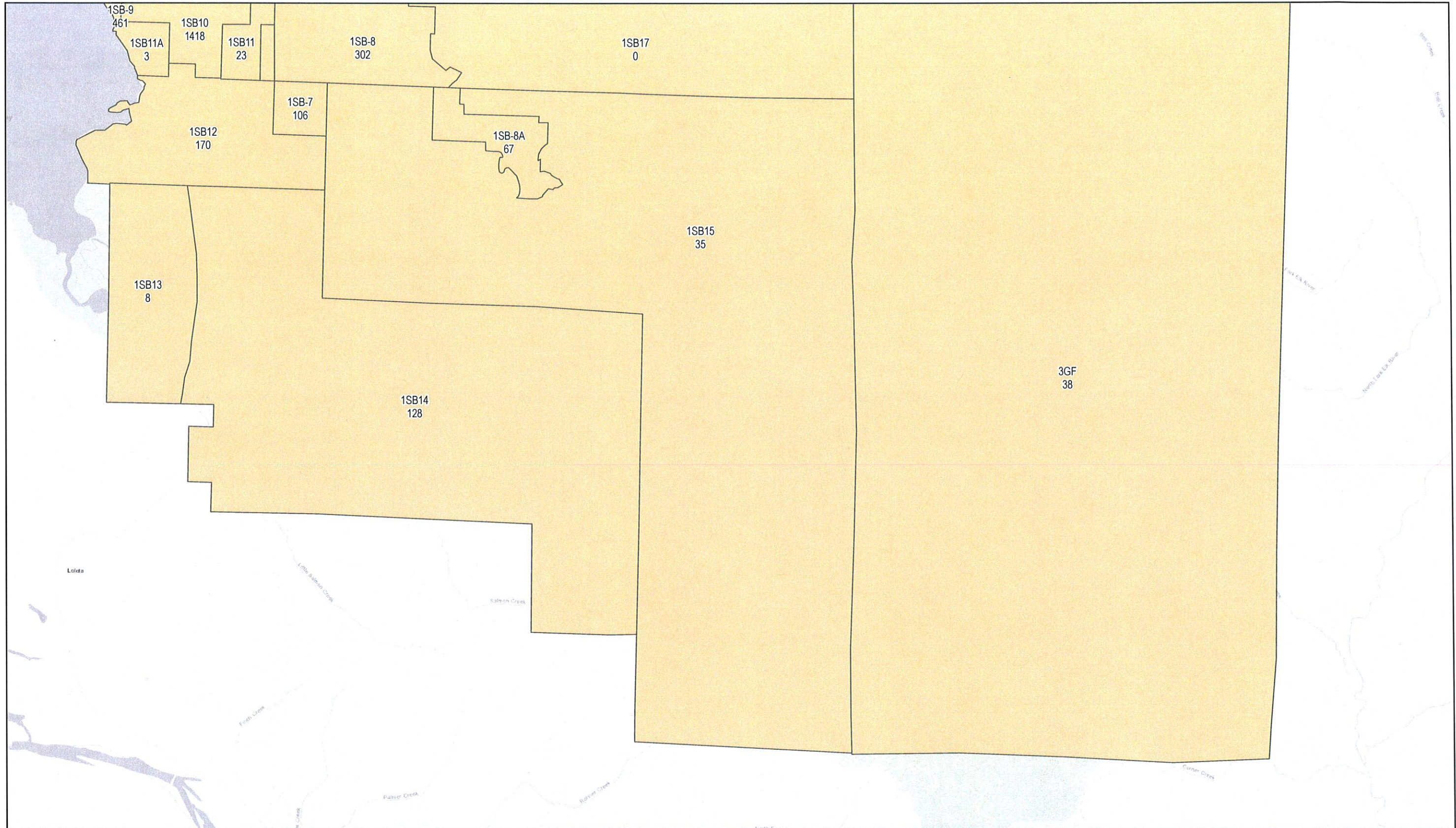
FIGURE 2.7

Data source: World Light Gray Canvas Base, Esri, HERE, Garmin, USGS, EPA, NPS, World Light Gray Reference, Esri, HERE, NPS
Print date: 16 Mar 2022 - 06:55
World Light Gray Canvas Base: Bureau of Land Management, Esri, HERE, Garmin, USGS, EPA, NPS. Created by djones3



<p>Legend</p> <p>Board Member Location</p> <ul style="list-style-type: none"> ● Div 1 - Pre 1E-36 ● Div 2 - Pre 5FBS ● Div 3 - Pre 1CS-4 ● Div 4 - Pre 1E-38 ● Div 5 - Pre 3A-J2 		<p>Scenario 2</p> <ul style="list-style-type: none"> Division 1 Division 2 Division 3 Division 4 Division 5 		<p>Population Distribution (Ideal Pop. = 18,856)</p> <table border="0"> <tr> <td>Division #</td> <td>Pop. +/-</td> </tr> <tr> <td>Division 1:</td> <td>18,856 0</td> </tr> <tr> <td>Division 2:</td> <td>18,859 3</td> </tr> <tr> <td>Division 3:</td> <td>18,858 2</td> </tr> <tr> <td>Division 4:</td> <td>18,857 1</td> </tr> <tr> <td>Division 5:</td> <td>18,853 -3</td> </tr> </table>		Division #	Pop. +/-	Division 1:	18,856 0	Division 2:	18,859 3	Division 3:	18,858 2	Division 4:	18,857 1	Division 5:	18,853 -3	<p>Precinct Label Example</p> <p>5MK - 2 — Precinct No.</p> <p>1342 — Population</p>				<p>Paper Size ANSI B</p> <p>0 0.25 0.5 0.75 1</p> <p>Miles</p> <p>Map Projection: Lambert Conformal Conic Horizontal Datum: North American 1983 Grid: NAD 1983 StatePlane California 1 FIPS 0401 Feet</p>				<p>Humboldt Bay Municipal Water District Division Boundary Redistricting</p>		<p>Project No. 12572230 Revision No. A Date Mar 2022</p>	
Division #	Pop. +/-																												
Division 1:	18,856 0																												
Division 2:	18,859 3																												
Division 3:	18,858 2																												
Division 4:	18,857 1																												
Division 5:	18,853 -3																												
<p>Division Boundary Redistricting Panel Map for Scenario: 2</p>										<p>FIGURE 2.8</p>																			

Data source: World Light Gray Canvas Base, Esri, HERE, Garmin, USGS, EPA, NPS
World Light Gray Reference: Esri, HERE, NPS
Print date: 16 Mar 2022 - 06:55
World Light Gray Canvas Base: Bureau of Land Management, Esri, HERE, Garmin, USGS, EPA, NPS. Created by: dpones3



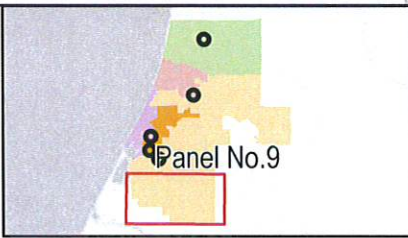
- Legend**
- Board Member Location**
- Div 1 - Pre 1E-36
 - Div 2 - Pre 5FBS
 - Div 3 - Pre 1CS-4
 - Div 4 - Pre 1E-38
 - Div 5 - Pre 3A-J2

- Scenario 2**
- Division 1
 - Division 2
 - Division 3
 - Division 4
 - Division 5

Population Distribution
(Ideal Pop. = 18,856)

Division #	Pop. +/-
Division 1:	18,856 0
Division 2:	18,859 3
Division 3:	18,858 2
Division 4:	18,857 1
Division 5:	18,853 -3

- Precinct Label Example**
- 5MK - 2 ——— Precinct No.
 - 1342 ——— Population



Paper Size ANSI B

0 0.25 0.5 0.75 1
Miles

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet



Humboldt Bay Municipal Water District
Division Boundary Redistricting

Division Boundary Redistricting
Panel Map for Scenario: 2

Project No. 12572230
Revision No. A
Date Mar 2022

FIGURE 2.9

Data source: World Light Gray Canvas Base: Esri, HERE, Garmin, USGS, EPA, NPS
World Light Gray Reference: Esri, HERE, NPS
World Light Gray Canvas Base: Bureau of Land Management, Esri, HERE, Garmin, USGS, EPA, NPS. Created by djones3
Print date: 16 Mar 2022 - 06:55

Exhibit 2

PRECINCT	Population	Division
3PA-5	0	Division 1
4E-53	1103	Division 1
1E-35	713	Division 1
1E-36	377	Division 1
4E-15	93	Division 1
4E-23	1042	Division 1
4E-24	978	Division 1
4E-25	1147	Division 1
1E-28	4	Division 1
4E-54	1167	Division 1
4E-49	0	Division 1
1SB-1	46	Division 1
1E-29	38	Division 1
1SB-5	0	Division 1
1E-27	97	Division 1
3MA-2	183	Division 1
4PE	150	Division 1
4PEF	438	Division 1
3MA-1	588	Division 1
3PESF	36	Division 1
4E-20	135	Division 1
4E-58	182	Division 1
4E-11	1642	Division 1
4E-56	1381	Division 1
4E-14	347	Division 1
4E-31	169	Division 1
4E-32	1564	Division 1
4E-21	841	Division 1
4E-12	1047	Division 1
4E-22	933	Division 1
4E-13	1793	Division 1
1E-26	70	Division 1
1E-30	177	Division 1
4E-51	375	Division 1

18,856 Division Population

5MK-9A	44	Division 2
5MKS9	12	Division 2
5FBS	822	Division 2
5FB	35	Division 2
5MK-7	1261	Division 2
5MK-3	990	Division 2
5MK-1	2056	Division 2
5AS-5	106	Division 2
5AS-4	2	Division 2
5BLS	216	Division 2
5PA-3A	23	Division 2

Exhibit 2

PRECINCT	Population	Division
5PAS	157	Division 2
5AS-6	86	Division 2
5MK-8	1193	Division 2
5BLFS	27	Division 2
5MK-2	1342	Division 2
5AS-7	52	Division 2
3PA-3B	137	Division 2
3PAE	156	Division 2
5BLFS-1	310	Division 2
5BLF-1	84	Division 2
5BL-1	0	Division 2
5MKS8-1	42	Division 2
5MK-5A	1526	Division 2
5MK-5	1512	Division 2
5MK-6	2023	Division 2
5MK-6A	1210	Division 2
5MK-4	834	Division 2
5MK-4A	1126	Division 2
5MK-4B	1077	Division 2
3AS-7	176	Division 2
5AS-5A	0	Division 2
5MK-9B	5	Division 2
5BLF-2	217	Division 2

18,859 Division Population

3AS-4	36	Division 3
3B--1	1174	Division 3
3A--8	369	Division 3
3AS-1	4	Division 3
3JCFR	670	Division 3
3JCF	52	Division 3
3A-J1	480	Division 3
5MCK	29	Division 3
3A-JW	186	Division 3
3JC-R	57	Division 3
3JCWR	648	Division 3
3JCFRB	9	Division 3
3A-JWA	10	Division 3
3JCFRC	5	Division 3
3JCWF	0	Division 3
3FWW	0	Division 3
3JCW	139	Division 3
3FW	351	Division 3
3GFF-A	299	Division 3
1SB-6	1669	Division 3
1SB-4	293	Division 3
1CS-4	1479	Division 3

Exhibit 2

PRECINCT	Population	Division
1SB-9	461	Division 3
1SB10	1418	Division 3
1SB17	0	Division 3
1SB12	170	Division 3
1SB-7	106	Division 3
1SB13	8	Division 3
1SB-2	1393	Division 3
1SB11A	3	Division 3
3AS-9	121	Division 3
3FWF-A	866	Division 3
3AS10	4	Division 3
3ES-7	445	Division 3
1SB-3	919	Division 3
1SB-8	302	Division 3
1ES-3	17	Division 3
1SB-8A	67	Division 3
3FWF	259	Division 3
3GFF	27	Division 3
1CS-3	1027	Division 3
3ESS6	413	Division 3
1SB11	23	Division 3
1SB-7A	0	Division 3
3MA-3	6	Division 3
5BL	84	Division 3
3JCM	31	Division 3
3JCM-1	4	Division 3
1SB15	35	Division 3
3GF	38	Division 3
1SB14	128	Division 3
5BLF	410	Division 3
5AS-9	174	Division 3
3BLF	0	Division 3
3BLFS	0	Division 3
3A--3A	415	Division 3
3ES-9	48	Division 3
3FWS	828	Division 3
3ES-6	39	Division 3
3JCM-2	0	Division 3
3A-J3	206	Division 3
3A-J5	0	Division 3
3A-J4	30	Division 3
3AS-8	211	Division 3
1SB-3A	0	Division 3
5BLF-3	17	Division 3
3AS-11	0	Division 3
3ES-11	140	Division 3

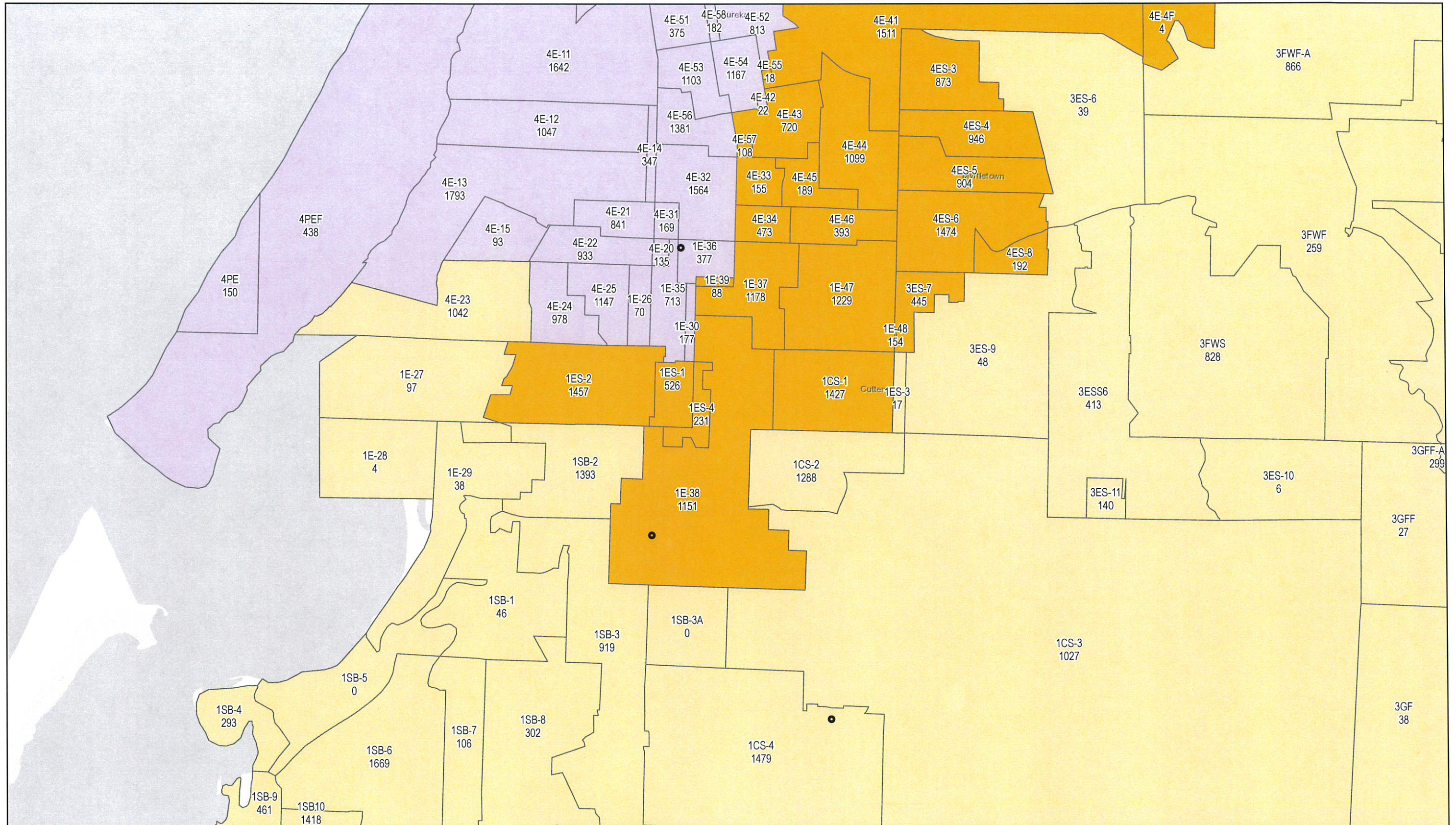
Exhibit 2

PRECINCT	Population	Division
3ES-10	6	Division 3
3ES-12	0	Division 3
		18,858 Division Population
3JCFRA	134	Division 4
3E-4J	0	Division 4
4E-4J	14	Division 4
4FWS	0	Division 4
4E-52	813	Division 4
4E-44	1099	Division 4
4E-43	720	Division 4
4ES-4	946	Division 4
4ES-5	904	Division 4
4E-45	189	Division 4
1E-37	1178	Division 4
4ES-8	192	Division 4
1E-47	1229	Division 4
1E-38	1151	Division 4
1ES-2	1457	Division 4
1CS-1	1427	Division 4
1ES-1	526	Division 4
4E-4FW	0	Division 4
4E-41	1511	Division 4
4ES-3	873	Division 4
4E-4F	4	Division 4
4ES-6	1474	Division 4
3JCWRA	86	Division 4
4FW	0	Division 4
1CS-2	1288	Division 4
1E-48	154	Division 4
4E-34	473	Division 4
4E-46	393	Division 4
4E-42	22	Division 4
4E-57	108	Division 4
4E-33	155	Division 4
1E-39	88	Division 4
4E-55	18	Division 4
1ES-4	231	Division 4
		18,857 Division Population
3PA-3A	176	Division 5
3PA-3	48	Division 5
3A-P8	402	Division 5
3A-P2A	1422	Division 5
3A-P7	0	Division 5
3PA-2	422	Division 5
3A-P6	469	Division 5
3A-P3	327	Division 5

Exhibit 2

PRECINCT	Population	Division
3AS-3	82	Division 5
3PA-1	142	Division 5
3PA-6	12	Division 5
3A-P4	464	Division 5
3AS-2	15	Division 5
3A-14	1264	Division 5
3A-13	1131	Division 5
3A-10	532	Division 5
3A-11	1166	Division 5
3A--9	940	Division 5
3A-12	1087	Division 5
3A-P1	0	Division 5
3A--5A	674	Division 5
3A--7	972	Division 5
3A--6	600	Division 5
3A--4	1398	Division 5
3AS-5	113	Division 5
3A--1	673	Division 5
3A--3	863	Division 5
3A--2	1119	Division 5
3A-J2	264	Division 5
3A-P5	10	Division 5
3A-P2	1014	Division 5
3PA-4	401	Division 5
5PA-3	37	Division 5
3A--5	485	Division 5
3A-P10	0	Division 5
3A-P9	91	Division 5
3AS-12	38	Division 5
		18,853 Division Population
Grand Totals	94,283	94,283

SCENARIO 4



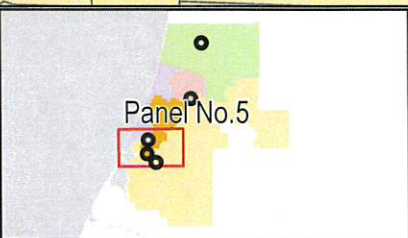
- Legend**
- Board Member Location**
- Div 1 - Pre 1E-36
 - Div 2 - Pre 5FBS
 - Div 3 - Pre 1CS-4
 - Div 4 - Pre 1E-38
 - Div 5 - Pre 3A-J2

- Scenario 4**
- Division 1
 - Division 2
 - Division 3
 - Division 4
 - Division 5

Population Distribution (Ideal Pop. = 18,856)

Division #	Pop. +/-
Division 1:	18,669 -187
Division 2:	20,847 1991
Division 3:	17,675 -1181
Division 4:	17,439 -1417
Division 5:	19,653 797

- Precinct Label Example**
- 5MK - 2 — Precinct No.
 - 1342 — Population



Paper Size ANSI B

0 0.15 0.3 0.45 0.6 Miles

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

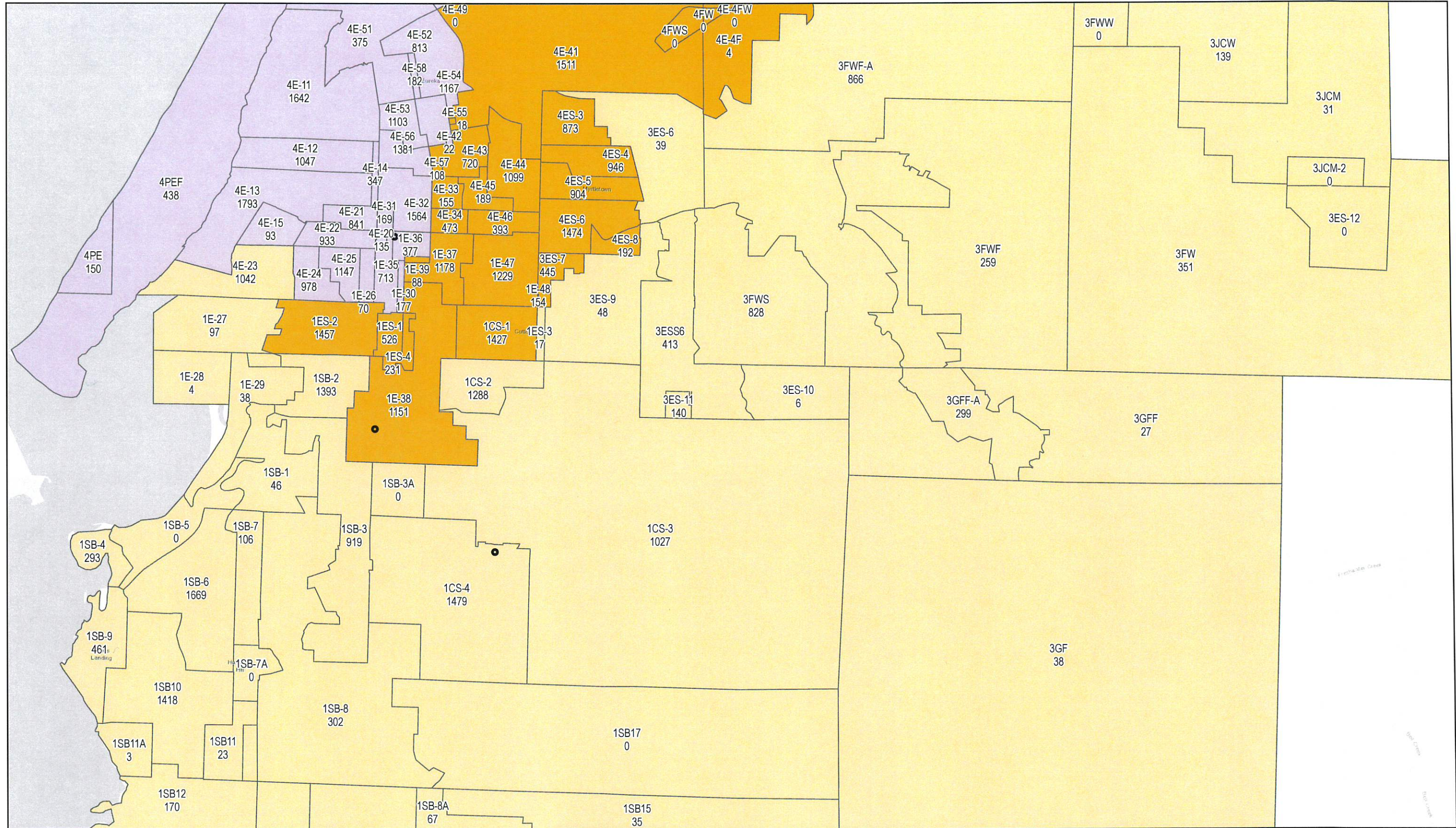
Humboldt Bay Municipal Water District
Division Boundary Redistricting

**Division Boundary Redistricting
Panel Map for Scenario: 4**

Project No. 12572230
Revision No. A
Date Mar 2022

FIGURE 4.5

Data source: World Light Gray Canvas Base, Esri, HERE, Garmin, USGS, EPA, NPS, World Light Gray Reference, Esri, HERE, Garmin, USGS, EPA, NPS, World Light Gray Canvas Base, Bureau of Land Management, Esri, HERE, Garmin, USGS, EPA, NPS, Created by dpones3



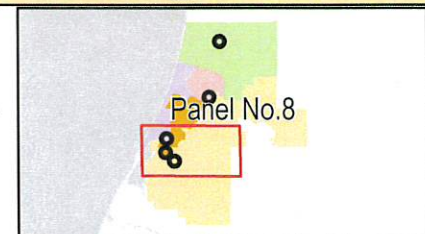
- Legend**
- Div 1 - Pre 1E-36
 - Div 2 - Pre 5FBS
 - Div 3 - Pre 1CS-4
 - Div 4 - Pre 1E-38
 - Div 5 - Pre 3A-J2

- Scenario 4**
- Division 1
 - Division 2
 - Division 3
 - Division 4
 - Division 5

Population Distribution (Ideal Pop. = 18,856)

Division #	Pop. +/-
Division 1:	18,669 -187
Division 2:	20,847 1991
Division 3:	17,675 -1181
Division 4:	17,439 -1417
Division 5:	19,653 797

- Precinct Label Example**
- SMK - 2 — Precinct No.
 - 1342 — Population



Paper Size ANSI B

0 0.25 0.5 0.75 1 Miles

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

Print date: 16 Mar 2022 - 08:17



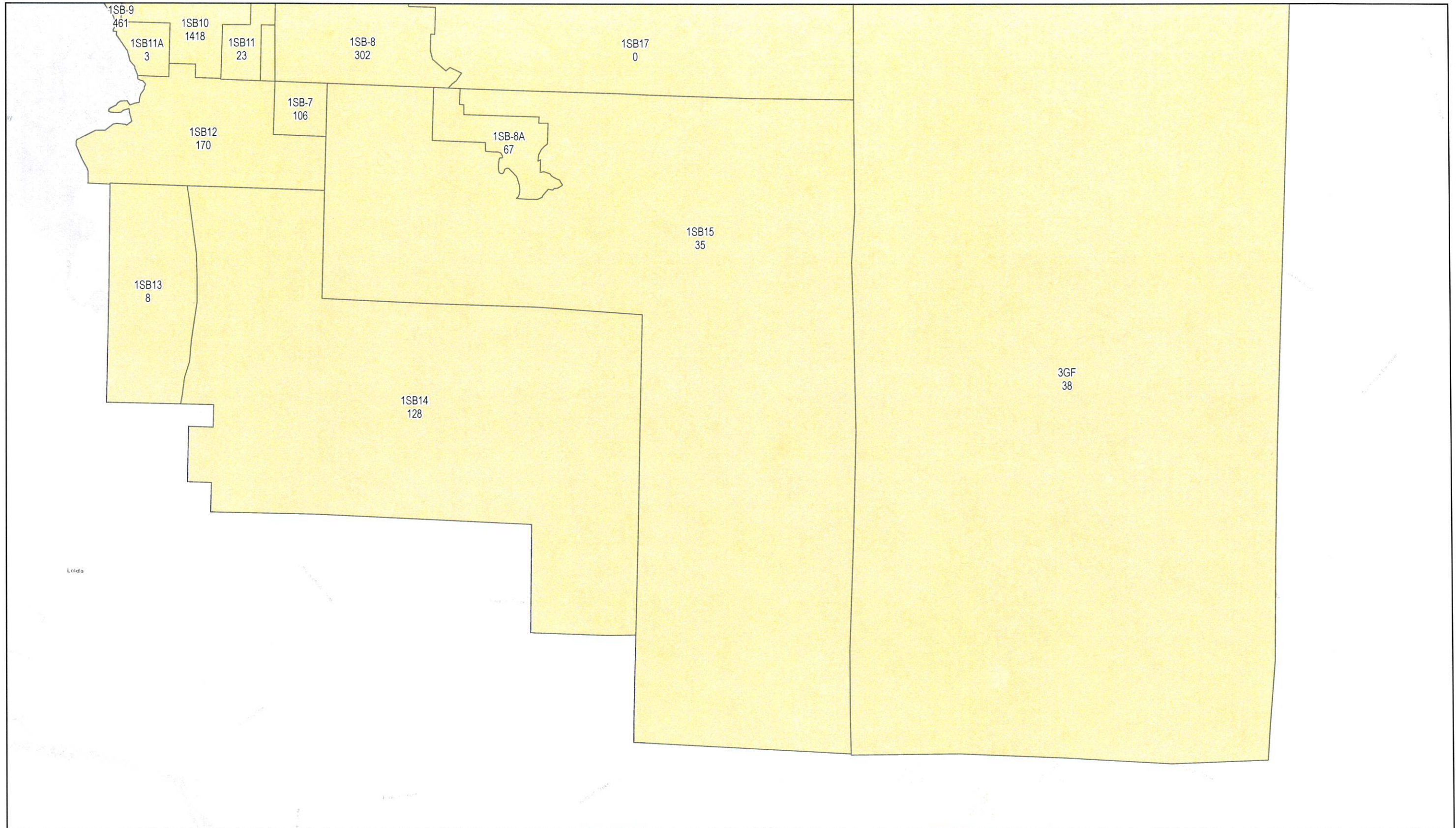
Humboldt Bay Municipal Water District
Division Boundary Redistricting

**Division Boundary Redistricting
Panel Map for Scenario: 4**

Project No. 12572230
Revision No. A
Date Mar 2022

FIGURE 4.8

Data source: World Light Gray Canvas Base, Bureau of Land Management, Esri, HERE, Garmin, USGS, EPA, NPS, World Light Gray Reference, Esri, HERE, NPS, World Light Gray Canvas Base, Esri, HERE, Garmin, USGS, EPA, NPS. Created by: djon3



<p>Legend</p> <p>Board Member Location</p> <ul style="list-style-type: none"> ● Div 1 - Pre 1E-36 ● Div 2 - Pre 5FBS ● Div 3 - Pre 1CS-4 ● Div 4 - Pre 1E-38 ● Div 5 - Pre 3A-J2 	<p>Scenario 4</p> <ul style="list-style-type: none"> □ Division 1 □ Division 2 □ Division 3 □ Division 4 □ Division 5 	<p>Population Distribution (Ideal Pop. = 18,856)</p> <table border="0"> <thead> <tr> <th>Division #</th> <th>Pop.</th> <th>+/-</th> </tr> </thead> <tbody> <tr> <td>Division 1:</td> <td>18,669</td> <td>-187</td> </tr> <tr> <td>Division 2:</td> <td>20,847</td> <td>1991</td> </tr> <tr> <td>Division 3:</td> <td>17,675</td> <td>-1181</td> </tr> <tr> <td>Division 4:</td> <td>17,439</td> <td>-1417</td> </tr> <tr> <td>Division 5:</td> <td>19,653</td> <td>797</td> </tr> </tbody> </table>	Division #	Pop.	+/-	Division 1:	18,669	-187	Division 2:	20,847	1991	Division 3:	17,675	-1181	Division 4:	17,439	-1417	Division 5:	19,653	797	<p>Precinct Label Example</p> <p>5MK - 2 ——— Precinct No.</p> <p>1342 ——— Population</p>	<p>Panel No.9</p>	<p>Paper Size ANSI B</p> <p>0 0.25 0.5 0.75 1</p> <p>Miles</p> <p>Map Projection: Lambert Conformal Conic Horizontal Datum: North American 1983 Grid: NAD 1983 StatePlane California I FIPS 0401 Feet</p>		<p>Humboldt Bay Municipal Water District Division Boundary Redistricting</p> <p>Division Boundary Redistricting Panel Map for Scenario: 4</p>	<p>Project No. 12572230 Revision No. A Date Mar 2022</p> <p>FIGURE 4.9</p>
Division #	Pop.	+/-																								
Division 1:	18,669	-187																								
Division 2:	20,847	1991																								
Division 3:	17,675	-1181																								
Division 4:	17,439	-1417																								
Division 5:	19,653	797																								

UghdnetghdUSIEurekaProjects56112572230GISMapsDeliverables12572230_HBMWD_Redistricting_RevA.aprx
Print date: 16 Mar 2022 - 08:18

Data source: World Light Gray Canvas Base, Bureau of Land Management, Esri, HERE, Garmin, USGS, EPA, NPS
World Light Gray Reference, Esri, HERE, NPS
World Light Gray Canvas Base, Esri, HERE, Garmin, USGS, EPA, NPS. Created by: djones3

Exhibit 3

PRECINCT	Population	Division
3PA-3A	176	Division 1
5PA-3A	23	Division 1
3PA-5	0	Division 1
4E-52	813	Division 1
4E-53	1103	Division 1
1E-35	713	Division 1
1E-36	377	Division 1
4E-15	93	Division 1
4E-24	978	Division 1
4E-25	1147	Division 1
4E-54	1167	Division 1
4E-49	0	Division 1
3MA-2	183	Division 1
3MA-3	6	Division 1
4PE	150	Division 1
4PEF	438	Division 1
3MA-1	588	Division 1
3PESF	36	Division 1
4E-20	135	Division 1
4E-42	22	Division 1
4E-58	182	Division 1
4E-11	1642	Division 1
4E-56	1381	Division 1
4E-14	347	Division 1
4E-31	169	Division 1
4E-32	1564	Division 1
4E-21	841	Division 1
4E-12	1047	Division 1
4E-22	933	Division 1
4E-13	1793	Division 1
1E-26	70	Division 1
1E-30	177	Division 1
4E-51	375	Division 1
<hr/>		
		18,669 Division Population
5MK-9A	44	Division 2
5MKS9	12	Division 2
5FBS	822	Division 2
5FB	35	Division 2
5MK-7	1261	Division 2
5MK-3	990	Division 2
5MK-1	2056	Division 2
5AS-5	106	Division 2
5AS-4	2	Division 2
5BLS	216	Division 2
5PAS	157	Division 2
5AS-6	86	Division 2

Exhibit 3

PRECINCT	Population	Division
3B--1	1174	Division 2
5MK-8	1193	Division 2
5BLFS	27	Division 2
3AS-9	121	Division 2
5MK-2	1342	Division 2
3AS10	4	Division 2
5AS-7	52	Division 2
5PA-3	37	Division 2
3PAE	156	Division 2
5BLFS-1	310	Division 2
5BLF-1	84	Division 2
5BL-1	0	Division 2
5MKS8-1	42	Division 2
5MK-5A	1526	Division 2
5MK-5	1512	Division 2
5MK-6	2023	Division 2
5MK-6A	1210	Division 2
5MK-4	834	Division 2
5MK-4A	1126	Division 2
5MK-4B	1077	Division 2
5BLF	410	Division 2
5AS-9	174	Division 2
3BLF	0	Division 2
3AS-7	176	Division 2
3BLFS	0	Division 2
3AS-8	211	Division 2
5AS-5A	0	Division 2
5MK-9B	5	Division 2
5BLF-2	217	Division 2
5BLF-3	17	Division 2
3AS-11	0	Division 2
<hr/>		20,847 Division Population
3JCFR	670	Division 3
5MCK	29	Division 3
3A-JW	186	Division 3
3JC-R	57	Division 3
3JCWR	648	Division 3
3JCFRB	9	Division 3
3A-JWA	10	Division 3
3JCFRC	5	Division 3
3JCFRA	134	Division 3
3JCWF	0	Division 3
3FWW	0	Division 3
3JCW	139	Division 3
3FW	351	Division 3
4E-23	1042	Division 3

Exhibit 3

PRECINCT	Population	Division
1E-28	4	Division 3
3GFF-A	299	Division 3
1SB-6	1669	Division 3
1SB-4	293	Division 3
1CS-4	1479	Division 3
1SB-9	461	Division 3
1SB10	1418	Division 3
1SB17	0	Division 3
1SB12	170	Division 3
1SB-7	106	Division 3
1SB13	8	Division 3
1SB-2	1393	Division 3
1SB11A	3	Division 3
3FWF-A	866	Division 3
3JCWRA	86	Division 3
1SB-3	919	Division 3
1SB-8	302	Division 3
1SB-1	46	Division 3
1E-29	38	Division 3
1SB-5	0	Division 3
1E-27	97	Division 3
1ES-3	17	Division 3
1CS-2	1288	Division 3
1SB-8A	67	Division 3
3FWF	259	Division 3
3GFF	27	Division 3
1CS-3	1027	Division 3
3ESS6	413	Division 3
1SB11	23	Division 3
1SB-7A	0	Division 3
5BL	84	Division 3
3JCM	31	Division 3
3JCM-1	4	Division 3
1SB15	35	Division 3
3GF	38	Division 3
1SB14	128	Division 3
3ES-9	48	Division 3
3FWS	828	Division 3
3ES-6	39	Division 3
3JCM-2	0	Division 3
3A-J3	206	Division 3
3A-J5	0	Division 3
3A-J4	30	Division 3
1SB-3A	0	Division 3
3ES-11	140	Division 3
3ES-10	6	Division 3

Exhibit 3

PRECINCT	Population	Division
3ES-12	0	Division 3
<hr/>		
17,675 Division Population		
3A-J1	480	Division 4
3E-4J	0	Division 4
4E-4J	14	Division 4
4FWS	0	Division 4
4E-44	1099	Division 4
4E-43	720	Division 4
4ES-4	946	Division 4
4ES-5	904	Division 4
4E-45	189	Division 4
1E-37	1178	Division 4
4ES-8	192	Division 4
1E-47	1229	Division 4
1E-38	1151	Division 4
1ES-2	1457	Division 4
1CS-1	1427	Division 4
1ES-1	526	Division 4
4E-4FW	0	Division 4
4E-41	1511	Division 4
4ES-3	873	Division 4
4E-4F	4	Division 4
4ES-6	1474	Division 4
4FW	0	Division 4
3ES-7	445	Division 4
1E-48	154	Division 4
4E-34	473	Division 4
4E-46	393	Division 4
4E-57	108	Division 4
4E-33	155	Division 4
1E-39	88	Division 4
4E-55	18	Division 4
1ES-4	231	Division 4
<hr/>		
17,439 Division Population		
3PA-3	48	Division 5
3A-P8	402	Division 5
3A-P2A	1422	Division 5
3A-P7	0	Division 5
3PA-2	422	Division 5
3A-P6	469	Division 5
3A-P3	327	Division 5
3AS-3	82	Division 5
3PA-1	142	Division 5
3PA-6	12	Division 5
3A-P4	464	Division 5
3AS-4	36	Division 5

Exhibit 3

PRECINCT	Population	Division
3AS-2	15	Division 5
3A-14	1264	Division 5
3A-13	1131	Division 5
3A-10	532	Division 5
3A-11	1166	Division 5
3A--9	940	Division 5
3A-12	1087	Division 5
3A-P1	0	Division 5
3A--5A	674	Division 5
3A--7	972	Division 5
3A--6	600	Division 5
3A--8	369	Division 5
3AS-1	4	Division 5
3A--4	1398	Division 5
3AS-5	113	Division 5
3A--1	673	Division 5
3A--3	863	Division 5
3JCF	52	Division 5
3A--2	1119	Division 5
3A-J2	264	Division 5
3A-P5	10	Division 5
3A-P2	1014	Division 5
3PA-4	401	Division 5
3PA-3B	137	Division 5
3A--3A	415	Division 5
3A--5	485	Division 5
3A-P10	0	Division 5
3A-P9	91	Division 5
3AS-12	38	Division 5
		19,653 Division Population
Grand Totals	94,283	94,283

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John Friedenbach

From: Dennis M. Ryan <dryan95528@gmail.com>
Sent: Tuesday, March 15, 2022 10:42 AM
To: Lisa Lozier
Cc: rkuhns@trinitycounty.org; John Friedenbach; Jeremiah Boldway
Subject: Fwd: Proposed LLA APN 018-520-029
Attachments: combined DR letter_HBMWD agenda item.pdf

Ms. Lozier,

On October 28, 2021, I sent the email below, together with attachments to you, requesting your opinion regarding the feasibility of a proposed Lot Line Adjustment (LLA) between Mr. Jeremiah Boldway and the Humboldt Bay Municipal Water District (HBMWD) on Trinity County APN 018-530-029. As explained in the forwarded correspondence, Mr. Boldway's cabin burned in the August Complex fires, and he was subsequently informed during cleanup operations that the cabin was not located on his property. On behalf of Mr. Boldway, I contacted the HBMWD regarding their willingness to consider completing a LLA to adjust the property lines between their parcels, to allow Mr. Boldway to rebuild his cabin on the graded terrace where it was previously located. During their October 14, 2021 meeting, the HBMWD Board expressed the willingness to consider the LLA, but asked that we first obtain an opinion regarding the feasibility of completing the LLA from the Trinity County Planning Department.

Since this time, I have left numerous voice messages. I have spoken with you twice by phone. During both of these phone conversations, you offered apologies regarding your lack of response, and both times made commitments to get back to me on dates specific, the first time on the following Thursday (two days future), and the last time we spoke, you committed to provide an email to me the next morning. I have yet to receive any correspondence from you.

I understand that circumstances such as the August Complex fires, cannabis industry permitting, and understaffing in the Trinity County Planning Department have created challenges for your office. However, Mr. Boldway very much desires to try to rebuild the summer cabin he enjoyed with his family for several years during the coming construction season. In order to do this, the LLA must be finalized, and building permits must first be obtained. At this time, the Planning Department's lack of response is jeopardizing this possibility.

I believe we have been extremely patient and understanding during your explanations of extenuating circumstances such as the relocation of your office, the holidays, and the department's staffing levels that have delayed your response. However, this matter must be finalized. We would respectfully request and deeply appreciate your prompt attention to this matter.

Sincerely,

Dennis Ryan, PE

707-726-3266
dryan95528@gmail.com

Hello Lisa,

My name is Dennis Ryan. I am a registered civil engineer, authorized to perform land surveying, working out of Humboldt County. My son-in-law (Jeremiah Boldway) owns a piece of property that had a cabin on it near Ruth Lake. The property and cabin were burned during the August Complex fires. Subsequent to the fire, it was determined that the graded flat and cabin thereon, were not located on his property. This is not a lease lot, but a fee simple parcel ownership contiguous to properties of the Humboldt Bay Municipal Water District (HBMWD) property.

We have addressed the HBMWD requesting their consideration of a LLA to adjust the common property line to include the existing graded flat and adequate additional lands to provide for required setbacks within the lands of Boldway, such that he can reconstruct his cabin. During their October 14th, 2021 meeting the HBMWD Board of Directors confirmed their willingness to consider this request, with a couple of conditions. They asked that we request the Trinity County Planning Department to confirm that the proposed LLA was feasible, from the Planning Department's perspective, and that Mr. Boldway offer to pay fair market value for the additional property to be included within his parcel.

We have been in contact with an appraiser regarding initiating an appraisal of the lands to be obtained from the District. By means of this letter, I wish to ask you to review the proposed LLA, and provide your opinion regarding the feasibility of the proposed LLA from the Planning Department's perspective.

Attached please find the chain of correspondence between myself and the HBMWD, not including minutes of their October 14th Board Meeting. Please note that the Trinity County Parcel Viewer appears to show portions of a remnant parcel extending across a portion of Mr. Boldway's north property line. This anomaly is discussed in my letter to the Board, and in accordance with Trinity County Title Company and Mr. Dero Forsland, this linework appears to be in error.

If at all possible, should we be able to obtain your response prior to November 3rd, this item could be agendized for the Board's next meeting on November 12th.

Please feel free to contact me should you have any questions, or need additional information. Thank you for your time and attention to this matter.

Sincerely,

Dennis Ryan, P.E.

H.B.M.W.D., SEP 27 2021

September 15, 2021

Humboldt Bay Municipal Water District
c/o Mr. John Friedenbach, District Manager
828 7th Street
Eureka, CA 95501

Re: Property of Jeremiah Boldway – Trinity County APN 018-530-029
Proposed Property Line Adjustment in Return for Access to Harvest Hazard Trees

Dear Mr. Friedenbach and District Directors,

My name is Dennis Ryan. I am a California Registered Civil Engineer, authorized to perform land surveying. I have been contacted by Mr. Jeremiah Boldway regarding a parcel of land he owns identified as Trinity County Assessor's Parcel number 018-530-029, located at 5901 Lower West Side Road, on the south side of Ruth Lake. The approximate centroid of the property is located at 40.334230° Latitude, and -123.405676° Longitude. Mr. Boldway purchased this property without completing a boundary survey, from the Bruce and Constance Filben Trust, in May of 2017, with an assurance by the seller at the time of purchase, that a small cabin and several trailers located on a small, graded hillside terrace were located on the subject property. Mr. Boldway had the use and enjoyment of the property and curtilage until September 28, 2020, on which date the cabin and trailers were consumed by the August Complex fires.

The subject property purchased by Mr. Boldway in May of 2017 was deeded together with a right-of-way over an existing twelve (12) foot roadway located in the Northwest quarter of the Southeast quarter of Section 32 for ingress to, and egress from, Ruth Lake.

During clean-up efforts following the August Complex fires, Mr. Boldway was notified that it appeared that the majority of the existing terrace, upon which his cabin and curtilage stood prior to the fire, was not located within the property deeded to him. Mr. Boldway then contacted me, asking that I research this situation, and attempt to confirm the location of the terrace, prior to any planning or efforts to rebuild on the terrace.

Shortly thereafter, Mr. Boldway was informed that the District may be interested in obtaining permission to utilize his existing property access, and deeded access to District-leased properties, in order to allow clean-up of hazard trees on District-leased property immediately adjacent to Mr. Boldway's parcel.

The purpose of this letter is to explore the possibility that the District may consider a mutually beneficial agreement between Mr. Boldway and the District that would allow the District to utilize Mr. Boldway's existing property access and deeded access to District-leased properties for the clean-up of hazard trees, in exchange for a Property Line Adjustment that would provide for the small, graded terrace to be located wholly within Mr. Boldway's parcel, thus allowing him to rebuild a cabin on the existing terrace where his cabin formerly stood.

Humboldt Bay Municipal Water District
September 15, 2021
Page 2 of 3

In an attempt to gather a more complete understanding of the facts surrounding these matters, I accompanied Mr. Boldway to his property on June 19, 2021. Mr. Boldway showed me a rebar and aluminum cap marked Hunt Surveying, (LS 4570). Mr. Boldway stated he unintentionally disturbed this monument some time before, while maintaining his driveway, and that this rebar and cap were originally located very near the center of his driveway. Being concerned that he may again disturb it during future maintenance, he reset the monument approximately 12' west of its original location, outside the limits of the driveway.

Mr. Boldway also informed me that it was his understanding that the adjacent property to the west of his parcel was recently surveyed, prior to a recent sale.

I am currently gathering information from Mr. Hunt and the Trinity County Surveyor, to gather any and all survey information that may be available regarding the found monumented property corner on Mr. Boldway's property, and any additional survey work that may have been completed and recorded in the immediate vicinity. It is my belief that recorded survey data will be available for the found monument which was set by Mr. Hunt. I am also hopeful that a Record of Survey has been recorded for the adjacent parcel of land, which will allow a fairly simple determination of the property lines for Mr. Boldway's parcel, to help facilitate an accurate location of the existing terrace upon which Mr. Boldway's cabin was located.

Utilizing a hand compass and recording hand-held GPS waypoints of the locations of key elements of the existing terrace, and after reviewing record maps, it is my preliminary opinion that the monument that Mr. Boldway disturbed marked the northwest corner of his parcel, and that the majority of the existing terrace is likely on Water District-leased property.

Based upon my rough measurements and the assumptions noted immediately above, in order to adjust the property line to include the existing terrace and fill slopes within Mr. Boldway's property, and allow for proper setbacks, all or portions of Mr. Boldway's two northerly property line segments would need to be moved approximately 130 feet to the north. A rough calculation of the additional property to be included within Mr. Boldway's parcel, in the event of a Property Line Adjustment to include the terrace within his parcel, is approximately 0.5 acres. All of these dimensions, areas, and assumptions should be able to be quickly confirmed upon receiving available record survey data from Mr. Hunt and the Trinity County Surveyor.

During my research into the properties that surround Mr. Boldway's parcel, I noticed the Assessor's Parcel Map and Parcelquest appear to imply that a small, remnant parcel identified as Trinity County APN 018-530-030 may extend across a portion of Mr. Boldway's northerly boundary. In discussions with Ms. Cheryl Leeper of Trinity County Title Co., and Mr. Dero Forsland, formerly of Trinity County Title Company, and the former Trinity County Assessor, who are intimately familiar with lots along this portion of Ruth Lake, I was assured that this is not the case, and that the northerly line of Mr. Boldway's deed contains calls to the newer Ruth Lake "take" line along the full frontage of Mr. Boldway's parcel.

Humboldt Bay Municipal Water District
September 15, 2021
Page 3 of 3

As acknowledged by Mr. Boldway's signature at the bottom of this letter, it is Mr. Boldway's desire that the District consider approving the preparation of a Property Line Adjustment to include the existing terrace within Mr. Boldway's parcel, in order to allow him to rebuild his cabin on the existing hillside terrace. In return, Mr. Boldway would like to offer permission to allow the District to utilize his existing property access and deeded right-of-way to gain access to District-leased properties to facilitate the removal of hazard trees on District-leased property. Mr. Boldway is willing to pay for the survey work required to complete the proposed Property Line Adjustment, and to also pay for the preparation of a Record of Survey, such that property line locations and monuments will be established at each of the new property line locations, as shown on a Record of Survey map, to be recorded in the Office of the Trinity County Recorder for permanent documentation of the adjusted property lines' locations.

In order to more clearly communicate Mr. Boldway's proposal, I have prepared the attached DRAFT Exhibit A showing the concept of the proposed Property Line Adjustment. Please realize this drawing is based upon the assumptions noted within this letter, all of which will need to be confirmed by field survey.

Please note that Mr. Boldway has considered the possibility of providing an equal exchange of property with the District, but due to his property being surrounded on all sides by private property, except for the direction that needs adjustment, an exchange of property with the District, is not feasible.

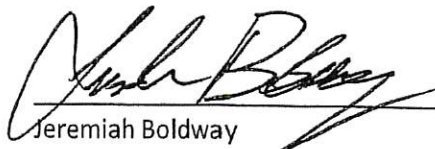
Please contact Mr. Boldway at (707) 499-6095 (cell), or myself at (707) 726-3266 (cell) or by email at dryan95528@gmail.com, regarding the District's interest in pursuing these matters further.

Sincerely,

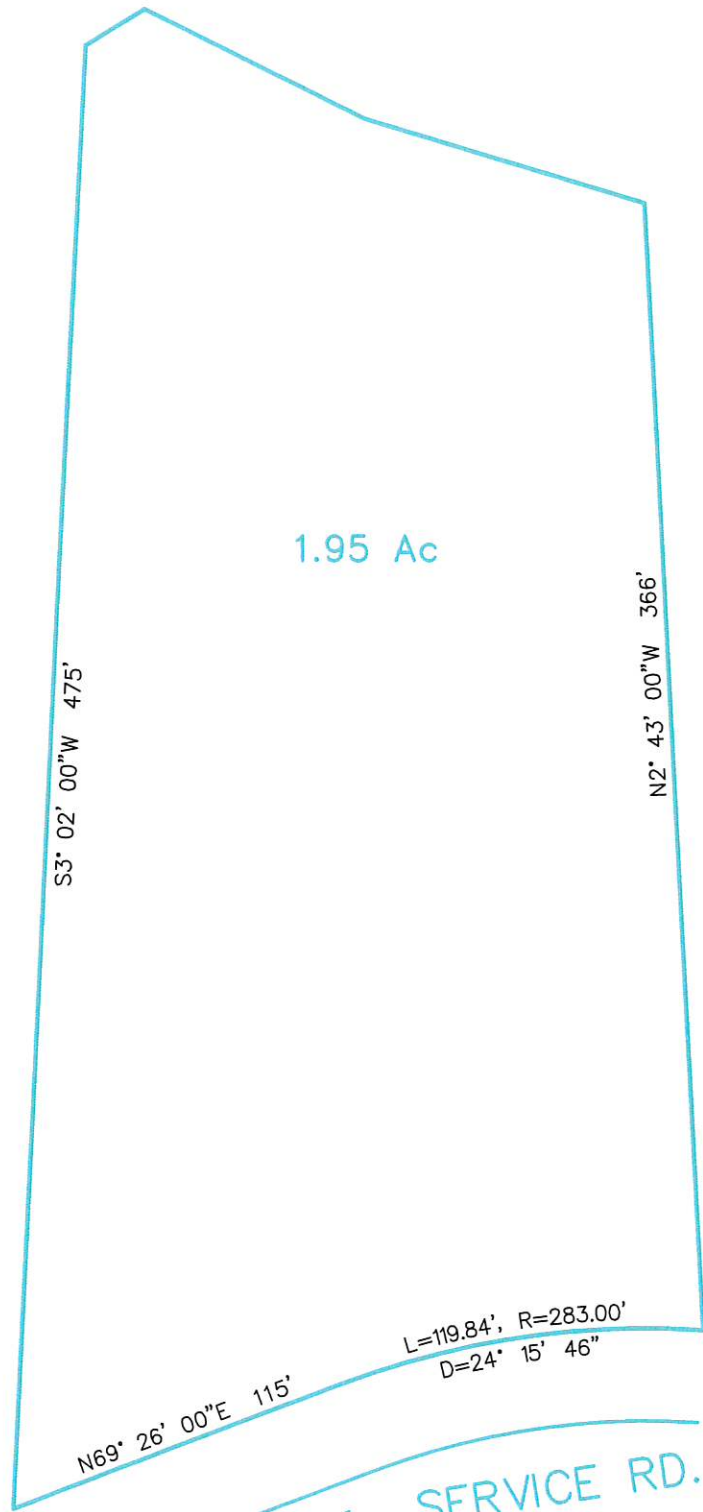
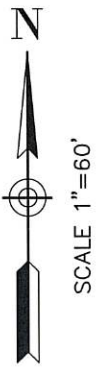


Dennis Ryan, PE
RCE 32143

I, Jeremiah Boldway, owner of Trinity County APN 018-530-029, hereby authorize Dennis Ryan to act as my agent, regarding matters pertaining to the District's interest in pursuing a mutually beneficial agreement to complete a Property Line Adjustment to allow my property to include the existing terrace upon which my former cabin stood, in exchange for an agreement for the District to utilize my existing property access and deeded right-of-way to gain access to District-leased property in order to harvest hazard trees adjacent to my property.


Jeremiah Boldway

Date: 9/15/21



1.95 Ac

SURVEYOR'S NOTE:
THIS EXHIBIT IS BASED UPON
RECORD INFORMATION, NOT A
FIELD SURVEY.

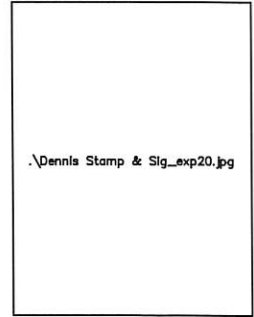
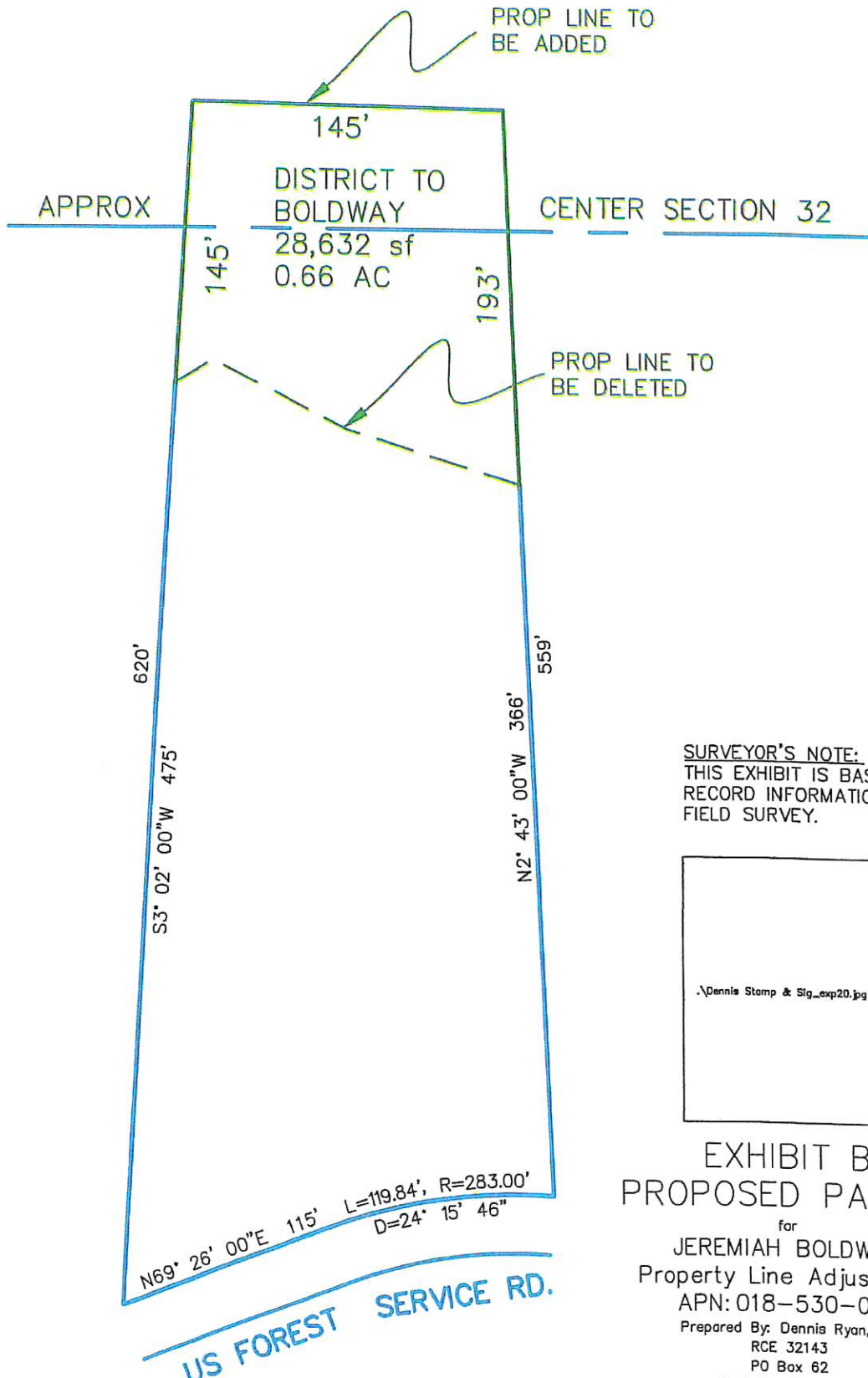


EXHIBIT A
EXISTING PARCEL

for
JEREMIAH BOLDWAY
Property Line Adjustment
APN: 018-530-029

Prepared By: Dennis Ryan, PE
RCE 32143
PO Box 62
Carlotta, CA 95528
(707)726-3266
September, 2021

US FOREST SERVICE RD.



SURVEYOR'S NOTE:
 THIS EXHIBIT IS BASED UPON
 RECORD INFORMATION, NOT A
 FIELD SURVEY.

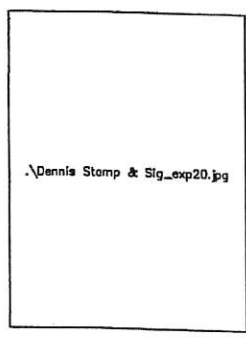


EXHIBIT B
PROPOSED PARCEL
 for
JEREMIAH BOLDWAY
 Property Line Adjustment
 APN: 018-530-029
 Prepared By: Dennis Ryan, PE
 RCE 32143
 PO Box 62
 Carlotta, CA 95528
 (707)726-3266
 September, 2021

US FOREST SERVICE RD.

Humboldt Bay Municipal Water District

To: Board of Directors
From: John Friedenbach
Date: October 14, 2021

Re: Boldway Encroachment onto District Property

Discussion

Staff received the attached letter dated September 15, 2021 from Mr. Dennis Ryan. Mr. Ryan is a licensed civil engineer. His client, Jeremiah Boldway, purchased a property on the west side of Ruth Lake above the District's buffer strip. It became apparent during the August Complex wildfire cleanup activities that the structures associated with this parcel, APN 018-530-029, were constructed illegally on the District's property.

Mr. Boldway is requesting a lot line adjustment as a solution to this error to allow him to rebuild on his previous building site.

Attached for your reference are photos that staff took at the building site with CalOES staff. Also attached is a screen shot from Trinity County's GIS APN parcel program. There appears to be a discrepancy between the APN provided by Mr. Ryan and the APN shown on Trinity County's website (APN 018-520-29). The street address of 5901 Lower West Side Road do match.

There appear to be some water rights on a nearby spring that were retained originally by the Dillon family when this area was acquired by the District for original construction of the dam and creation of Ruth Lake. Staff observed that a new water tank, pump and piping had been installed during our site visit. There was damage to the spring's water course that was referred to the CDFW for investigation and possible correction. This spring flows into Ruth Lake.

Staff Recommendation

Staff recommends that the Board not agree to a lot line adjustment. Granting the lot line adjustment would set an unwelcome precedence that adjacent property owners on the west side of the lake can encroach onto District property and build structures.

If the Board chooses to entertain the lot line adjustment, then staff recommends that adequate consideration be obtained for the full value of property exchanged. The proposal of an easement to cross this parcel as full and just compensation to the District is inadequate in staff's opinion.

Trinity County Parcel Viewer 018-530-029-000

Parcel Information:

Parcel Number	018-530-29-00
APN - Assessors Parcel Number	018-530-29-00
Street Number	5901
Street Name	Lower West Side
Street Type	Rd
Community	Mad River
Zip Code	95552
Post Office	Mad River
Notification Status	Tentative
Multiple Addresses	
Multiple Address Description	
Old Address	3276 Lower West Side Rd
Lot Acres	1.50
GIS Acres	1.78

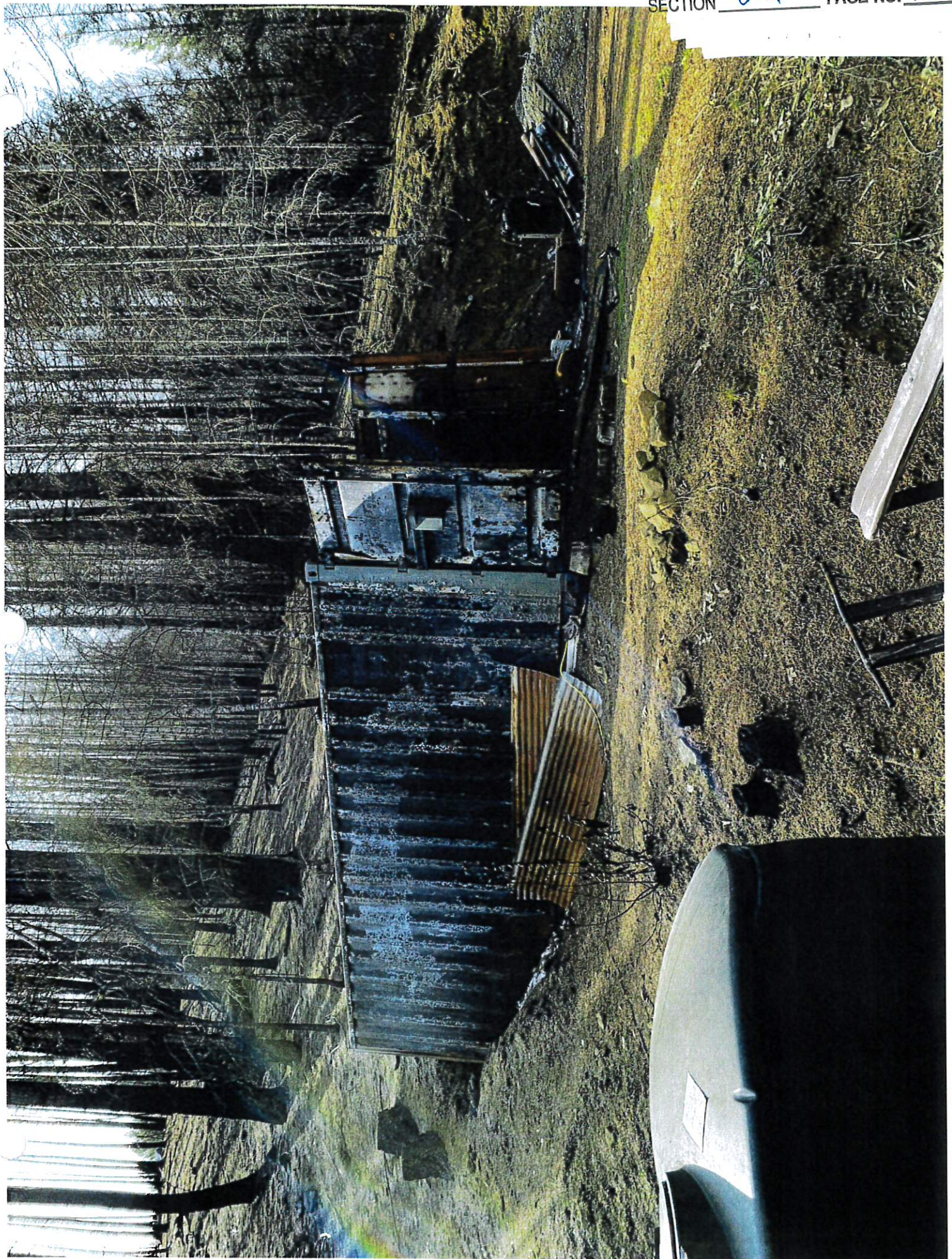
Lower West Side Rd

Lower West Side Rd

Powered by Esri

Mobax, Microsoft | Trinity County RCD, Shasta-Trinity National Forest, Six Rivers National Forest, Trinity County Planning Department, Trinity County...





PENINSULA BEAUTIFICATION PROJECT NABS OVER \$900K IN GRANT MONEY

March 12, 2022 [Kym Kemp](#) 10 comments



Fairhaven residents Chuck DeWitt and Jody Himango at a past community cleanup day. Photo: Natalie Arroyo.

Press release from Humboldt Bay Harbor, Recreation and Conservation District and Redwood Community Action Agency:

The Humboldt Bay Harbor, Recreation and Conservation District, together with our project partner Redwood Community Action Agency, are pleased to announce that we have been selected for grant funding for the Peninsula Beautification Project. The project's goals are to reduce and prevent dumping and littering, beautify and protect public spaces for recreation, and support the people who live and work in Manila, Samoa, Fairhaven, and Finnetown. Specific improvements will include: murals; physical

barriers to minimize illegal driving on the beach; interpretive and wayfinding signs; a Humboldt Bay-wide litter abatement campaign; park and public recreational enhancements throughout the Peninsula; more play structures; a series of community cleanup events; and pedestrian safety improvements.



A mural by Laci Dane located on a concrete utility vault. This project will include multiple new murals. Photo: Carla Avila-Martinez.

Colleen Clifford, a Manila resident, said, “Those of us who live on the Peninsula know how very special it is. This grant will bring needed upgrades and beautification to ensure a healthy and safe connection with our dune environment. It will also support artists in our community through the creation of more outdoor public art. We are so grateful that our neighbors and wider community will get to appreciate and respect these spaces!”

The total amount of funding for this project is \$903,870, beginning this spring and ending in 2024. This funding will be provided by the Clean California Local Grant Program, which was established by the legislature for the purposes of beautifying and cleaning up local streets and roads, tribal lands, parks, pathways, transit centers, and other public spaces. The Clean California Local Grant Program is administered by the California Department of Transportation (Caltrans). This project is one of 105 projects identified for funding throughout the state in the program’s first cycle.

The Peninsula Beautification Project builds on the work that the resident-based Peninsula Community Collaborative has done over several years. The Peninsula Community Collaborative is a resident-based community group who support the following shared vision: We collaborate to bring Peninsula community members together, share ideas, develop solutions, seek support, and put our plans into action with the goal of improving well-being and safety.

Chris Mikkelsen, the Humboldt Bay Harbor, Recreation and Conservation District's Director of Facility Management, said "The District has partnered with the Peninsula Community Collaborative to clean up the Peninsula before this grant became available, but the challenges are significant and we were not able to address all of the myriad needs with existing resources. We wanted to continue supporting the vision of a cleaner, safer place to enjoy healthy coastal recreation. This was important to our Board, and important to our community. I'm thrilled that we will be able to do more over the next two years to make the Samoa Peninsula a wonderful place to be." Redwood Community Action Agency will be supporting implementation of the project and coordinating with the Peninsula Community Collaborative. RCAA and the Harbor District will collaborate with the Manila Community Services District, Peninsula Community Services District and Samoa Peninsula Fire Department, Humboldt Bay Municipal Water District, Friends of the Dunes, and numerous private businesses and resident groups to implement this project.

Additional information about the Clean California Local Grant Program is available at <https://cleancalifornia.dot.ca.gov/local-grants>. The Peninsula Beautification Project team looks forward to making these visible changes on the Samoa Peninsula for the enjoyment of all! For more information about this project, please contact Carla Avila-Martinez at cavila@rcaa.org.



Dumped items in the dunes. This grant will include an anti-dumping focus. Photo: Lia Stoffers.



HUMBOLDT BAY MUNICIPAL WATER DISTRICT
828 7th Street, Eureka

Agenda for Special Joint Meeting of
HBMWD Board of Directors with the
Ruth Lake Community Services District Board of Directors

200 Headquarters Rd., Mad River
June 17, 2022
1:00 pm

DRAFT

JOINT BOARD MEETING– 1:00 p.m.

Meeting of the HBMWD and RLCSD Board of Directors to discuss issues or events regarding Ruth Lake and the buffer strip of mutual interest

1. Introductions/Roll Call

2. Public Comment

Members of the public are invited to address the Board on items not listed on the agenda that are within the scope and jurisdiction of the District. 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.

3. Updates from Guests:

- a. Trinity County – 5th District Supervisor and Staff
- b. US Forest Service
- c. Trinity County Volunteer Fire Department and /or STAR
- d. Trinity County Sheriff/OES
- e. Ruth Lake Leaseholders Association
- f. Any other guests

4. HBMWD Topics

- 4.1 Disaster Recovery - discuss
- 4.3 Law Enforcement on Ruth Lake - discuss
- 4.4 Cannabis Cultivation in the Mad River Watershed – discuss
- 4.5 Healthy Forest grant – discuss
- 4.6 Cal Fire Fuel Reduction, defensible space - discuss

5. Ruth Lake CSD Topics

- 5.1 Lease Lots: area of concern- discuss



HUMBOLDT BAY MUNICIPAL WATER DISTRICT
828 7th Street, Eureka

**Agenda for Special Joint Meeting of
HBMWD Board of Directors with the
Ruth Lake Community Services District Board of Directors**

DRAFT

200 Headquarters Rd., Mad River
June 17, 2022
1:00 pm

6. Adjournment

Directly following the Joint Board meeting, there will be a staff-level meeting to discuss:

- a) HBMWD's Emergency Action Plan (EAP) for Matthews Dam: Face-to-Face meeting with HBMWD, RLCSD, USFS, Trinity County Sheriff/OES, STAR and Southern Trinity Volunteer Fire Department staff to discuss the EAP, especially notification flow charts

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 72 hours prior to the meeting will enable the District to make reasonable arrangements to ensure accessibility to this meeting.

(Posted and mailed on _____, 2022)

DRAFT

New Business

Humboldt Bay Municipal Water District

To: Board of Directors
From: Chris Harris
Date: April 14, 2022
Re: Succession Planning Introduction

Background

Currently, of our staff of 28 full-time/permanent employees, the District has ten employees eligible for retirement now and another three employees eligible in the next 1-5 years. Staff has been made aware of the retirement intentions of four District employees in the relative near future (February 2023, January 2024, September 2025, and one additional +/- 2025).

These particular retiring employees represent over 100 years of service to the District. In preparing for this challenging transition, staff has been reviewing impacted job descriptions to ensure they are up-to-date and to also ensure they are positioned correctly for future succession planning.

Current – Administrative Staff

Over the past few years administrative staff have implemented multiple software upgrades and process improvements to increase efficiency. During an analysis of the Administrative job descriptions for the District, staff has determined that several are out of date (last revision 2017). It has also been discovered that some positions are not correctly aligned on the salary schedule for succession planning.

Next month, staff will present updated job descriptions for the following positions (job titles are also being updated to be more consistent with other agencies):

1. **Accounting Tech I** (formerly “Customer Service and Accounting Assistant”)
2. **Accounting Tech II** (formerly “Customer Service, Accounting and Human Resources Assistant”)
 - a. Accounting Tech I and II positions are intended to be succession-planned positions
3. **Accounting Specialist I** (formerly Accounting and Human Resources Specialist)
4. **Accounting Specialist II** (new position)
 - a. Only one Accounting Specialist position on staff at any given time.
 - b. The Accounting Specialist II position step scale would be aligned with the Program and Regulatory Analyst II position.
 - c. Accounting Specialist I, II, and Business Manager positions are intended as succession-planned positions.
5. **Regulatory Analyst I** (formerly “Program and Regulatory Analyst”, job title change only)
6. **Regulatory Analyst II** (formerly “Sr. Program and Regulatory Analyst”, job title change, adjustment to salary-step for succession planning)
7. **Assistant General Manager** (new position)
 - a. Intended as succession planning for General Manager position, short-term position.

8. **Assistant Superintendent** (new position)

- a. Intended as succession planning for Superintendent position, short-term position.

It should be noted that these updates and corrections are separate from the salary survey that will be in the upcoming project budget. Once the District-wide salary survey is completed, staff will report back and advise the board of those findings at that time.

Recommendation

Staff will bring updated job descriptions as outlined and the salary-step adjustment to the May board meeting for review and possible approval.

Engineering

APPLICATION AND CERTIFICATION FOR PAYMENT

PAGE 1 OF 2

TO: **HBMWD** PROJECT: **HBMWD 12KV Switchgear Relocation** APPLICATION NO: 14
 828 7th St
 Eureka, CA 95501

FROM: **Sequoia Construction Specialties** ENGINEER: **GHD** PERIOD FROM: 02/01/22
 PO Box 6061 Eureka, CA 95502-6061 PERIOD TO: 03/31/22

FEMA NO.: 4240-DR-CA-PJ0017

CONTRACT FOR: APPLICATION DATE: 04/01/22

APPLICATION FOR PAYMENT

Application is made for Payment, as shown below, in connection with the Contract.
 Continuation Sheet is attached.

1. Original Contract Sum	2,448,063.00
2. Net Change by Change Orders	400,962.13
3. Contract Sum to Date (Line 1 and 2)	2,849,025.13
4. Total Completed & Stored to Date	2,383,719.78
5. Retainage:	
a. 5% of Completed & Stored Work	119,185.99
Total Retainage	119,185.99
6. Total Earned Less Retainage	2,264,533.79
7. Less Previous Certificates for Payment (Net amount)	2,135,846.12
8. Current Payment Due	128,687.67
9. Balance to Finish, Plus Retainage	465,305.35

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months.	389,434	0
Total approved this Month	11,528	0
TOTALS	\$400,962	\$0
NET CHANGES BY Change Order		\$400,962

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 4/1/2022

APPROVED BY

North Ste 4/4/2022

ENGINEER: GHD

OWNER: HBMWD

[Signature] 4/5/22

PROJECT: HBMWD 12kV Relocation

Application and Certificate for payment, containing Contractor's signed certification is attached. In tabulations below, amounts are stated to the nearest dollar.

ITEM NO.	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		STORED MATERIALS	TOTAL COMPLETED AND STORED TO DATE	%	BALANCE TO FINISH	RETAINAGE
			PREVIOUS APPLICATIONS	THIS PERIOD					
1	Mobilization	120,000.00	80,000.00	0.00	0.00	80,000.00	67%	40,000.00	4,000.00
2	Erosion Control	10,000.00	6,000.00	0.00	0.00	6,000.00	60%	4,000.00	300.00
3	Access Road	32,500.00	29,250.00	0.00	0.00	29,250.00	90%	3,250.00	1,462.50
4	Trenching	320,895.00	256,373.00	0.00	0.00	256,373.00	80%	64,522.00	12,818.65
5	Vaults	109,450.00	109,450.00	0.00	0.00	109,450.00	100%	0.00	5,472.50
6	Building Pad	108,020.00	70,000.00	38,020.00	0.00	108,020.00	100%	0.00	5,401.00
7	Drainage	24,453.00	10,000.00	0.00	0.00	10,000.00	41%	14,453.00	500.00
8	Ramp & Wall	81,070.00	63,000.00	0.00	0.00	63,000.00	78%	18,070.00	3,150.00
9	Site Grading	119,340.00	92,000.00	0.00	0.00	92,000.00	77%	27,340.00	4,600.00
10	Fence	27,025.00	0.00	0.00	0.00	0.00	0%	27,025.00	0.00
11	IPA Building	404,808.00	350,042.00	40,000.00	0.00	390,042.00	96%	14,766.00	19,502.10
12	PG&E Interconnection	33,000.00	7,837.00	16,913.00	0.00	24,750.00	75%	8,250.00	1,237.50
13	1200 A Metering	34,068.00	34,068.00	0.00	0.00	34,068.00	100%	0.00	1,703.40
14	1200 A Breakers	169,514.00	169,514.00	0.00	0.00	169,514.00	100%	0.00	8,475.70
15	1200 A Feeders	482,470.00	482,470.00	0.00	0.00	482,470.00	100%	0.00	24,123.50
16	1200 A Bus	108,966.00	108,966.00	0.00	0.00	108,966.00	100%	0.00	5,448.30
17	Switchgear Battery	57,108.00	57,108.00	0.00	0.00	57,108.00	100%	0.00	2,855.40
18	Relocate Gen Controller	43,287.00	0.00	0.00	0.00	0.00	0%	43,287.00	0.00
19	Testing	116,186.00	69,411.00	0.00	0.00	69,411.00	60%	46,775.00	3,470.55
20	Decommissioning	45,903.00	0.00	0.00	0.00	0.00	0%	45,903.00	0.00
C.O.									
1	Fence upgrade	23,265.00	0.00	0.00	0.00	0.00	0%	23,265.00	0.00
2	Contract Days	291,742.00	189,873.00	29,000.00	0.00	218,873.00	75%	72,869.00	10,943.65
3	Controller	3,466.00	3,466.00	0.00	0.00	3,466.00	100%	0.00	173.30
4	Scada Panelview	42,281.07	42,281.07	0.00	0.00	42,281.07	100%	0.00	2,114.05
5	Test Switches	15,294.92	10,457.00	0.00	0.00	10,457.00	68%	4,837.92	522.85
6	Feeder #5 + Additional Rock	13,385.43	6,693.00	0.00	0.00	6,693.00	50%	6,692.43	334.65
7	Misc Electrical	4,660.71	4,660.71	0.00	0.00	4,660.71	100%	0.00	233.04
8	Feeder #5 Splices	6,867.00	6,867.00	0.00	0.00	6,867.00	100%	0.00	343.35
9	Move CT's	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
Sub-Total		2,849,025.13	2,248,259.07	135,460.71	0.00	2,383,719.78	84%	465,305.35	119,185.99

718 Third Street,
Eureka, California 95501
www.ghd.com



Our ref: 11186675

March 16, 2022

Brian Pritchard
Sequoia Construction Specialties
PO Box 6061
Eureka, CA 95502

RE: HBMWD 12 kV Switchgear Relocation Project – Change Order Request for Integrated Power Assembly Additional Shipping Charges

Dear Brian,

This letter is being provided in response to the change order request (COR) you provided via email on February 3, 2022 (attached). The COR includes a letter from Dave Sanderson of Eaton to Barry Pires of Campton Electric Supply dated January 28, 2022 that identifies several factors that are claimed to have increased the cost of shipping for the switchgear integrated power assembly (IPA) building from Minden, Louisiana to the project site.

In considering the potential for additional payment from the District to Sequoia Construction beyond the agreed upon contract amount, the first step is to determine what is allowable based on the stipulations in the contract agreement between the District and Sequoia Construction. Furthermore, a distinction must be made between items that are reasonably foreseeable at the time of bid and are covered by the contract documents versus items that are not reasonably foreseeable and consequently are in addition to what is required by the terms and conditions in the contract documents.

We respectfully request that you note the following excerpts from the contract documents for the project that are relevant to the subject change order request:

1. General Conditions Section B-3: *"The Contractor shall obtain approval in writing from the District prior to proceeding with any changes of work."*
2. General Conditions Section B-4.c: *"All changes which affect the cost or time of the construction of the project must be authorized by means of a Change Order. The Change Order will include extra work, work for which quantities have been altered from those shown in the bidding schedule, as well as decreases or increases in the quantities of installed units which are different than those shown in the bidding schedule because of final measurements. All changes should be recorded on a Change Order as they occur. Each Change Order must contain complete and detailed justification for all items addressed by the Change Order."*
3. General Conditions Section B-7.d: *"The written notice of potential claims shall set forth the reasons for which the Contractor believes additional compensation will or may be due, the nature of the costs involved, and, insofar as possible, the amount of the potential claim. Except as provided in Section B-6, the notice as above required shall be given to the Engineer at least 48 hours prior to the time that the Contractor commences performance of the work giving rise to the potential claim for additional compensation. If such notice is not given, the Contractor shall be barred from making any such claim for extra compensation."* Note that Section B-6 addresses differing site conditions, which is not applicable as detailed below in this letter.

4. General Conditions Section B-11.b: *"Contractor agrees that shop drawings processed by the Engineer are not Contract Change Orders; that the purpose of shop drawings submitted by the Contractor is to demonstrate to the Engineer that the Contractor understands the design concept, that it demonstrates its understanding by indicating which equipment and material it intends to furnish and by detailing the fabrication methods it intends to use."*
5. General Conditions Section B-21.b: *"...any extra work done without written authority will be considered as unauthorized work and will not be paid for."*
6. Specification 02 00 10 (Site Conditions) Section 1.02.A: *"The Contractor shall satisfy themselves as to the nature and location of the Work and the general and local conditions, particularly those bearing upon...availability of transportation...limited access to site...the character of equipment facilities needed prior to and during the prosecution of the work, and all other matters which can in any way affect the Work or the cost thereof under this Contract."*
7. Specification 02 00 10 (Site Conditions) Section 1.02.B: *"Any failure by the Contractor to become acquainted with all available information will not relieve the Contractor from responsibility for properly estimating the difficulty or cost of successfully performing the Work."*
8. Specification 13 34 23 (Prefabricated Structures) Section 1.11.A: *"Contractor shall make all necessary field measurements to verify that equipment shall fit in allocated space in full compliance with minimum required clearances specified in National Electrical Code."*

The COR lists an increase in building width as a factor contributing to additional shipping costs. The "Issue for Bid" design drawings prepared by GHD dated November 2019 showed an IPA exterior width of 14'-8". At the time of design, it was unknown which equipment manufacturer(s) the contractor would select for the project or what the final dimensions of the selected manufacturer's switchgear equipment would be. The obligation to meet National Electrical Code (NEC) clearance requirements was explicit at the time of bidding as noted in item 8 above. Based on the manufacturers' knowledge of their own equipment and the obligation to meet NEC clearance requirements, the required building width was reasonably knowable to the contractor at the time of bidding. The first IPA submittal, which was provided on March 27, 2020, showed an exterior building width of 15'-4" to meet minimum NEC clearance requirements within the building considering the size of the manufacturer's switchgear compartments. The final IPA building was further optimized and constructed with an exterior width of 15'-2" while still meeting NEC requirements. The lifting brackets temporarily increase the width to 16'-0 3/4", but they are only used for loading/unloading the IPA and are removed for transport.

Bid Item #11 (Integrated Power Assembly) was set up on a unit cost, per square foot basis. This item was structured in this manner to account for the potential variation in building size to account for compliance with code requirements based on the actual equipment supplied by the manufacturer. This contractual mechanism was put in place to pay for the actual size of the required building based on the actual equipment to be supplied. Therefore, the IPA will be paid for according to the unit cost provided by Sequoia Construction in the bid. Based on the final square footage of the building (690 SF) compared to the square footage shown in the bid schedule (668 SF), and the unit cost in the bid of \$606 per SF, the contractor will be compensated \$13,332 beyond the total bid amount listed for this item in the bid.

The COR was provided in February 2022, almost two years after the contractor team made the building width change, and over two months after the building was shipped and delivered in November 2021. Per items 1-3 and 5 above, the contractor is not entitled to additional compensation for any extra costs (including shipping costs) associated with the change in building width beyond what is allowable through the bid schedule, as the work was done prior to requesting authorization from the District. Additionally, engineer approval of a shop drawing does not constitute a change order, as noted in item 4 above. However, the District reserves the right to consider additional compensation for some of the factors listed in the COR, provided adequate documentation and justification are presented by the contractor, as detailed further below in this letter.

Minutes from the construction progress meeting that occurred on January 31, 2020 note that the contractor's plan for setting the IPA was to build a 40' x 60' crane pad, use a crane to set the IPA, and subsequently remove the crane pad. The decision to deviate from this approach and instead use a specialized, 12-axle,

steerable trailer that had the capability to self-unload was a means and methods decision made by the contractor team. The savings realized from not using a crane to set the IPA and the additional costs incurred for the contractor's use of a specialized trailer are means and methods considerations that must be settled within the contractor team. Neither the District nor the engineer dictate contractor means and methods. The COR claims that access into the site required the specialized trailer, but site conditions did not change from the time of bidding. Similarly, tree coverage and road width are site conditions that did not change from the time of bidding. Re-routing due to construction projects is also included as a factor in the COR. However, when shipping equipment from Louisiana to Humboldt County, it is reasonable and prudent to expect that road construction projects would be encountered, and therefore, re-routing due to construction projects would not constitute an unforeseeable change for which the District should be expected to provide extra compensation. See items 6-7 above regarding requirements for the contractor to investigate site conditions prior to bidding.

The District, however, reserves its right to review documentation that would justify additional compensation to the contractor for items that were not reasonably foreseeable at the time of bidding the project. Although the District is not contractually obligated to pay for increases in fuel prices, the District recognizes that fuel prices have increased significantly since the time of bidding the project. Such increases appear to be due to extreme circumstances, including effects of the response to the COVID-19 pandemic on supply chains, significant inflation, and other factors. If the contractor team provides fuel receipts or other acceptable documentation that justifies the amount that was actually spent on fuel (including price per gallon, date, and location) to deliver the IPA to the site, as well as acceptable documentation that justifies the difference in fuel prices from the time of bidding to the time of IPA shipment, the District would be willing to review that documentation and possibly consider additional compensation.

Another factor presented in the COR is an increase in required police escorts due to wildfire threats. California experienced a record fire season in 2021. This included fires along Highway 299, which was part of the permitted route for shipping the IPA. Our understanding is that police escorts would have been required through California regardless of wildfire threats based on the load size of the IPA building. However, if the contractor can provide adequate justification and documentation to demonstrate that additional escorts were required solely due to wildfire threats beyond what would have been required in the absence of wildfires, the District will consider such documentation. The District reserves its right to consider eligibility for additional payment under the terms of the contract.

The COR also notes that the HVAC unit needed to be shipped separately due to the increased width of the IPA. As noted above, the contractor team increased the width of the IPA to meet NEC requirements, which were known at the time of bidding. Additionally, there is already a contractual mechanism in place for paying for increases in IPA size. However, if the contractor can provide adequate documentation that justifies that the HVAC unit needed to be shipped separately with a building that is 15'-2" wide, but the HVAC unit could have been shipped attached to the IPA if the building were 14'-8" wide per the GHD Issue for Bid drawings, the District reserves its right to consider providing additional compensation. This documentation would also need to demonstrate that the HVAC unit could not be placed inside the IPA building for shipment.

Please do not hesitate to call or email if you have comments or questions on this response to the COR.

Regards,



Nathan Stevens, PE
District Engineer

(707) 267-2204
nathan.stevens@ghd.com

Copy to: John Friedenbach, HBMWD
Michael Colantuono, Esq.

Enclosed: Change Order Request dated February 3, 2022

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: **Sequoia Construction Co.** Date: **2/3/2022**

Attn: **Brian** Job Location: **HBMWD 12kv Switchgear Relocation**

Email COR: **12 R**

We hereby propose to furnish all materials, equipment, and labor necessary to perform the following work:

Eaton's additional shipping charges because of extenuating circumstances please see the attached adder, along the justification for the increase:

Total Adder **\$ 62,071.25**

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 _____
 te 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: February 3, 2022

FOR JOB	HBMWD	email:
LOCATION	7270 W End Rd.	
CITY	Arcata	
QUOTE TO		

Quantity	ARTICLE	Unit Price	TOTALS
	Campton Electric - Increased IPA Shipping Costs (attached):		53,975.00
		Subtotal	53,975.00
			-
	OHP	15%	8,096.25
			-
			-
	Total		62,071.25

Customer Quote For: COLBURN ELECTRIC

CED-CAMPTON ELECTRIC Quote: Q5000369 Revision #: 001



605 W CLARK STREET
 EUREKA CA 95501
 Tel: (707)442-6446 Fax: (707)445-8250

Contact Name: BARRY PIRES
 Email: bpires@camptonelectric.com

Quote Date: 02/03/22
 Updated On: 02/03/22
 Expires On: 03/05/22

Job Name:
 Attn:
 Ship To: 12KV HUMBOLDT BAY WATER
 7270 WEST END ROAD
 ARCATA, CA 95521-0000

Customer PO #: ADDED FREIGHT
 Customer PO Date:
 FOB #: SHIPPING POINT
 Freight: PREPAID

LN	Product	Qty	Price	Per *	Ext Price
01	FRT ORIGINAL FREIGHT EST	-1	(\$27,475.00)	E	(\$27,475.00)
02	FRT REVISED FREIGHT PER NOTES	1	\$81,450.00	E	\$81,450.00

Merchandise: \$53,975.00
 Tax: \$0.00
 Total: \$53,975.00

1. WIDTH INCREASED TO 16' -4" AT THE EARLY STAGES OF DESIGN
2. PERMITTED ROUTE HAS EXCESSIVE TREE COVERAGE.
3. RE-ROUTE DUE TO CONSTRUCTION PROJECTS
4. ACCESS INTO THE SITE REQUIRED A SPECIALIZED TRAILER WHICH ALSO HAS TO BE CALIFORNIA CERTIFIED EQUIPMENT (SIGNIFICANT COST DIFFERENCE FROM ORIGINAL TRAILER).
5. INCREASED REQUIRED POLICE ESCORTS FOR CONTROL THROUGH CONSTRUCTION ZONES, NARROW ROADS AND WILD FIRE THREATS.
6. THE FUEL COST WAS AROUND \$1.85 PER GALLON WHEN THIS WAS QUOTED (MAY OF 2019) AND THEN RANGED BETWEEN \$3.43 PER GALLON ALL THE WAY UP TO \$4.70 PER GALLON IN CALIFORNIA WHEN TRANSPORTED (NOV 2021)

IPA S/O 48753
 POLICE ESCORTS: \$7,800.00
 CIVILIAN ESCORTS: \$15,650.00
 PERMIT COST: \$6,250.00
 FUEL COST: \$8,250.00
 DRIVER/EQUIPMENT: \$36,650.00
 UPDATED FREIGHT TOTAL: \$81,450.00

BUILDING AT \$74,600
 (1) FALL-OFF LOAD OF \$6,850 - HVAC UNIT NEEDED TO BE SHIPPED SEPARATE
 DUE TO THE INCREASED WIDTH OF THE IPA. ORIGINAL WIDTH WOULD HAVE ALLOWED HVAC TO SHIP ATTACHED TO IPA.

PLEASE NOTE: THIS IS NOT AN OFFER TO CONTRACT, BUT MERELY A QUOTATION OF CURRENT PRICES FOR YOUR CONVENIENCE AND INFORMATION. ORDERS BASED ON THIS QUOTATION ARE SUBJECT TO YOUR ACCEPTANCE OF THE TERMS AND CONDITIONS LOCATED AT SALES.OUR-TERMS.COM, WHICH WE MAY CHANGE FROM TIME TO TIME WITHOUT PRIOR NOTICE. WE MAKE NO REPRESENTATION WITH RESPECT TO COMPLIANCE WITH JOB SPECIFICATIONS.

* Per E = Each, C = Hundred, M = Thousand



Eaton Electrical
 tel: 541-776-4849
 fax: 541-773-9925

January 28, 2022

RE: Humboldt Municipal Water Shipping Costs
 GO Number MPO0009990

Barry:

Several factors contributed to the increase in the original estimated shipping costs for the IPA. Given the original dimensions/weight quoted we would have shipped this building on a low profile 3 axle step stretch trailer. Final dimensions/weight after production along with the inability for the site to use an outside crane required us to use a 12 axle steerable trailer that had the capability to self-unload. This type of trailer turned this load into a "variance load" which required state police escorts. Below is a breakdown of cost associated with transporting from Minden, La to Humboldt County job site.

Factors

1. Width increased to 16'-4" at the early stages of design
2. Permitted route has excessive tree coverage.
3. Re-Route due to construction projects
4. Access into the site required a specialized trailer which also has be to be California certified equipment (significant cost difference from original trailer).
5. Increased required police escorts for control through construction zones, narrow roads and wild fire threats.
6. The fuel cost was around \$1.85 per gallon when this was quoted (May of 2019) and then ranged between \$3.43 per gallon all the way up to \$4.70 per gallon in California when transported (Nov 2021)

IPA S/O 48753

Police Escorts:	\$7,800.00
Civilian Escorts:	\$15,650.00
Permit Cost:	\$6,250.00
Fuel Cost:	\$8,250.00
Driver/Equipment:	\$36,650.00

Updated Freight \$81,450.00

building at \$74,600

(1) fall-off load of \$6,850 – HVAC unit needed to be shipped separate due to the increased width of the IPA. Original width would have allowed HVAC to ship attached to IPA.

Sincerely,

Dave Sanderson
 Sales Engineer
 (541) 776-4849
davidmsanderson@eaton.com

www.eaton.com

FINANCIALS

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

<u>BANK ACCOUNT BALANCES AT MONTH-END</u>	March 31, 2022	March 31, 2021
GENERAL ACCOUNTS		
1. US Bank - General Account	4,257,472.74	2,421,454.72
2. US Bank - Xpress BillPay/Electronic Payments Account	4,006.97	2,607.01
<i>Subtotal</i>	4,261,479.71	2,424,061.73
INVESTMENT & INTEREST BEARING ACCOUNTS		
3. US Bank - DWR/SRF Money Markey Acctnt	166,547.15	166,517.67
4. US Bank - DWR/SRF Reserve CD Account	547,336.94	547,336.94
5. US Bank - PARS Investment Account	1,012,504.92	945,314.54
<i>Contributions = \$800,000 Earnings = \$212,504.92</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)	370,010.40	428,493.17
10. CalTRUST - DWFP Reserve Account (FedFund)	240,753.32	240,671.25
11. CalTRUST - ReMat Account (LEAF Fund)	1,031,064.45	653,843.32
12. CalTRUST - General Reserve Account (Short-Term)	2,369,670.27	2,381,615.81
<i>Total CalTRUST Accounts</i>	<i>5,341,136.62</i>	<i>5,025,229.76</i>
13. Humboldt County - SRF Loan Payment Account	144,027.61	144,029.93
14. Humboldt County - 1% Tax Account	(18,048.38)	60,242.85
15. Principle Investment Account	39,200.94	32,018.64
<i>Subtotal</i>	7,677,100.86	7,363,713.31
OTHER ACCOUNTS		
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)	-	11,822.68
19. Humboldt County - DWFP Reserve Account (clsd)	-	1,483.48
20. Humboldt County - MSRA Reserve Account (clsd)	-	-
21. Humboldt County - ReMat Account (clsd)	-	2,865.28
<i>Subtotal</i>	27,650.00	43,821.44
TOTAL CASH	11,966,230.57	9,831,596.48

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



<u>FUND BALANCES AT MONTH-END</u>	March 31, 2022	March 31, 2021
RESTRICTED FUNDS - ENCUMBERED		
1. Prior-Year Price Factor 2 Rebate	(897.28)	(6,557.81)
2. Prior-Year Restricted AP Encumbrances	(311,103.00)	(134,742.00)
3. Advanced Charges - 12Kv Relocation	(821,879.67)	-
4. Advanced Charges - 18,000lb Excavator	-	(125,459.00)
5. Advanced Charges - 3x Tank Seismic Retrofit	(1,056,440.67)	(154,787.26)
6. Advanced Charges - Cathodic Protection Project	(118,749.97)	(74,997.00)
7. Advanced Charges - Collector 2 Rehabilitation	(1,210,004.00)	(694,538.49)
8. Advanced Charges - On-Site Generation of Chlorine	(836,548.28)	(476,196.00)
9. Advanced Charges - Redundant Pipeline	(195,003.97)	(136,728.00)
10. Advanced Charges - TRF Emergency Generator	(356,250.00)	(293,747.00)
10a. 3AC Collected Funds - TRF Emergency Generator	(317,390.32)	-
11. Advanced Funding - Community Power Resiliency	(215,000.00)	-
11a. Advanced Funding - FEMA, Shoreline Debris Removal	(97,942.00)	-
12. Advanced Charges - Assist. Spillway Seismic Grant	(17,083.33)	-
<i>Subtotal</i>	(5,554,292.49)	(2,097,752.56)
RESTRICTED FUNDS - OTHER		
12. 1% Tax Credit to Muni's	18,048.38	(60,242.85)
13. DWR Reserve for SRF Payment	(166,547.15)	(166,524.88)
14. DWR Reserve for SRF Loan	(547,336.94)	(547,336.94)
15. Pension Trust Reserves	(1,012,504.92)	(945,314.54)
16. ReMat Deposit	(27,000.00)	(27,000.00)
17. HB Retail Capital Replacement Reserves	(114,858.65)	(85,030.62)
<i>Subtotal</i>	(1,850,199.28)	(1,831,449.83)
UNRESTRICTED FUNDS		
BOARD RESTRICTED		
18. MSRA Reserves	(444,395.06)	(443,022.98)
19. DWFP Reserves	(240,753.32)	(240,671.25)
20. ReMat Reserves	(1,031,064.45)	(656,708.60)
21. Paik-Nicely Development	(4,158.00)	(4,158.00)
22. Principle Investment Reserves	(39,200.94)	(32,018.64)
22a. Northern Mainline Extension Study Prepayment	56.40	(10,000.00)
<i>Subtotal</i>	(1,759,515.37)	(1,386,579.47)
UNRESTRICTED RESERVES		
23. Accumulation for SRF Payment	(144,027.61)	(194,471.29)
24. Accumulation for Ranney/Techite Payment	21,781.71	44,289.31
25. General Fund Reserves	(2,679,977.53)	(4,371,265.08)
<i>Subtotal</i>	(2,802,223.43)	(4,515,814.62)
TOTAL NET POSITION	(11,966,230.57)	(9,831,596.48)

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
 REVENUE REPORT
 March 31, 2022

75%
 Of Budget Year



A. REVENUE RETURNED TO CUSTOMERS VIA PF2

	MTD RECEIPTS	YTD RECEIPTS	PRIOR YEAR	BUDGET	% OF BUDGET
1. Humboldt Bay Retail Water Revenue	29,692	237,254	227,226	375,000	63%
General Revenue					
Interest	0	0	0	0	0%
FCSD Contract (Maint. & Operations)	10,635	194,476	169,508	225,000	86%
Power Sales (Net ReMat)	6,577	103,897	70,069	125,000	83%
Tax Receipts (1% Taxes)	0	0	198,457	875,000	0%
2. Miscellaneous Revenue*	3,785	107,655	42,024	50,000	215%
<i>*Detail on following page</i>					
TOTAL PF2 REVENUE CREDITS	50,688	643,282	707,284	1,650,000	39%

B. DISTRICT REVENUE

	MTD RECEIPTS	YTD RECEIPTS	PRIOR YEAR	BUDGET	% OF BUDGET
3. Industrial Water Revenue					
Harbor District	0	207	293	0	0
<i>Subtotal Industrial Water Revenue</i>	<i>0</i>	<i>207</i>	<i>293</i>	<i>0</i>	<i>0</i>
4. Municipal Water Revenue					
City of Arcata	110,984	1,022,379	948,115	1,457,266	70%
City of Blue Lake	14,996	137,345	131,869	190,603	72%
City of Eureka	261,567	2,385,017	2,239,112	3,368,178	71%
Fieldbrook CSD	14,356	132,384	125,688	185,228	71%
Humboldt CSD	81,229	751,356	734,569	1,061,800	71%
Manila CSD	6,142	56,789	52,575	79,725	71%
McKinleyville CSD	90,270	832,649	772,445	1,188,443	70%
<i>Subtotal Municipal Water Revenue</i>	<i>579,546</i>	<i>5,317,919</i>	<i>5,004,372</i>	<i>7,531,243</i>	<i>71%</i>
TOTAL INDUSTRIAL & WHOLESALE REVENUE	579,546	5,318,126	5,004,665	7,531,243	71%
5. Power Sales					
Power Sales (ReMat Revenue)	14,832	231,198	152,581	300,000	77%
Interest (ReMat Revenue)	0	0	5,620	0	
TOTAL REMAT REVENUE	14,832	231,198	158,201	300,000	77%
6. Other Revenue and Grant Reimbursement					
HB Retail Capital Replacement Rev.	4,869	35,940	35,645		
FCSD Contract (Admin & Overhead)	7,197	71,269	78,917		
FEMA/CalOES Grant Revenue	982,869	1,237,391	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	97,942	183,812	0		
Interest - Muni PF2 Retained	0	929	24,936		
Net Increase/(Decrease) Investment Accounts	(44,510)	(94,049)	142,127		
TOTAL OTHER/GRANT REVENUE	1,048,367	1,452,095	555,547		
GRAND TOTAL REVENUE	1,693,433	7,644,701	6,425,698	9,481,243	81%



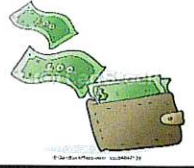
HUMBOLDT BAY MUNICIPAL WATER DISTRICT
 MISCELANEOUS REVENUE - DETAIL REPORT
 March 31, 2022

MISCELLANEOUS RECEIPTS (RETURNED TO CUSTOMERS VIA PF2)

	<u>MTD</u> <u>RECEIPTS</u>	<u>YTD</u> <u>RECEIPTS</u>
<u>Miscellaneous Revenue</u>		
Dividend - Principal Life	-	678
Fees - Park Use	-	150
Rebate - CALCard	209	646
Refund - Diesel Fuel Tax	58	58
Refunds - Miscellaneous	-	-
Reimb - Blue Lake SCADA/Internet Monthly Fees	51	408
Reimb. - Copies & Postage	-	49
Reimb. - Gas	-	-
Reimb. - Telephone	-	3.23
UB - Water Processing Fees	90	270
UB - Hydrant Rental Deposit/Use	159	12,549
Sale of Scrap Metal/Equipment	-	4,512
Retirees' Health Ins./COBRA Reimb.	3,097	29,302
State Water Arrearages Administration Rev.	-	53
	-	-
<u>Ruth Area</u>		
Lease - Don Bridge	-	-
Rent - Ruth Cabin	120	1,290
August Complex Wildfire FEMA Reimbursement	-	57,687
TOTAL MISCELANEOUS REVENUE	3,785	107,655

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
 ALL - MONTHLY EXPENDITURE REPORT - PAGE 1 OF 3
 March 31, 2022

75%
 Of Budget Year



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

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
Compensation					
1. Wages - Regular	194,981.73	1,677,390.96	1,534,173.84	2,345,318	80%
1a. COVID Essential Service Pay*	(9,417.26)	(64,323.42)	(9,424.65)	(83,700)	77%
2. Wages - Sick	5,594.26	53,162.95	35,376.12		
3. Wages - Vacation	6,817.92	143,017.73	116,926.06		
<i>Subtotal</i>	197,976.65	1,809,248.22	1,677,051.37	2,261,618	80%
4. Wages - Overtime	524.80	10,353.03	19,366.23	15,000	
5. Wages - Holiday (Worked)	910.88	9,709.90	11,048.84	15,000	
<i>Subtotal</i>	1,435.68	20,062.93	30,415.07	30,000	67%
6. Wages - Part-Time	1,203.93	11,055.36	22,046.24	97,557	11%
7. Wages - Shift Differential	764.56	7,546.81	8,079.60	11,000	69%
8. Wages - Standby	6,370.27	64,477.16	61,400.18	81,000	80%
9. Director Compensation	1,920.00	17,680.00	16,480.00	26,000	68%
10. Secretarial Fees	262.50	2,362.50	2,362.50	3,200	74%
11. Payroll Tax Expenses	16,640.75	153,086.89	142,292.06	198,150	77%
11a. COVID Ess. P/R Tax*	(720.42)	(4,920.74)	(720.99)	(7,100)	69%
<i>Subtotal</i>	26,441.59	251,287.98	252,660.58	409,807	61%
Employee Benefits					
12. Health, Life, & LTD Ins.	68,772.79	538,132.25	533,304.38	720,570	75%
13. Air Medical Insurance	-	2,279.00	2,080.00	2,210	103%
14. Retiree Medical Insurance	8,059.02	88,196.57	110,463.04	92,323	96%
15. Employee Dental Insurance	2,834.64	25,630.31	24,594.52	40,839	63%
16. Employee Vision Insurance	612.48	5,472.93	5,382.15	7,572	72%
17. Employee EAP	78.54	702.21	728.58	1,116	63%
18. 457b District Contribution	4,290.48	25,765.48	22,900.00	30,600	84%
19. CalPERS Expenses	27,099.61	493,267.51	443,204.16	581,759	85%
20. Workers Comp Insurance	-	80,776.29	63,122.49	109,557	74%
<i>Subtotal</i>	111,747.56	1,260,222.55	1,205,779.32	1,586,546	79%
TOTAL S.E.B	337,601.48	3,340,821.68	3,165,906.34	4,287,971	78%

*As approved by the Board of Directors on March 11, 2021, COVID Essential Service Pay Increase is funded via District reserves.

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
MONTHLY EXPENDITURE REPORT - PAGE 2 OF 3
March 31, 2022



SERVICE & SUPPLY EXPENDITURES (S & S)

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
Operations & Maintenance					
1. Auto Maintenance	3,992.96	40,140.13	29,412.75	39,700	101%
2. Engineering	6,797.78	33,036.78	16,720.64	75,000	44%
3. Lab Expenses	1,900.00	10,323.27	11,112.80	13,000	79%
4. Maintenance & Repairs					
General	909.22	18,555.17	19,492.25	47,000	39%
TRF	2,407.93	11,866.96	6,106.45	17,000	70%
Subtotal	3,317.15	30,422.13	25,598.70	64,000	48%
5. Materials & Supplies					
General	6,562.03	42,989.06	42,136.95	42,000	102%
TRF	8,421.46	38,014.08	11,022.04	35,000	109%
Subtotal	14,983.49	81,003.14	53,158.99	77,000	105%
6. Radio Maintenance	565.76	9,180.28	6,413.91	8,500	108%
7. Ruth Lake License	-	1,500.00	1,500.00	1,500	100%
8. Safety Equip./Training					
General	3,731.96	22,524.51	21,937.86	22,000	102%
TRF	-	377.98	678.03	2,000	19%
Subtotal	3,731.96	22,902.49	22,615.89	24,000	95%
9. Tools & Equipment	149.99	2,705.17	2,721.12	5,000	54%
10. USGS Meter Station	-	-	15,430.00	8,500	0%
Operations Subtotal	35,439.09	231,213.39	184,684.80	316,200	73%
General & Administration					
11. Accounting Services	-	19,945.00	4,719.00	18,000	111%
12. Bad Debt Expense	-	-	-	-	0
13. Dues & Subscriptions	348.56	37,233.54	30,970.32	33,000	113%
14. General Manager Training	99.00	1,585.52	47.00	3,000	53%
15. IT & Software Maintenance	3,390.05	19,449.58	19,376.60	31,000	63%
16. Insurance	-	85,684.62	86,792.90	111,000	77%
17. Internet	905.65	8,593.73	7,539.96	10,000	86%
18. Legal Services	373.95	19,602.45	22,919.00	35,000	56%
19. Miscellaneous	-	1,717.74	2,874.21	11,500	15%
20. Office Building Maint.	1,952.44	12,113.90	13,754.56	16,000	76%
21. Office Expense	2,457.33	26,527.30	39,012.14	40,500	65%
22. Professional Services	8,973.25	11,636.05	3,165.72	20,000	58%
23. Property Tax	-	2,006.00	945.00	1,000	201%

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
MONTHLY EXPENDITURE REPORT - PAGE 3 OF 3
March 31, 2022

**SERVICE & SUPPLY EXPENDITURES (con't)**

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
24. Regulatory Agency Fees	18,048.38	151,246.42	127,148.00	179,500	84%
25. Ruth Lake Programs	-	-	-	5,000	0%
26. Safety Apparel	-	3,929.49	2,925.68	3,000	131%
27. Technical Training	200.00	1,786.36	953.00	14,500	12%
28. Telephone	4,112.54	30,963.27	27,790.02	40,000	77%
29. Travel & Conference	571.21	3,300.22	(344.00)	25,000	13%
<i>Gen. & Admin. Subtotal</i>	<i>41,432.36</i>	<i>437,321.19</i>	<i>390,589.11</i>	<i>597,001</i>	<i>73%</i>
Power					
30. Essex - PG & E	59,865.94	601,302.61	531,549.51		
31. 2Mw Generator Fuel	-	2,274.57	3,358.48		
<i>Subtotal Essex Pumping</i>	<i>59,865.94</i>	<i>603,577.18</i>	<i>534,907.99</i>		
32. All other PG & E	11,751.37	75,288.67	73,718.81		
<i>Subtotal All Power</i>	<i>71,617.31</i>	<i>678,865.85</i>	<i>608,626.80</i>	<i>787,500</i>	<i>86%</i>
Total Service and Supplies incl.					
Power	148,488.76	1,347,400.43	1,183,900.71	1,700,701	79%

PROJECTS, FIXED ASSETS & CONSULTING SERVICES

	Month-to-Date	Year-to-Date	Budget	% of Budget	
	159,692.00	2,784,935.00	14,298,086	19%	
GRAND TOTAL EXPENSES	645,782.24	7,473,157.11	4,349,807.05	20,286,758	37%

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

	650,848.88	7,848,628.17	4,704,875.53	20,915,195	
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OTHER EXPENSES

35. ReMat Consultant Exp.	5,066.64	20,402.58	11,269.32		
36. Capital Replacement Exp.	-	-	157.88		

HUMBOLDT BAY MUNICIPAL WATER DISTRICT PROJECT PROGRESS REPORT

March 31, 2022

75% Of Budget Year



A. CAPITAL PROJECTS

	MTD	YTD		% OF
ACTIVE GRANT FUNDED CAPITAL PROJECTS	EXPENSES	TOTAL	BUDGET	BUDGET
1 Grant - 12kV Switchgear Relocation <i>(\$3M - FEMA, Approved)</i>	2,732	1,682,716	2,533,041	66%
2 Grant - Collector 2 Rehabilitation <i>(\$1.6M - NCRP Prop1, Approved)</i>	0	65,705	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>	0	6,158	0	0
NON-GRANT FUNDED CAPITAL PROJECTS				
7 On-Site Generation of Chlorine <i>(\$850k - FY22, Treatment Facility Project)</i>	0	526	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	282	282	61,750	0%
11 TRF Filter Building, Mezzanine EOC <i>(Treatment Facility Project)</i>	1,605	12,653	10,750	118%
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	165	50,000	0%
TOTAL CAPITAL PROJECTS	4,619	1,848,306	8,790,293	21%

B. EQUIPMENT AND FIXED ASSET PROJECTS

	MTD	YTD		% OF
	EXPENSES	TOTAL	BUDGET	BUDGET
15 FY22 Replace ESSEX Administrative Computers	0	2,236	6,300	35%
16 Replace 1 of 3 Essex Admin Servers	9,724	9,724	11,000	88%
17 Collector Lube Oil Detection System	0	1,035	8,250	13%
18 Replace Unit 9	0	0	82,000	0%
19 Hydraulic Oil Filtering Cart	(119)	3,204	3,750	85%
20 Tools and Storage For Elec/Maint Shops & Trucks	0	4,441	5,000	89%
21 Backflow Test Kit	0	1,340	1,500	89%
22 Unit 5 Truck Upgrades	0	1,178	2,250	52%
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

March 31, 2022

75% Of Budget Year



B. EQUIPMENT AND FIXED ASSET PROJECTS (con't)

	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	1,615	1,615	3,500	46%
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	6,223	88,263	81,750	108%
31A Collector 2-4 Power Feed Replacement	0	30,479	50,000	61%
TOTAL EQUIPMENT & FIXED ASSET PROJECTS	17,442	145,614	248,550	59%

C. MAINTENANCE PROJECTS

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
32 FY22 Pipeline Maintenance	1,849	3,918	14,000	28%
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	0	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	4,708	4,708	93,000	5%
48 Lighting Upgrades for Shop/Collectors/Line Sheds	0	227	9,750	2%
49 Collector 1 Interior Painting	271	893	41,750	2%
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>	800	800	10,000	8%
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
March 31, 2022

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**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	5,283	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	26,227	28,848	0	0
66 Grant - FEMA - COVID-19 Pandemic	445	1,604	0	0
TOTAL MAINTENANCE PROJECTS	34,299	93,863	571,950	16%

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	2,860	11,880	23,500	51%
74 Essex Mad River Cross-Sectional Survey	0	14,411	12,000	120%
75 FY22 Technical Training	0	0	23,250	0%
76 FY22 O & M Training	0	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	0	10,206	20,000	51%
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	9,440	9,440	50,000	19%
Collector 4 Restoration	0	0	5,000	0%

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
PROJECT PROGRESS REPORT - PAGE 4 OF 5

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**D. PROFESSIONAL & CONSULTING SERVICES (CONT)**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
87 FERC Part 12 - Independent Consultant & Engineer	107	65,658	110,000	60%
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	6,600	22,000	16,000	138%
91 Spillway Repair, Dam Inspection & Reporting Assist	0	5,063	5,000	101%
92 Assessments of Spillway Drains/Floor/Flip Bucket	0	0	120,000	0%
TOTAL PROF/CONSULTING SERVICES	19,007	207,007	660,750	31%

E. INDUSTRIAL SYSTEM PROJECTS

93 Maintain Water Supply to Industrial Pump Station 6	0	0	13,250	0%
TOTAL INDUSTRIAL SYSTEM PROJECTS	0	0	13,250	0%

F. CARRY-OVER PROJECTS FROM PRIOR YEAR

94 Collector 5 Security & Anti-Vandalism Measures	0	0	7,500	0%
TOTAL CARRYOVER PROJECTS	0	0	7,500	0%

G. PROJECTS NOT CURRENTLY CHARGED TO MUNICIPAL CUSTOMERS

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
95 Streambed Flow Enhancement Grant <i>(DWR Grant)</i>	7,914	22,845	449,902	5%
96 Refurbish PS-6 (Phase 1) <i>(EDA Grant & 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%
Industrial and Domestic System Intertie <i>(Reserves)</i>	0	0	32,000	0%
TOTAL NOT CHARGED TO CUSTOMERS	7,914	23,123	4,133,502	1%

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
PROJECT PROGRESS REPORT - PAGE 5 OF 5
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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	30,000	40,000	75%
105 Cathodic Protection Project <i>(\$405k, FY22)</i>	2,083	18,750	25,000	75%
106 On-Site Generation of Chlorine <i>(\$850k - FY22, Treatment Facility Project)</i>	4,484	40,355	53,807	75%
107 Grant - TRF Generator <i>(Treatment Facility Project, \$1.9M - FEMA, In Process)</i>	6,250	56,250	75,000	75%
108 Grant - Adv. Assistance Spillway Seismic <i>(\$1.9M - FEMA, In Process)</i>	2,083	18,750	25,000	75%
109 Ranney Collector 3/Techite Debit Service Funds	7,373	66,355	81,100	82%
TOTAL ADVANCED CHARGES COLLECTED - FY21	25,607	230,460	299,907	77%

PROJECT PROGRESS REPORT SUMMARY OF ALL ACTIVITY

CUSTOMER CHARGES	MTD	YTD	BUDGET	% BUDGET
TOTAL NON-GRANT FUNDED CAPITAL PROJECTS*	1,887	32,999	279,600	12%
TOTAL EQUIPMENT & FIXED ASSET PROJECTS	17,442	145,614	248,550	59%
TOTAL MAINTENANCE PROJECTS	34,299	93,863	571,950	16%
TOTAL PROF/CONSULTING SERVICES	19,007	207,007	660,750	31%
TOTAL INDUSTRIAL SYSTEM PROJECTS	0	0	13,250	0%
TOTAL CARRYOVER PROJECTS	0	0	7,500	0%
TOTAL ADVANCED CHARGES/DEBIT SERVICE - FY21	25,607	230,460	299,907	77%
TOTAL CUSTOMER CHARGES	\$98,241	\$709,943	\$2,081,507	34%

*EXCLUDES ON-SITE GENERATION OF CHLORINE

NON-CUSTOMER CHARGES (CURRENT FY)	MTD	YTD	BUDGET	% BUDGET
TOTAL GRANT FUNDED CAPITAL PROJECTS	2,732	1,815,307	7,660,693	24%
TOTAL NON-CUSTOMER CHARGES	7,914	23,123	4,133,502	1%
TOTAL USE OF ENCUMBERED FUNDS	25,403	118,281	429,384	28%
TOTAL NON-CUSTOMER CHARGES	\$36,048	\$1,956,711	\$12,223,579	16%
GRAND TOTAL PROJECT BUDGET ACTIVITY	\$134,289	\$2,666,654	\$14,305,086	19%

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HUMBOLDT BAY MUNICIPAL WATER DISTRICT
ENCUMBERED FUNDS RECONCILIATION REPORT

March 31, 2022



	MTD EXPENSES	YTD TOTAL	AMOUNT ENCUMBERED	REMAINING
A. CAPITAL PROJECTS				
1 Tesla Battery Project - ESSEX	0	0	5,000	5,000
2 Tesla Battery Project - TRF	0	18,580	12,500	(6,080)
3 Replacement Server Rack - Eureka Office	456	2,846	5,500	2,654
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. EQUIPMENT & FIXED ASSET PROJECTS				
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
C. MAINTENANCE PROJECTS				
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
Hydro Plant Annual Elect. & Maintenance Inspection	0	0	2,050	2,050
18 FY21 Chlorine System Maintenance	0	2,217	2,800	583
D. PROFESSIONAL & CONSULTING SERVICES				
19 404 Permit Assistance	4,947	5,638	30,000	24,362
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	20,000	20,000	20,000	0
E. FY20 SERVICE & SUPPLY BUDGET				
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

25,403

118,281

429,384

311,103

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
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Vendor Name	Date Paid	Description	Amount Paid
101 NETLINK			
101 NETLINK	03/04/2022	<i>Ruth Hydro Data Link/Internet</i>	190.00
Total 101 NETLINK:			190.00
ACWA/JPIA			
ACWA/JPIA	03/21/2022	<i>RETIREE MEDICAL</i>	7,975.26
ACWA/JPIA	03/21/2022	<i>COBRA Dental</i>	65.20
ACWA/JPIA	03/21/2022	<i>COBRA Vision</i>	18.56
Total ACWA/JPIA:			8,059.02
Advanced Display & Signs			
Advanced Display & Signs	03/28/2022	<i>Ruth Boat stickers</i>	54.70
Advanced Display & Signs	03/28/2022	<i>Ruth Boat stickers</i>	54.71
Total Advanced Display & Signs:			109.41
AirGas NCN			
AirGas NCN	03/11/2022	<i>maintenance safety supplies</i>	97.00
AirGas NCN	03/11/2022	<i>maintenance safety supplies</i>	44.84
Total AirGas NCN:			141.84
Allied Electronics Inc			
Allied Electronics Inc	03/21/2022	<i>Repair Fieldbrook Pump Station maintenance</i>	35.76
Total Allied Electronics Inc:			35.76
Almquist Lumber			
Almquist Lumber	03/28/2022	<i>TRF Filter Building, Mezzanine EOC</i>	18.55
Total Almquist Lumber:			18.55
Arcata Used Tire and Wheel			
Arcata Used Tire and Wheel	03/21/2022	<i>Unit 13 tire repair</i>	20.00
Total Arcata Used Tire and Wheel:			20.00
AT & T			
AT & T	03/15/2022	<i>Eureka/Essex Land Line</i>	36.04
AT & T	03/15/2022	<i>Arcata/Essex Land Line</i>	36.04
AT & T	03/15/2022	<i>Samoa/Essex Land Line</i>	241.63
AT & T	03/15/2022	<i>Eureka Office Modem</i>	209.37
AT & T	03/15/2022	<i>Eureka Office Alarm Line</i>	204.91
AT & T	03/15/2022	<i>Samoa Booster Pump Station</i>	207.47
AT & T	03/15/2022	<i>Valve Building - Samoa</i>	209.37
AT & T	03/15/2022	<i>Eureka Office</i>	825.23
AT & T	03/15/2022	<i>TRF</i>	203.01
AT & T	03/15/2022	<i>Ruth Hydro Data Line</i>	204.90
AT & T	03/15/2022	<i>Essex office/Modem/Essex Alarm System</i>	204.90
AT & T	03/14/2022	<i>SIMS Service</i>	311.55
Total AT & T:			2,894.42
AT&T Advertising Solutions			
AT&T Advertising Solutions	03/04/2022	<i>white page listing</i>	21.00

Humboldt Bay Municipal Water District

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Vendor Name	Date Paid	Description	Amount Paid
AT&T Advertising Solutions	03/28/2022	<i>white page listing</i>	21.29
Total AT&T Advertising Solutions:			42.29
AT&T Long Distance			
AT&T Long Distance	03/04/2022	<i>Eureka Office Long Distance</i>	86.97
AT&T Long Distance	03/21/2022	<i>Eureka Office Long Distance</i>	20.36
AT&T Long Distance	03/21/2022	<i>Essex Office Long Distance</i>	26.63
AT&T Long Distance	03/21/2022	<i>TRF Long Distance</i>	10.39
AT&T Long Distance	03/21/2022	<i>Valve Building-Samoa Long Distance</i>	123.31
Total AT&T Long Distance:			267.66
ATS Communications			
ATS Communications	03/28/2022	<i>IT Support for Essex Admin Computers</i>	1,630.00
ATS Communications	03/28/2022	<i>Support for Essex Admin computers</i>	1,430.00
ATS Communications	03/28/2022	<i>Elite Server Care</i>	200.00-
Total ATS Communications:			2,860.00
Borges & Mahoney, Inc			
Borges & Mahoney, Inc	03/28/2022	<i>TRF Lab Equipment</i>	1,688.69
Total Borges & Mahoney, Inc:			1,688.69
Cal-Pac Machine & Hydraulics			
Cal-Pac Machine & Hydraulics	03/28/2022	<i>TRF sludge wetwell valve repair</i>	311.00
Cal-Pac Machine & Hydraulics	03/28/2022	<i>Pipeline maintenance tool</i>	880.00
Total Cal-Pac Machine & Hydraulics:			1,191.00
Chris Merz			
Chris Merz	03/28/2022	<i>Expense Reimbursement - Essex Safety Meeting</i>	69.77
Total Chris Merz:			69.77
Citi Cards			
Citi Cards	03/28/2022	<i>Ruth Bunkhouse Cleaning Supplies</i>	38.43
Total Citi Cards:			38.43
City of Eureka			
City of Eureka	03/10/2022	<i>Eureka office water/sewer</i>	113.75
Total City of Eureka:			113.75
Coastal Business Systems Inc.			
Coastal Business Systems Inc.	03/14/2022	<i>Essex copy/fax machine</i>	244.83
Coastal Business Systems Inc.	03/14/2022	<i>Eureka office copy and fax machine</i>	788.85
Total Coastal Business Systems Inc.:			1,033.68
Condor Earth Technologies, Inc			
Condor Earth Technologies, Inc	03/11/2022	<i>R.W Matthews Dam Inundation Maps</i>	20,000.00
Condor Earth Technologies, Inc	03/11/2022	<i>R.W. Matthews Dam Inundation Mapping</i>	9,439.55

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Vendor Name	Date Paid	Description	Amount Paid
Total Condor Earth Technologies, Inc:			29,439.55
Dave Perkins			
Dave Perkins	03/04/2022	auto mileage reimbursement	136.19
Total Dave Perkins:			136.19
DMV			
DMV	03/15/2022	Sales Tax for Boat Trailer	972.08
DMV	03/15/2022	Sales Tax for Boat	4,901.33
Total DMV:			5,873.41
Eureka Oxygen			
Eureka Oxygen	03/25/2022	Collector 1 Interior Painting	56.16
Eureka Oxygen	03/25/2022	cylinder rental	114.52
Total Eureka Oxygen:			170.68
Eureka-Humboldt Fire Ext.,Co, Inc			
Eureka-Humboldt Fire Ext.,Co, Inc	03/28/2022	Fire Extinguisher for Ruth Boat	85.72
Total Eureka-Humboldt Fire Ext.,Co, Inc:			85.72
Fastenal Company			
Fastenal Company	03/28/2022	Ruth Hydro Tool replacement	214.12
Fastenal Company	03/28/2022	Essex Maintenance tools	22.74
Fastenal Company	03/28/2022	TRF maintenance tools	62.16
Fastenal Company	03/28/2022	safety supplies	248.90
Total Fastenal Company:			547.92
Frontier Communications			
Frontier Communications	03/28/2022	Ruth HQ	55.75
Frontier Communications	03/28/2022	Ruth Hydro/Ruth Dataline	211.72
Total Frontier Communications:			267.47
GEI Consultants, Inc			
GEI Consultants, Inc	03/28/2022	Ruth Hydro FERC Part 12 Inspection	107.00
Total GEI Consultants, Inc:			107.00
Genesis Computer Systems, Inc			
Genesis Computer Systems, Inc	03/11/2022	Replace Essex Administrative Server	9,723.96
Total Genesis Computer Systems, Inc:			9,723.96
GHD			
GHD	03/28/2022	General Engineering - Essex	962.50
GHD	03/28/2022	General Engineering - Eureka	525.00
GHD	03/28/2022	Director Division Boundaries	2,824.01
GHD	03/28/2022	Assistance w/Biological submittal for Samoa Peninsula Right of	2,486.27
GHD	03/28/2022	12 KV Replacement- Grant	2,731.50

Humboldt Bay Municipal Water District

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Vendor Name	Date Paid	Description	Amount Paid
Total GHD:			9,529.28
Grainger			
Grainger	03/28/2022	TRF lab maintenance	86.75
Grainger	03/28/2022	TRF Filter Building Mezzanine EOC	130.14
Total Grainger:			216.89
H.T. Harvey & Associates			
H.T. Harvey & Associates	03/04/2022	Assistance with Streambed Flow Enhancement - Grant	939.25
H.T. Harvey & Associates	03/28/2022	Assistance with Streambed Flow Enhancement - Grant	2,044.25
Total H.T. Harvey & Associates:			2,983.50
Harbor Freight Tools			
Harbor Freight Tools	03/11/2022	Waterproof document holder for Ruth Work Boat	32.54
Harbor Freight Tools	03/28/2022	TRF Handtruck	65.09
Total Harbor Freight Tools:			97.63
Health Equity Inc			
Health Equity Inc	03/07/2022	HSA Admin Fee 10 employees	29.50
Health Equity Inc	03/07/2022	HSA Admin Fee - 5 employees	14.75
Health Equity Inc	03/21/2022	District HSA Contributions - 8 employees	4,745.12
Health Equity Inc	03/21/2022	District HSA Contributions- 3 employees	1,896.25
Total Health Equity Inc:			6,685.62
Hensel Hardware			
Hensel Hardware	03/28/2022	Unit 1 maintenance	10.83
Hensel Hardware	03/28/2022	Essex lab sample sink repair	59.63
Hensel Hardware	03/28/2022	TRF Building Maintenance	31.44
Hensel Hardware	03/28/2022	Essex lab maintenance	118.12
Hensel Hardware	03/28/2022	TRF lab sink repair	34.24
Hensel Hardware	03/28/2022	maintenance supplies	8.64
Total Hensel Hardware:			262.90
Henwood Associates, Inc			
Henwood Associates, Inc	03/04/2022	Consultant Services Agreement- January 2022	2,533.32
Total Henwood Associates, Inc:			2,533.32
Hilfiker Co.			
Hilfiker Co.	03/28/2022	TRF Sludge Bed Gutter Replacement	799.50
Total Hilfiker Co.:			799.50
Humboldt County Treasurer			
Humboldt County Treasurer	03/28/2022	Fund No 3876 Account 800870	45,611.43
Total Humboldt County Treasurer:			45,611.43
Humboldt Fence Company			
Humboldt Fence Company	03/28/2022	Ruth Area Fire Disaster Recovery	26,200.00

Humboldt Bay Municipal Water District

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Vendor Name	Date Paid	Description	Amount Paid
Total Humboldt Fence Company:			26,200.00
Humboldt Redwood Company, LLC			
Humboldt Redwood Company, LLC	03/11/2022	<i>Mt Pierce Lease site</i>	308.26
Total Humboldt Redwood Company, LLC:			308.26
Industrial Electric			
Industrial Electric	03/28/2022	<i>TRF Filter Building, Mezzanine EOC</i>	204.09
Industrial Electric	03/28/2022	<i>TRF Filter Building, Mezzanine EOC</i>	50.46
Industrial Electric	03/28/2022	<i>TRF Filter Building, Mezzanine EOC</i>	3.62
Industrial Electric	03/28/2022	<i>TRF Filter Building, Mezzanine EOC</i>	26.07
Total Industrial Electric:			284.24
J. Bruce Rupp			
J. Bruce Rupp	03/28/2022	<i>expense reimbursement - ACWA Board Meeting</i>	571.21
Total J. Bruce Rupp:			571.21
Johnson's Mobile Rentals LLC			
Johnson's Mobile Rentals LLC	03/28/2022	<i>Tesla Battery Bank Project</i>	118.12
Johnson's Mobile Rentals LLC	03/28/2022	<i>Eureka office sewer line upgrade</i>	79.84
Total Johnson's Mobile Rentals LLC:			197.96
JTN Energy, LLC			
JTN Energy, LLC	03/04/2022	<i>Consultant Services Agreement - January 2022</i>	2,533.32
Total JTN Energy, LLC:			2,533.32
Justin Natividad			
Justin Natividad	03/28/2022	<i>expense reimbursement - Class A drivers permit</i>	85.00
Total Justin Natividad:			85.00
Keith Daggs			
Keith Daggs	03/28/2022	<i>Expense Reimbursement - Class A Driver Permit</i>	85.00
Total Keith Daggs:			85.00
Kernen Construction			
Kernen Construction	03/28/2022	<i>Pipeline Maintenance</i>	374.56
Kernen Construction	03/28/2022	<i>Line Shed 8 Build</i>	282.33
Total Kernen Construction:			656.89
Kolstad Land Surveyors			
Kolstad Land Surveyors	03/28/2022	<i>Van Duzen Investments Timber Harvest Claim</i>	1,000.00
Total Kolstad Land Surveyors:			1,000.00
Mercer-Fraser Company			
Mercer-Fraser Company	03/28/2022	<i>Eureka office parking lost repair</i>	673.98

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
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Vendor Name	Date Paid	Description	Amount Paid
Total Mercer-Fraser Company:			673.98
Miller Farms Nursery			
Miller Farms Nursery	03/28/2022	equipment maintenance	28.11
Miller Farms Nursery	03/28/2022	equipment maintenance	45.24
Miller Farms Nursery	03/28/2022	equipment maintenance	36.62
Total Miller Farms Nursery:			109.97
Miscowater			
Miscowater	03/28/2022	TRF chemical pump repair	287.25
Total Miscowater:			287.25
Mission Linen			
Mission Linen	03/04/2022	Uniform Rental	109.75
Mission Linen	03/04/2022	maintenance supplies	55.99
Mission Linen	03/04/2022	Uniform Rental	138.45
Mission Linen	03/04/2022	Uniform Rental	109.75
Mission Linen	03/04/2022	Uniform Rental	107.60
Mission Linen	03/04/2022	maintenance supplies	77.01
Mission Linen	03/04/2022	Uniform Rental	35.81
Total Mission Linen:			634.36
Mitchell, Brisso, Delaney & Vrieze			
Mitchell, Brisso, Delaney & Vrieze	03/08/2022	Legal Services - February 2022 - North Mainline Extension Stud	186.00
Mitchell, Brisso, Delaney & Vrieze	03/08/2022	Legal Services- February 2022	327.45
Mitchell, Brisso, Delaney & Vrieze	03/08/2022	Legal Services- VDI Claim February 2022	46.50
Total Mitchell, Brisso, Delaney & Vrieze:			559.95
Napa Auto Parts			
Napa Auto Parts	03/21/2022	Unit 2 maintenance	74.85
Napa Auto Parts	03/14/2022	equipment maintenance	35.01
Napa Auto Parts	03/28/2022	Unit 11 maintenance	19.16
Napa Auto Parts	03/28/2022	Unit 13 maintenance	7.04
Napa Auto Parts	03/28/2022	equipment maintenance	6.05
Napa Auto Parts	03/28/2022	Ruth Hydro annual maintenance	17.99
Total Napa Auto Parts:			160.10
North Coast Laboratories			
North Coast Laboratories	03/10/2022	lab tests - Humboldt Bay Retail	50.00
North Coast Laboratories	03/10/2022	lab tests - Fieldbrook-Glendale CSD	95.00
North Coast Laboratories	03/10/2022	lab tests - Humboldt Bay Retail	95.00
North Coast Laboratories	03/10/2022	lab tests - Humboldt Bay Retail	140.00
North Coast Laboratories	03/10/2022	lab tests - Humboldt Bay Retail	285.00
North Coast Laboratories	03/10/2022	lab tests - Humboldt Bay Retail	95.00
North Coast Laboratories	03/10/2022	lab tests - Fieldbrook-Glendale CSD	95.00
North Coast Laboratories	03/10/2022	lab tests - Fieldbrook-Glendale CSD	95.00
North Coast Laboratories	03/10/2022	lab tests - Humboldt Bay Retail	95.00
North Coast Laboratories	03/10/2022	lab tests - Fieldbrook-Glendale CSD	95.00
North Coast Laboratories	03/10/2022	lab tests - Humboldt Bay Retail	95.00
North Coast Laboratories	03/10/2022	lab tests - Humboldt Bay Retail	285.00
North Coast Laboratories	03/10/2022	lab tests - Humboldt Bay Retail	95.00

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
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Vendor Name	Date Paid	Description	Amount Paid
North Coast Laboratories	03/10/2022	lab tests - Fieldbrook-Glendale CSD	95.00
North Coast Laboratories	03/10/2022	lab tests - Humboldt Bay Retail	95.00
North Coast Laboratories	03/10/2022	lab tests - Fieldbrook-Glendale CSD	95.00
Total North Coast Laboratories:			1,900.00
Northern California Safety Consortium			
Northern California Safety Consortium	03/04/2022	membership fee	75.00
Total Northern California Safety Consortium:			75.00
NTU Technologies, Inc			
NTU Technologies, Inc	03/21/2022	TRF chemical supplies	1,728.86
Total NTU Technologies, Inc:			1,728.86
O&M Industries			
O&M Industries	03/28/2022	Security Fencing Replacements at Essex and Samoa Booster PS	4,136.45
Total O&M Industries:			4,136.45
Occupational Health Service of Mad River			
Occupational Health Service of Mad River	03/28/2022	Annual Hearing and Respirator Exams 9 employees	1,811.25
Occupational Health Service of Mad River	03/28/2022	Annual Hearing and Respirator Exam	157.50
Total Occupational Health Service of Mad River:			1,968.75
Pacific Gas & Electric Co.			
Pacific Gas & Electric Co.	03/03/2022	Ruth HQ	81.41
Pacific Gas & Electric Co.	03/03/2022	Ruth Bunkhouse	48.42
Pacific Gas & Electric Co.	03/16/2022	Eureka Office	681.02
Pacific Gas & Electric Co.	03/16/2022	Jackson Ranch Rectifier	17.85
Pacific Gas & Electric Co.	03/16/2022	299 Rectifier	135.06
Pacific Gas & Electric Co.	03/16/2022	West End Road Rectifier	149.18
Pacific Gas & Electric Co.	03/16/2022	TRF	9,445.65
Pacific Gas & Electric Co.	03/16/2022	Ruth Hydro Valve Control	30.04
Pacific Gas & Electric Co.	03/16/2022	Ruth Hydro	624.88
Pacific Gas & Electric Co.	03/16/2022	Samoa Booster Pump Station	499.77
Pacific Gas & Electric Co.	03/16/2022	Samoa Dial Station	38.09
Pacific Gas & Electric Co.	03/16/2022	Essex Pumping	59,865.94
Total Pacific Gas & Electric Co.:			71,617.31
Pacific Paper Co.			
Pacific Paper Co.	03/11/2022	Eureka office supplies	54.82
Total Pacific Paper Co.:			54.82
Pierson Building Center			
Pierson Building Center	03/03/2022	TRF Filter Building, Mezzanine EOC	129.24
Total Pierson Building Center:			129.24
Pitney Bowes			
Pitney Bowes	03/28/2022	postage meter supplies	88.21
Pitney Bowes	03/28/2022	postage meter lease	260.15

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
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Vendor Name	Date Paid	Description	Amount Paid
Total Pitney Bowes:			348.36
Platt Electric Supply			
Platt Electric Supply	03/28/2022	TRF Filter Building, Mezzanine EOC	766.75
Platt Electric Supply	03/28/2022	TRF Filter Building, Mezzanine EOC	178.06
Platt Electric Supply	03/28/2022	TRF Filter Building, Mezzanine EOC	58.68
Total Platt Electric Supply:			1,003.49
Points West Surveying Co			
Points West Surveying Co	03/28/2022	R.W. Matthews Dam Surveying	6,600.00
Total Points West Surveying Co:			6,600.00
Power Industries, Inc			
Power Industries, Inc	03/28/2022	Equipment maintenance	27.97
Total Power Industries, Inc:			27.97
Recology Arcata			
Recology Arcata	03/25/2022	Essex Garbage/Recycling Service	647.25
Total Recology Arcata:			647.25
Recology Humboldt County			
Recology Humboldt County	03/08/2022	Eureka office garbage/recycling service	93.21
Total Recology Humboldt County:			93.21
Ryan Chairez			
Ryan Chairez	03/21/2022	expense reimbursement for Class A driver permit	83.00
Total Ryan Chairez:			83.00
Sitestar Nationwide Internet			
Sitestar Nationwide Internet	03/14/2022	Essex Internet	47.90
Total Sitestar Nationwide Internet:			47.90
Staples			
Staples	03/28/2022	Essex office supplies	79.08
Staples	03/28/2022	Essex office supplies	16.15
Staples	03/28/2022	Essex office supplies	51.15
Staples	03/28/2022	Essex office supplies	45.19
Staples	03/28/2022	Essex office supplies	9.47
Total Staples:			201.04
Stillwater Sciences			
Stillwater Sciences	03/28/2022	professional assistance -Streambed Flow Enhancement Grant	4,930.00
Stillwater Sciences	03/28/2022	professional assistance - Fish habitat/biologist consultation US	765.00
Total Stillwater Sciences:			5,695.00
Streamline			
Streamline	03/04/2022	Website maintenance membership fee	450.00

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
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Vendor Name	Date Paid	Description	Amount Paid
Total Streamline:			450.00
Sudden Link			
Sudden Link	03/07/2022	Fieldbrook-Glendale CSD Internet	323.61
Sudden Link	03/08/2022	Essex Phones	89.64
Sudden Link	03/08/2022	Essex internet	213.02
Sudden Link	03/07/2022	TRF Internet	26.22
Sudden Link	03/07/2022	TRF Internet - Blue Lake SCADA Monitoring	52.45
Sudden Link	03/07/2022	TRF Internet - Fieldbrook-Glendale CSD	52.45
Sudden Link	03/14/2022	Eureka Internet	208.45
Total Sudden Link:			965.84
SWAPE, LLC			
SWAPE, LLC	03/28/2022	Professional Services Hydrology, Hydrogeology sampling @ Mc	1,848.75
SWAPE, LLC	03/28/2022	Professional Services Hydrology, Hydrogeology and sampling at	412.50
Total SWAPE, LLC:			2,261.25
SWRCB Accounting Office			
SWRCB Accounting Office	03/28/2022	T4 Operator Cert Renewal - Neaz Ahmad	155.00
Total SWRCB Accounting Office:			155.00
Telstar Instruments, Inc			
Telstar Instruments, Inc	03/28/2022	Lab supplies	1,178.30
Total Telstar Instruments, Inc:			1,178.30
Thatcher Company, Inc			
Thatcher Company, Inc	03/28/2022	replenish TRF chemicals	6,692.60
Thatcher Company, Inc	03/28/2022	replenish chlorine	6,615.43
Thatcher Company, Inc	03/28/2022	replenish chlorine - container credit	2,000.00-
Total Thatcher Company, Inc:			11,308.03
The Mill Yard			
The Mill Yard	03/11/2022	Eureka office parking lot maintenance	84.47
The Mill Yard	03/28/2022	TRF Filter Building Mezzanine EOC	10.83
The Mill Yard	03/28/2022	Eureka office server rack	5.86
The Mill Yard	03/28/2022	TRF Filter Building Mezzanine EOC	28.24
Total The Mill Yard:			129.40
Thrifty Supply			
Thrifty Supply	03/28/2022	pipeline maintenance	594.67
Thrifty Supply	03/28/2022	Fieldbrook-Glendale CSD leak repair	302.59
Total Thrifty Supply:			897.26
Trinity County General Services			
Trinity County General Services	03/28/2022	Pickett Peak site lease	257.50
Total Trinity County General Services:			257.50

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
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Vendor Name	Date Paid	Description	Amount Paid
Trinity County Solid Waste			
Trinity County Solid Waste	03/08/2022	Ruth HQ dump fees	18.03
Trinity County Solid Waste	03/08/2022	Ruth Hydro dump fees	18.03
Total Trinity County Solid Waste:			36.06
United Rentals, Inc			
United Rentals, Inc	03/28/2022	New Employee Safety Training	245.00
United Rentals, Inc	03/28/2022	Eureka office parking lot maintenance	360.97
Total United Rentals, Inc:			605.97
US Bank			
US Bank	03/14/2022	New Employee Jacket	60.04
US Bank	03/14/2022	Speciality Construction Techniques for Foundation Improvement	99.00
US Bank	03/14/2022	Annual Domain Hosting	214.18
US Bank	03/14/2022	Collector 1 Interior Paint project	214.42
US Bank	03/14/2022	Replenish Essex First Aid Kits	425.19
US Bank	03/14/2022	Essex Office Supplies	128.84
US Bank	03/14/2022	Ruth Hydro Maintenance Crew Supplies	10.78
US Bank	03/14/2022	Essex Zoom Meetings Renewal - COVID 19 Safety	149.90
US Bank	03/14/2022	COVID 19 Test Kits	294.60
US Bank	03/14/2022	Purchase Order Software Monthly Maint	79.70
US Bank	03/14/2022	Water Audit Validator Renewal Workshop	200.00
US Bank	03/14/2022	Humboldt Bay Retail - Automated Calls	9.00
US Bank	03/14/2022	FMCSA Annual Commercial Driver Query	3.75
US Bank	03/14/2022	Eureka office computer supplies	16.38
US Bank	03/14/2022	Essex Operations Computer Supplies/Web Cam	50.61
US Bank	03/14/2022	Essex Office Supplies	37.15
US Bank	03/14/2022	Essex Office Supplies	32.30
US Bank	03/14/2022	Ruth Boat Safety Equipment	54.90
US Bank	03/14/2022	Ruth Boat Safety Equipment	54.90
US Bank	03/14/2022	Ruth Boat Supplies	48.80
US Bank	03/14/2022	Ruth Boat Supplies	48.81
US Bank	03/14/2022	Security Fencing Replacement at Essex and Samoa Booster Pum	571.34
Total US Bank:			2,804.59
VALEO Networks			
VALEO Networks	03/28/2022	Eureka office Essential Care Service	2,680.99
VALEO Networks	03/21/2022	Eureka office server rack	449.96
VALEO Networks	03/03/2022	Replace Eureka office computer - Billing Computer	1,614.90
Total VALEO Networks:			4,745.85
Valley Pacific Petroleum Servi, Inc			
Valley Pacific Petroleum Servi, Inc	03/10/2022	CardLock Fuel - Pumping & Control	631.09
Valley Pacific Petroleum Servi, Inc	03/10/2022	CardLock Fuel - Water Quality	631.09
Valley Pacific Petroleum Servi, Inc	03/10/2022	CardLock Fuel - Maintenance	631.08
Valley Pacific Petroleum Servi, Inc	03/10/2022	CardLock Fuel - Humboldt Bay Retail	164.08
Valley Pacific Petroleum Servi, Inc	03/10/2022	CardLock Fuel - Fieldbrook-Glendale CSD	467.00
Valley Pacific Petroleum Servi, Inc	03/28/2022	Ruth Area Bulk Fuel	547.27
Valley Pacific Petroleum Servi, Inc	03/28/2022	Ruth Hydro bulk fuel	547.28
Total Valley Pacific Petroleum Servi, Inc:			3,618.89

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
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Vendor Name	Date Paid	Description	Amount Paid
Verizon Wireless			
Verizon Wireless	03/11/2022	General Manager	38.21
Verizon Wireless	03/11/2022	Ruth Area Fire Recovery	26.93
Verizon Wireless	03/11/2022	Customer Service - Humboldt Bay	14.84
Verizon Wireless	03/11/2022	Customer Service - Fieldbrook-Glendale CSD	42.22
Verizon Wireless	03/11/2022	Operations 1	.17
Verizon Wireless	03/11/2022	Customer Service IPad-Humboldt Bay	9.88
Verizon Wireless	03/11/2022	Customer Service IPad - Fieldbrook-Glendale CSD	28.13
Verizon Wireless	03/11/2022	Ruth Area	24.51
Verizon Wireless	03/11/2022	Ruth Hydro	24.51
Total Verizon Wireless:			209.40
West Group			
West Group	03/16/2022	California Water Code 2022	134.38
Total West Group:			134.38
Grand Totals:			294,309.10

Humboldt Bay Municipal Water District

--Monthly Overtime Report--
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Position Title	2-01 Overtime Emp Hrs	2-01 Overtime Emp Amt	2-02 Doubletime Emp Hrs	2-02 Doubletime Emp Amt
Actg/HR Spec	1.00	\$76	.00	\$0
Actg/HR Assit	.50	\$24	.00	\$0
Executive Assis	3.75	\$207	.00	\$0
Total ADMIN:	5.25	\$307	.00	\$0
Elec & Ins Tech	5.50	\$334	.00	\$0
Maint Worker	3.75	\$115	.00	\$0
Total ESSEX:	9.25	\$449	.00	\$0
PT Hydro Oper	3.50	\$102	.00	\$0
Hydro Oper Ruth	6.00	\$354	.00	\$0
Total RUTH:	9.50	\$455	.00	\$0
Grand Totals:	24.00	\$1,211	.00	\$0

Humboldt Bay Municipal Water District

To: Board of Directors

From: Chris Harris

Date: April 14, 2022

Re: Life Insurance, Disability Insurance, and Accidental Death & Dismemberment Policies

Background

As part of our current comprehensive benefits package for employees, the District pays for Long-Term Disability (LTD) Insurance; employee Life Insurance; and Accidental Death and Dismemberment (AD&D). The Life Insurance benefit is \$50,000 and the AD&D benefit is \$50,000 for accidental death, and 25% to 100% for dismemberment depending upon body part(s) or function lost.

Employees also have the option for additional coverage by opting into a voluntary Life Insurance Policy, managed by the same provider. The employees pay for this additional coverage through automatic payroll deductions.

In 2015 staff initiated a price and coverage comparison through our then current provider Assurant Benefits Group. This led to a switch to Unum with increased benefits and an annual premium decrease of approximately \$13,500 annually. Based on recent changes in policy rates, staff has again initiated a price and coverage comparison across multiple providers.

Next Steps

Currently staff is waiting for several of the quotes in order to complete a thorough analysis. At the Board Meeting staff will provide a complete analysis of all options for both District provided life insurance (including AD & D and LTD) as well as the optional employee-paid voluntary coverage costs.

OPERATIONS

Memo to: HBMWD Board of Directors
From: Dale Davidsen, Superintendent
Date: April 1, 2022
Subject: Essex/Ruth March 2022 Operational Report

Upper Mad River, Ruth Lake, and Hydro Plant

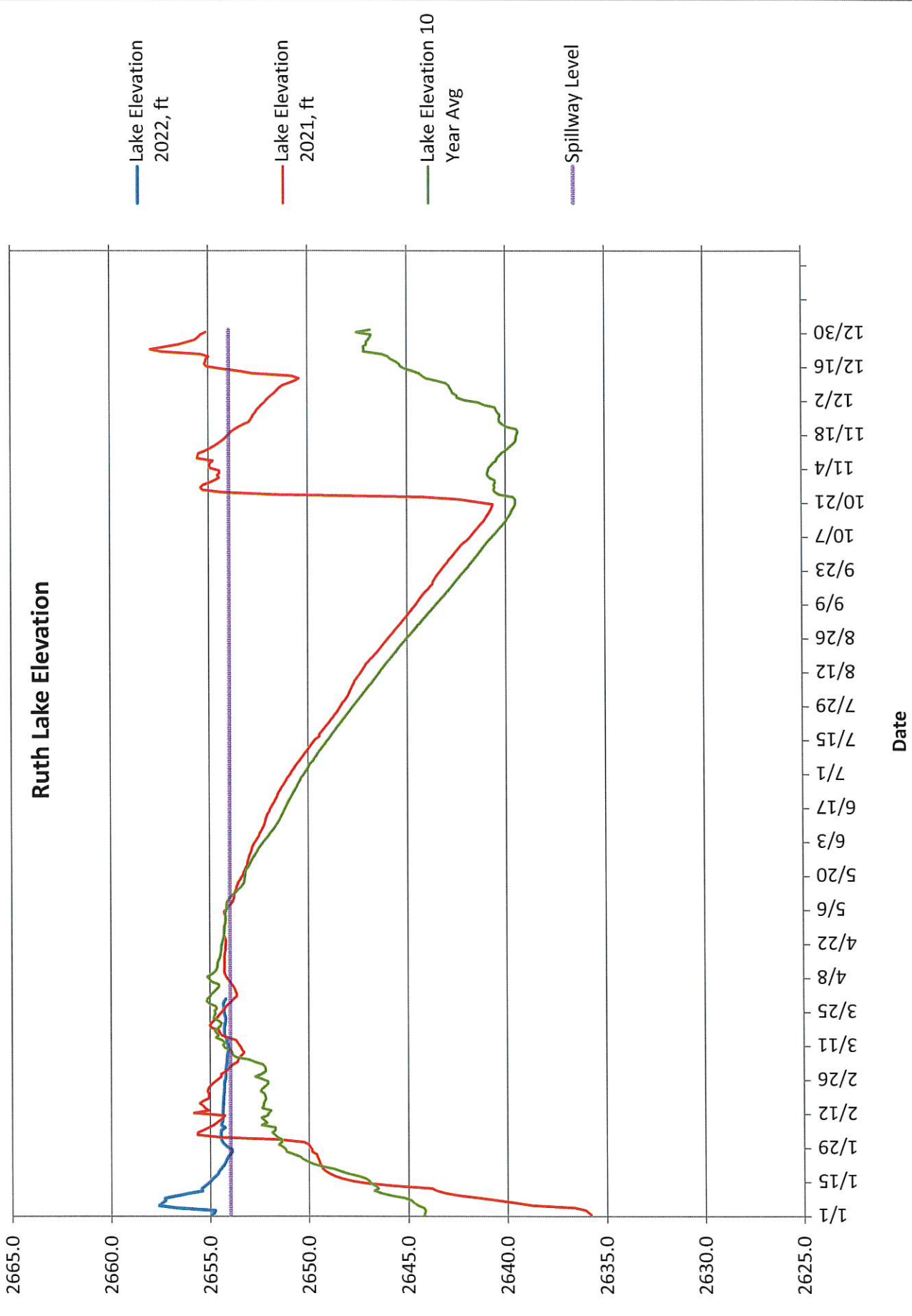
1. Flow at Mad River above Ruth Reservoir (Zenia Bridge) averaged 40 cfs with a high of 70 cfs on March 16th and a low of 28 cfs on March 31st
2. The conditions at Ruth Lake for March were as follows:
The lake level on March 31st was 2654.20 feet which is:
 - 0.02 feet lower than February 28th, 2022
 - 0.40 feet higher than March 31st, 2021
 - 0.93 feet lower than the ten-year average
 - 0.20 feet above the spillway
3. Ruth Headquarters recorded 1.64 inches of rainfall for March.
4. Ruth Hydro produced 148800 KWh in March. There were 2 shut downs for maintenance (164 hours with 32730 KWh lost production).
5. The lake discharge averaged 60 cfs with a high of 107 cfs on March 31st.

Lower Mad River, Winzler Control, and TRF

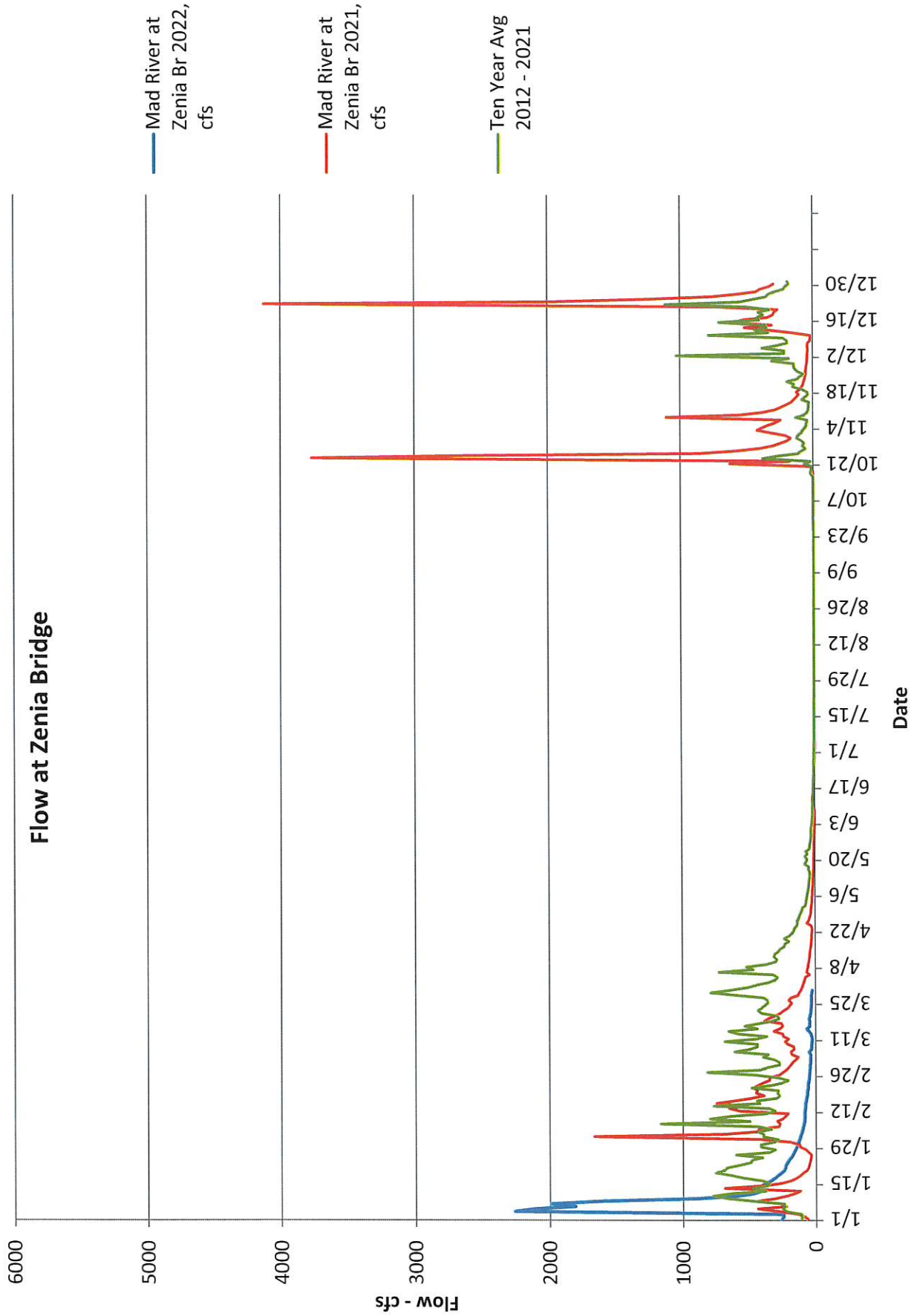
6. The river at Winzler Control Center for March, had an average flow of 205 cfs. The river flow reached a high of 426 cfs on March 16th.
7. The domestic water conditions were as follows:
 - a. The domestic water turbidity average was 0.06 NTU, which meets Public Health Secondary Standards.
 - b. As of March 31st, we pumped 209.841 MG at an average of 6.769 MGD.
 - c. The maximum metered daily municipal use was 8.004 MGD on March 7th.
8. The TRF conditions for March were as follows:
 - a. Average monthly source water turbidity was 0.21 NTU.
 - b. Average monthly filtered water turbidity was 0.08 NTU.
 - c. Number of filter backwashes for the month was 31.

9. March 2nd – Safety meetings
 - a. Respiratory Safety
 - b. Respirator fit-testing
10. March 9th – Lowered hydro production to conserve water for Ruth Annual maintenance.
11. March 14th
 - a. Worked on SPCC plan documentation.
 - b. 90 day DOT truck inspections
12. March 16th – Safety meetings
 - a. Confined Spaces
 - b. Gas Detectors
 - c. SCBA's
 - d. Patient packaging & SKED training
 - e. Lockout/Tagout
13. March 22nd – JPIA Site visit at Essex – Reviewed safety program, Reviewed losses, toured Essex and TRF
14. March 23rd
 - a. JPIA safety meeting at Main Office – Traffic Control
 - b. Trimark calibrated the CASIO meter at Ruth. Required for ReMat contract.
 - c. After testing CAISO meter, we shut down the Hydro plant to maintain lake level for Ruth Annual maintenance next week.
15. March 28th – 30th – Ruth Annual Maintenance
16. March 28th – DSOD inspection at Ruth – New DSOD Engineer, Michelle Holmes witnessed closing of slide gate and inspected the Dam. We got a good report back from the inspection.
17. March 30th – Ruth maintenance crew re-installed the Old Ruth boat ramp gate.
18. Current and Ongoing Projects
 - a. COVID 19 – Slowly getting back to a somewhat normal staffing arrangement.
 - b. 12kV project. – Coordinating cutover and pumping abilities during this time with Municipal Customers.
 - c. Tesla battery bank projects – TRF site prep work is in progress.
 - d. TRF EOC / breakroom construction - complete.
 - e. OSHG – Working on Bid documents.
 - f. Collector 1 interior painting – In progress
 - g. Main Office Solar project – Working on plans and coordination with roof replacement.
 - h. Routine annual equipment maintenance and services.

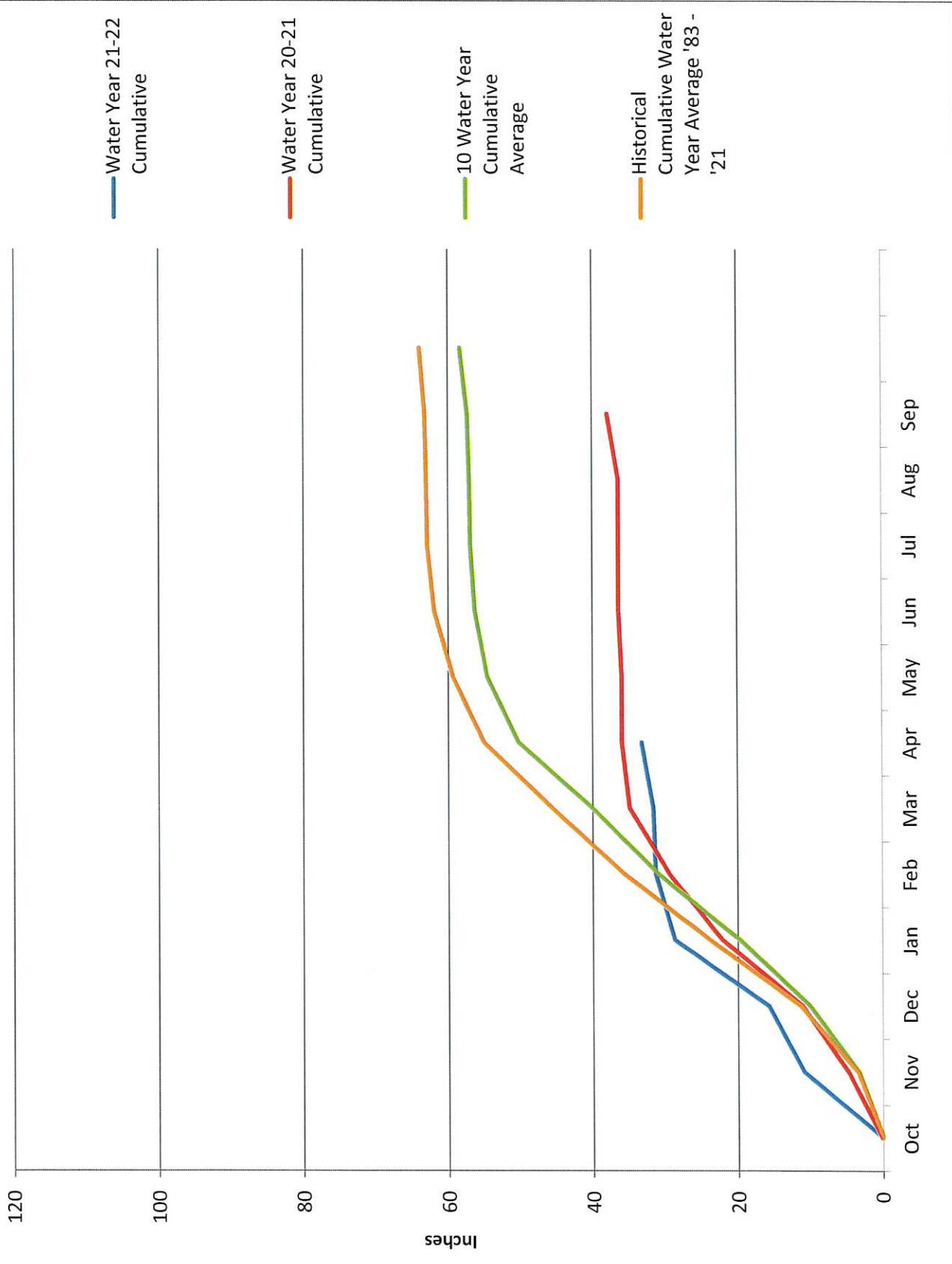
Ruth Lake Elevation

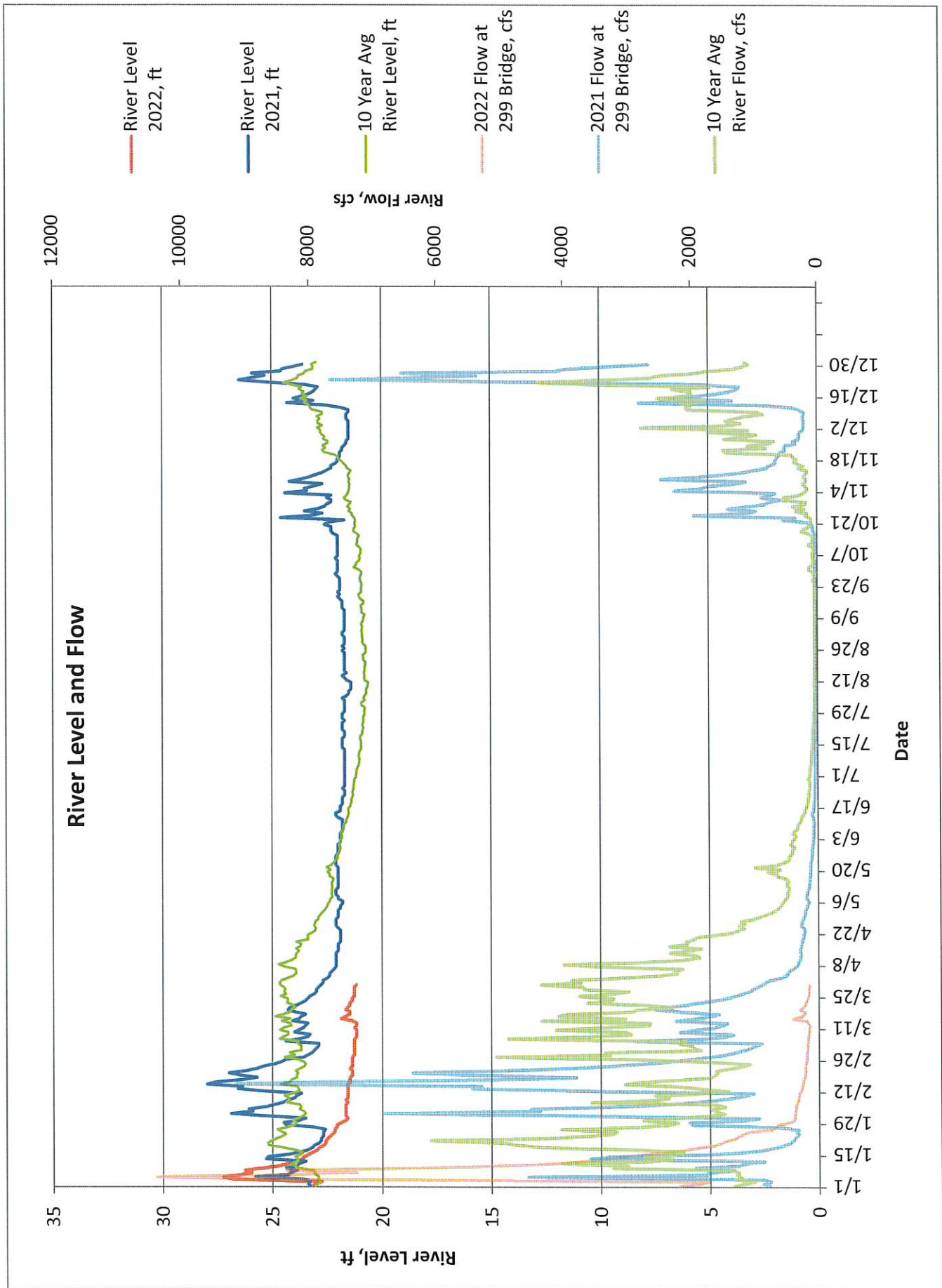


Flow at Zenia Bridge

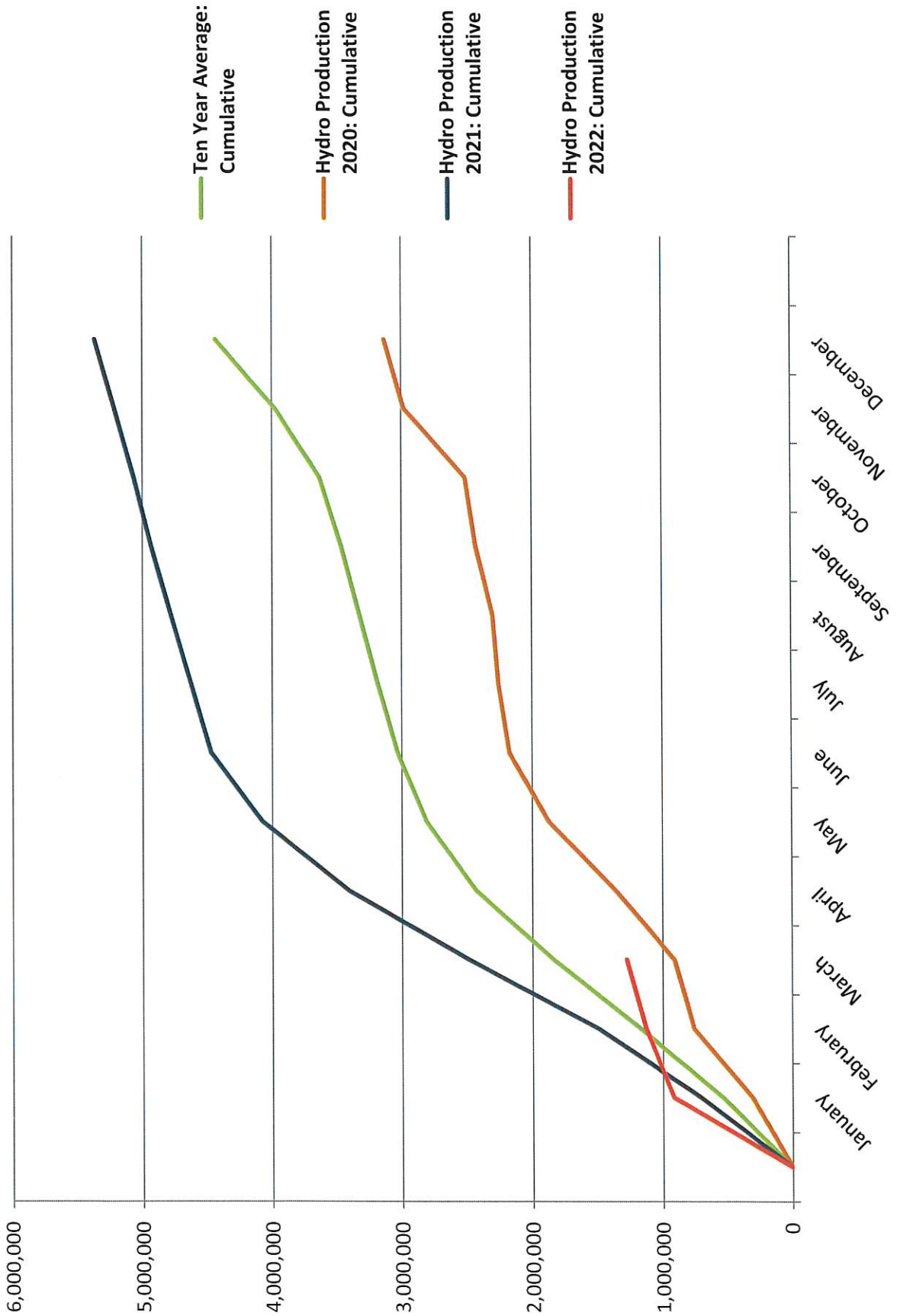


Ruth Rainfall - Water Year 2021-2022





Ruth Hydro Production: Cumulative kWh



Memo to: Board of Directors
From: Dale Davidsen, Superintendent
Date: April 6, 2022
Subject: Remove from surplus equipment – Military water tank trailer

Board,

We would like to remove the Military water buffalo trailer and tank from the Surplus list.

It was declared surplus in June of 2017. We listed on Craigslist at some point after this, and had no takers at the time. We listed again in February or March of 2020, had some interest but then the Covid shutdown happened and we took the item off the listing and cancelled all potential public contact.

Since then we had the August Complex fire at Ruth and Larry has requested we consider making this into a small mobile “fire wagon”. In the FY-22/23 budget we will be proposing to purchase a pump and hoses to make use of this trailer and tank again at Ruth for fire response.

Dale



MANAGEMENT



RESOLUTION NO. 2022-06

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
HUMBOLDT BAY MUNICIPAL WATER DISTRICT TO OPPOSE INITIATIVE 21-0042A1**

WHEREAS, an association representing California’s wealthiest corporations and developers is spending millions to push a deceptive proposition aimed for the November 2022 statewide ballot; and

WHEREAS, the proposed proposition, Initiative 21-0042A1, has received the official title: “LIMITS ABILITY OF VOTERS AND STATE AND LOCAL GOVERNMENTS TO RAISE REVENUES FOR GOVERNMENT SERVICES. INITIATIVE CONSTITUTIONAL AMENDMENT.”

WHEREAS, the measure includes provisions that would make it more difficult for local voters to pass measures needed to fund local services and infrastructure, and would limit voter input by prohibiting local advisory measures where voters provide direction on how they want their local tax dollars spent; and

WHEREAS, the measure exposes taxpayers to a new wave of costly litigation, limits the discretion and flexibility of locally elected boards to respond to the needs of their communities, and injects uncertainty into the financing and sustainability of critical infrastructure; and

WHEREAS, the measure severely restricts state and local officials’ ability to protect our environment, public health and safety, and our neighborhoods against corporations and others who violate the law; and

WHEREAS, the measure creates new constitutional loopholes that would allow corporations to pay less than their fair share for the impacts they impose on our communities, including local infrastructure, our environment, water quality, air quality, and natural resources; and

WHEREAS, the measure threatens billions of dollars currently dedicated to state and local services, and could force cuts to critical industrial and drinking water infrastructure, as well as public schools, fire and emergency response, law enforcement, public health, parks, libraries, affordable housing, services to address homelessness, mental health services, and more; and

WHEREAS, the measure would also reduce funding for critical infrastructure like streets and roads, public transportation, ports, drinking water, sanitation, utilities, and more.

THEREFORE, BE IT RESOLVED that the Humboldt Bay Municipal Water District opposes Initiative 21-0042A1;

BE IT FURTHER RESOLVED, that the Humboldt Bay Municipal Water District will join the No on Initiative 21-0042A1 coalition, a growing coalition of public safety, labor, local government, infrastructure advocates, and other organizations throughout the state, and that staff will email a copy of this adopted resolution to the California Special Districts Association at advocacy@cgsda.net.

PASSED AND ADOPTED by the Board of Directors of the Humboldt Bay Municipal Water District this 14th day of April, 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: April 7, 2022

Re: Cal Poly 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.

On Tuesday, May 3rd beginning at approximately 6:00 p.m., the students will present their capstone project reports. This will take place in Founders Hall room 118 on the Cal Poly Humboldt campus and will last until about 8:00 p.m.

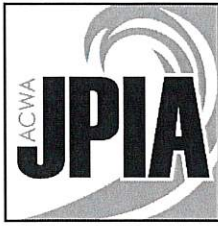
Current Covid-19 protocols for on campus visits are proof of vaccination, or negative Covid-19 test results, and wearing a face mask while indoors.

Any directors are welcome to attend if available.

For the capstone projects, the following projects were 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. 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.
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.
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.

ACWA



April 7, 2022

Mr. John Friedenbach, General Manager
Humboldt Bay Municipal Water District
P.O. Box 95
Eureka, California 95502-0095

Re: Liability, Property, and Workers' Compensation Programs Risk Assessment

Dear Mr. Friedenbach:

This letter is a follow-up to my visit to Humboldt Bay Municipal Water District on March 22-23, 2022. The purpose was to obtain an update on District operations, review loss history, evaluate for risk exposures, and provide training. District staff should be commended for taking actions that go beyond compliance and reduce risk. Steps like evaluating chemicals currently used in the treatment process and either eliminating or changing to chemicals that pose a lower risk to staff and the environment. Please thank Dale Davidsen, Superintendent, and Chris Merz, Assistant Maintenance and Electrical Supervisor, for their time and consideration. Below are highlights of our discussions and related ACWA JPIA resources.

Loss History

The District's loss history over the last five years was reviewed with an emphasis on claims that occurred in the previous policy year. These claims have the most impact on pooled coverage costs; and can assist with identifying trends, training, and best practices for risk reduction efforts.

The District experienced 14 workers' compensation claims in the last five years. Since the last review, only one claim occurred, and the upward trend and severity of claims have stopped. The one claim reviewed involved strains to the arm and hand due to the vibration from using a jackhammer. To prevent future claims like this, the District conducted a review with staff on the safe use of jackhammers and purchased anti-vibration gloves for staff.

Like the jackhammer case, many of the past 14 claims have identified an ergonomic risk factor as a causal factor. Therefore, an Ergonomic Site Survey was done for chain sawing and cable car tasks during this visit. The ergonomic site survey aims to help members identify ergonomic hazards with a given task and list actions that can be taken to minimize these hazards. Once completed, these surveys can be used during toolbox presentations or incorporated into a written procedure.

During the discussion of workers' compensation claims, it was great to learn that the District developed a corrective action log to track the implementation of identified corrective actions. In reviewing this log, it was easy to see that these corrective actions stemmed from completed inspections and staff hazard reports. The District is encouraged to add the corrective actions

Mr. John Friedenbach, General Manager
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identified during an accident investigation. Together, hazard inspections, hazard reports, and corrective actions serve as leading indicators of the District's loss prevention program. Indicators that can be shared and reviewed to help direct the continuous improvement of the District's loss prevention program.

There was one liability, and six property claims in the last five years. The liability claim involved a District vehicle backing into another vehicle. The District is encouraged to adopt a backing policy to improve driver situational awareness and decrease risk. This backing policy could be incorporated into an existing driving policy.

Property Program Change

Any new property, assets, or other equipment must now be added within 90 days of acquisition to ensure proper coverage; the additional premium will be pro-rated. After July 1, 2021, existing assets exceeding \$100,000 may be submitted for mid-year coverage, and a full year's premium will be invoiced. For detailed questions about changes, please contact Debbie Kyburz in Member Services at (916) 786-5742.

Field Visit

Dale provided a tour of the District's shops, pump facilities, and water treatment facility. In addition to excellent housekeeping at each site, multiple aspects of the District's safety program were observed. Elements included various safety forms on clipboards in the shop for easy access by the staff, posting ladder safety reminders next to the ladder storage, and having a mobile A-frame lift that can be easily set up in various areas of the treatment facility. Dale also shared many of the updates in process or planned at the District, including the near completion of the switchgear relocation and the future addition of Tesla battery banks. Both improvements will aid in power consistency and ensure operations during future Public Safety Power Shutoffs (PSPS.)

The District is exploring moving from chlorine gas to chlorine generation. Although the District has had an excellent safety record with the current system, moving to a chlorine generation system has many benefits. A chlorine generation system would eliminate the risk of a chlorine gas leak to the community and give on-demand access to chlorine without all the safety requirements and concerns.

Training Recap

On March 23, 2022 a Traffic Control and Flagging class were provided to ten District staff. The purpose of this class is to ensure the safety of workers doing traffic control and flagger duties, and compliance with Cal/OSHA standards. A few key takeaways include:

- Ensuring all Temporary Traffic Control (TTC) devices for the project are consistent with the CA-MUTCD and are effective for motorists, bicyclists, pedestrians, and workers.
- The competent person overseeing the TCC should inspect TTC throughout the work period.
- Review the fundamentals of flagging in moving traffic with staff before being assigned as flaggers.

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The training also provided an opportunity for District staff to discuss the District's current process that is followed to ensure its TTC is effectively set up. Such as having all traffic control devices well stored and labeled, using a form to list staff and their roles during a TTC, and going out to the site a day ahead to mark the advanced warning signs and cone locations. To further enhance the District's TTC program, a Sample Traffic Control Supervisor Authorization Form, Sample Traffic Control Flagger Authorization Form, and TTC Inspection forms were shared. Adopting these forms will aid in documenting staff designation and having a written record of TTC inspection.



HBMWD Traffic Control Storage Room

Volunteer Resolution

In 1997, the JPIA's Board of Directors approved a recommendation requiring all Liability Program members to adopt a resolution making volunteers subject to workers' compensation coverage. Dale shared that the District updated Volunteer Resolution (2017-08) passed in 2017.

Covering volunteers under workers' compensation has significant benefits. Workers' compensation benefits are statutorily defined. Claims costs are usually significantly lower compared to liability lawsuits for the same injuries or illnesses. The claims are easier to control since litigation is avoided. Also, providing benefits to volunteer workers under the "no-fault" workers' compensation system can be seen as good public relations.

Recreational Activity

The District manages the recreational park areas on the Mad River, adjacent to the Essex Operation center. The park is open during daytime only and has a barbeque area, picnic benches, and flushing toilets maintained by the District. The District has posted and maintains signs with warnings and general park rules. Dale shared that the District has a special use process that must be completed for those wishing to use the park for a special event.

The special use process was not reviewed during the visit. Therefore, the District is encouraged to contact Debbie Kyburz in Member Services, to discuss risk transfer language and best practices related to this special use process. Member Services also provided other Risk Transfer model language and guidelines. Members are encouraged to review this language and guidelines with their legal counsel before finalizing any contract or agreement.

Return-to-Work

A return-to-work program is a set of protocols and guidelines to help injured workers reintegrate into their employment position after taking time off due to injury or illness. As soon as an employee is able, it is in everyone's best interest to return them to work in some capacity. Even

Mr. John Friedenbach, General Manager
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if an injured employee cannot return to their regular jobs right away, bringing them back as soon as possible by providing modified-duty tasks in line with any medical restrictions; can help them recover faster, feel productive, and maintain work relationships. A return-to-work program can also help reduce workers' compensation costs.

A written return-to-work program was shared that was updated in 2018. It is recommended that the District review the JPIA's sample Return to Work Policy and possibly incorporate the "Transitional Work" section. It included the best practice of limiting a modified or alternate work assignment to 90 days. This sample policy can be found alongside other HR resources on the JPIA's Human Resources Best Practices site. Please contact Patricia Slaven if there are questions related to these or any JPIA HR resources.

I want to thank Humboldt Bay Municipal Water District for its membership and participation in the pooled programs. Please contact me if you have questions or need further assistance. I can be reached at (530) 400-5629 or contact me via email at tbenzing@acwaipia.com.

Sincerely,



Thor Benzing, CSP, CEAS II
Senior Risk Control Advisor

407:tl

c: Dale Davidsen, Superintendent
JPIA Member Services
JPIA Risk Management Committee
J. Bruce Rupp, JPIA Board Member

RREDC/RCEA



REDWOOD COAST Energy Authority

March 2022 News and Updates from the Redwood Coast Energy Authority

RCEA's Commercial Rebate Catalog cover image

Our monthly updates summarize RCEA's progress during the previous month. Please check our website for more information, and please ask us if you have any questions.

Power Resources updates



● **Redwood Coast Airport Microgrid**

- Final tests are successfully completed and the team is wrapping up site commissioning.
- Some inverter hardware is still being corrected at the manufacturer. Pending successful repairs, the site will reach 100% operation during April.

● **Tierra Buena Battery Energy Storage**

The Tierra Buena battery energy storage project being developed by Ormat is set to reach commercial operation by April 7. It will begin providing resource adequacy for RCEA and our sister community choice energy program Valley Clean Energy as of June 1.

● **CA Community Power - Long Duration Storage**

The CC Power Board approved and executed agreements for the second LDS project (Goal Line proposed by the developer Onward). The RCEA Board will be receive agreements for the Goal Line project in Spring 2022 for review and approval.

● **Mailers**

Late Payment Notices:

At the January Board meeting, the RCEA Board of Directors approved reinstating Late Payment Notice to RCEA customers in alignment with PG&E resuming account shutoffs for customer non-payment. In total, 10 RCEA commercial customers with outstanding bills received their first Late Payment Notice in March.

● **Customer Accounts**

RCEA Rate Change:

In response to a PG&E rate change, RCEA instituted a rate change that went into effect on March 1st. Due to the rising cost of energy, both PG&E and RCEA electric generation rates increased. However, pursuant to RCEA Board goals, RCEA will continue to provide a 0.5% discount from PG&E rates.

To date			During February 2022	
<p>Residential EV Charging Equipment REBATE</p> <p>10 approved</p>	<p>Electric Vehicles REBATE</p> <p>21 approved</p>	<p>Heat Pumps REBATE</p> <p>36 approved 9 reserved</p>	<p>Non-Res Services ASSESSMENTS</p> <p>23 Completed</p>	<p>Residential Services ASSESSMENTS</p> <p>12 consultations 7 residential kits</p>



March 2022 News

Customer Energy Solutions updates



RCEA Commercial Rebate Catalog We're excited to announce we've published a wide range of rebates, now available on RCEAs website - <https://redwoodenergy.org/rcea-rebates>

RCEA's Contractor & Vendor Network

Current open enrollment for contractors and vendors now has 16 contractors and 5 vendors. The network is for RCEA customers, in support of their energy projects.

RuralREN application and legal filing submitted March 4, 2022.

Agency Projects - ongoing



City of Ferndale - solar and lighting installation is in progress

City of Rio Dell - solar & storage installed, generator in progress

Eureka City Schools - solar, storage, and electric bus charger installation project is nearing completion

Yurok Tribe – benchmarking & continuing to connect for multiple project locations

City of Arcata – working to outline an energy efficiency project at Arcata Community Center

City of Eureka – solar and lighting upgrades at Water Treatment Plant and High Tank

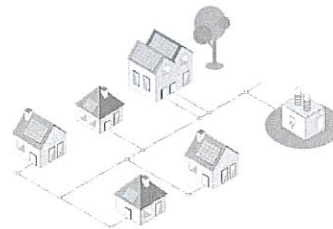
Burnt Ranch Elementary School – released RFQ/RFP for roof-mounted solar array

Community Grid Program

SGIP / Swell Energy

16 Sign ups so far

115 kW aggregate capacity of enrolled customers



Events

Solar & Battery First Responder Training in April 5-7, 3 locations, 3 different days. See website for details.

Advanced Transportation



Lee Valenzuela left RCEA for a position with the City of Denver.

RCEA staff submitted a CEC grant application for \$700,000 to install 10 more EV charging sites in the county.



BOARD OF DIRECTORS MEETING AGENDA

March 24, 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 16, 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. 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 at least 3 business days before the meeting. Advance notice enables RCEA staff to make their best effort to reasonably accommodate access to this meeting while maintaining public safety.

Pursuant to Government Code section 54957.5, all writings or documents relating to any item on this agenda which have been provided to a majority of the Board of Directors, including those received less than 72 hours prior to the RCEA Board meeting, will be made available to the public at www.redwoodenergy.org.

OPEN SESSION Call to Order

1. REPORTS FROM MEMBER ENTITIES

2. 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.

3. CONSENT CALENDAR

All matters on the Consent Calendar are considered to be routine by the Board and are enacted in one motion. There is no separate discussion of any of these items. If discussion is required, that item is removed from the Consent Calendar and considered separately. At the end of the reading of the Consent Calendar, Board members or members of the public can request that an item be removed for separate discussion.

3.1 Approve Minutes of February 24, 2022, Board Meeting.

3.2 Approve Disbursements Report.

3.3 Accept Financial Reports.

3.4 Authorize extension of Resolution No. 2022-2 Ratifying Governor Newsom's March 4, 2020, State of Emergency Proclamation and Authorizing Remote Teleconference Meetings of RCEA's Legislative Bodies, for the Extension Period March 27, 2022, Through April 25, 2022, Pursuant to Brown Act Revisions of AB 361.

3.5 Approve Selection of Caselle Hosted Software to Provide Financial and Payroll Software to RCEA for an Amount Not to Exceed \$22,045 for Purchase and Implementation and \$23,868 Annually for Maintenance and Support. Authorize the Executive Director to Prepare and Execute a Professional Services Agreement with Caselle for These Services.

4. REMOVED FROM CONSENT CALENDAR ITEMS

Items removed from the Consent Calendar will be heard under this section.

COMMUNITY CHOICE ENERGY (CCE) BUSINESS (Confirm CCE Quorum)

Items under this section of the agenda relate to CCE-specific business matters that fall under RCEA's CCE voting provisions, with only CCE-participating jurisdictions voting on these matters with weighted voting as established in the RCEA joint powers agreement.

5. OLD CCE BUSINESS

5.1. Demand Reduction Incentive Program (DRIP) Pilot Program Summary – Information only

6. NEW CCE BUSINESS – None.

END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS

7. OLD BUSINESS – None.

8. NEW BUSINESS

8.1. Regulatory and Legislative Policy Platform Adoption

Approve 2022 RCEA Policy Platform.

9. STAFF REPORTS

9.1. Report from Executive Director

a. Monthly RCEA Work Report

10. FUTURE AGENDA ITEMS

Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

11. CLOSED SESSION

11.1 Conference with real property negotiators pursuant to Government Code § 54956.8 in re: APN 001-115-007; RCEA negotiator: Executive Director; Owner's negotiating party: Disiere & Associates and Harris Plaza Properties; Under negotiation: price and terms.

12. RECONVENE TO OPEN SESSION

13. CLOSED SESSION REPORT

14. ADJOURNMENT

NEXT REGULAR MEETING

Thursday, April 28, 2022, 3:30 p.m.

This location of this meeting is to be determined.



BOARD OF DIRECTORS MEETING DRAFT MINUTES

February 24, 2022 - Thursday, 3:30 p.m.

Notice of this meeting was posted on February 19, 2022. Chair Stephen Avis 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 Avis stated that the posted agenda contained public teleconference meeting participation instructions.

PRESENT: Chair Stephen Avis, Alternate Director Leslie Castellano, Vice Chair Chris Curran, David Grover, Mike Losey, Sarah Schaefer (arrived 3:39 p.m.), Frank Wilson, Mike Wilson (arrived 3:33 p.m.), Sheri Woo. ABSENT: Scott Bauer. STAFF AND OTHERS PRESENT: Power Resources Director Richard Engel, Community Advisory Committee Chair Larry Goldberg, CAC Member Catherine Gurin, CAC Vice Chair Dennis Leonardi, CAC Member Kit Mann, Executive Director Matthew Marshall; Community Strategies Manager Nancy Stephenson; Clerk of the Board Lori Taketa.

Before calling the meeting to order, Chair Avis spoke in recognition of the disaster unfolding in the city of Kyiv and the suffering caused by the Russian invasion.

REPORTS FROM MEMBER ENTITIES

Director Losey reported that the Tesla battery storage project is fully online at the Fortuna water treatment facility, having passed all interconnection tests with PG&E.

Director Grover reported that Trinidad appointed Jack Tuttle as a new Councilmember. Councilmember Tuttle may be a future RCEA Alternate Director.

ORAL COMMUNICATIONS

There were no comments from the public on non-agenda items.

CONSENT CALENDAR

- 3.1 Approve Minutes of January 27, 2022, Board Meeting.
- 3.2 Approve Disbursements Report.
- 3.3 Accept Financial Reports.
- 3.4 Adopt Resolution 2022-2 Ratifying Governor Newsom's March 4, 2021, State of Emergency Proclamation and Authorizing Remote Teleconference Meetings of RCEA's Legislative Bodies for the Period February 24, 2022, through March 26, 2022, Pursuant to Brown Act Revisions.
- 3.5 Adopt Resolution 2022-3 Approving Updates to the Energy Risk Management Policy.

3.6 Approve Information Technology Technician Job Description and Revised Organizational Chart.

Director Losey requested that item 3.1, the minutes of the January 27, 2022, Board meeting be removed from the consent calendar. No member of the public requested an item be removed from the consent calendar.

M/S: Grover, M. Wilson: Approve the consent calendar except for item 3.1 – Minutes of January 27, 2022, Board meeting.

The motion passed with a unanimous roll call vote. Ayes: Avis, Castellano, Curran, Grover, Losey, Schaefer, F. Wilson, M. Wilson, Woo. Noes: None. Absent: None. Abstain: None.

Director Losey asked that the attendee list in the minutes be corrected to reflect his absence.

M/S: Losey, Grover: Approve consent calendar item 3.1 – Minutes of January 27, 2022, Board meeting with corrected attendee list.

The motion passed with a unanimous roll call vote. Ayes: Avis, Castellano, Curran, Grover, Losey, Schaefer, F. Wilson, M. Wilson, Woo. Noes: None. Absent: None. Abstain: None.

Chair Avis stated there was no Community Choice Energy business on this meeting agenda.

OLD BUSINESS

5.1 Community Advisory Committee Member Appointments

Executive Director Marshall reported that an ad hoc Board subcommittee reviewed applications and nominated four people to fill the at-large Community Advisory Committee seats. Director Woo thanked the applicants and described the committee's decision-making process and criteria. The nomination subcommittee requested more effort to recruit applicants from different parts of the community and requested enlisting the Racial Equity Subcommittee to help find applicants to fill the next vacancies. The diversity of the current applicant pool's community involvements, energy and transportation experience and length of time spent in Humboldt was praised. Director Mike Wilson expressed appreciation for County nominee Jerome Qirazi's experience and institutional knowledge.

There were no responses from the public to Chair Avis' invitation for comment. Chair Avis closed the public comment period.

M/S: Grover, Losey: Reappoint Elizabeth Burks, Roger Hess, Ethan Lawton, and Dennis Leonardi to the Fortuna, Rio Dell, Humboldt Bay Municipal Water District and Ferndale seats, respectively; appoint Jerome Qirazi to the vacant County seat; and appoint/reappoint Colin Fiske, Larry Goldberg, Emily Morris, and Jeff Trirogoff to the at-large Community Advisory Committee seats; for Two-Year Terms Ending on April 9, 2024.

The motion passed with a unanimous roll call vote. Ayes: Avis, Castellano, Curran, Grover, Losey, Schaefer, F. Wilson, M. Wilson, Woo. Noes: None. Absent: None. Abstain: None.

5.2 RePower Humboldt Strategic Plan Status Update (Information only)

Executive Director Marshall gave the biannual report on progress in the strategic plan's four categories.

In Regional Planning and Coordination, the CORE Hub launched in September after two years of development. This project will seek ways to move climate and resilience issues forward and bring funding for these projects into the region. RCEA, its offshore wind partners and the CORE Hub provided comments on the offshore wind BOEM lease process' draft environmental impact assessment. RCEA continues to work with staff from the cities and County on the regional climate action plan development.

In Low-Carbon Transportation, the Arcata Community Center electric vehicle charging stations began operations and development of the airport EV charging stations is underway. Staff is working on a California Energy Commission grant application for additional charging stations. Eligible electric vehicle and charging station applicants are receiving rebates and there is interest in a second round of electric bike rebates. Funding for these transportation rebates comes from RCEA's Community Choice Energy program revenues. Staff is starting work on a medium- and heavy-duty EV planning grant application.

In Integrated Demand-Side Management, also known as Customer Energy Solutions, RCEA received a \$161,000 grant to expand the building electrification heat pump program which is funded through CPUC grants and RCEA's Community Choice Energy program revenues. Staff are in the final stages of submitting a CPUC Rural REN funding proposal and are launching a customer rebate catalog listing an increased number of customer rebate and incentive programs.

In Energy Generation and Utility Services, the airport microgrid is now the largest operating Humboldt County solar array, delivering power to the grid and participating in the California energy market. The last phases of testing and commissioning for islanding are underway and a ribbon cutting event is being planned for June. Michael Furniss completed his contract to investigate small, local hydropower development and alternative uses of forest biomass. RCEA enrolled in the California Arrearages Payment Program. RCEA customers who fell behind in payments will receive about \$1.5 million in bill credits. The first California Community Power joint procurement agreement for long-duration storage is on this agenda for Board approval. Construction on the 5 MW Tierra Buena battery storage project, a joint procurement with Valley Clean Energy which satisfies some of RCEA's new energy capacity construction requirements, is 90% complete. Battery performance degradation, recycling and consideration of these issues in the Tesla contract were discussed.

Chair Avis invited public comment. There were no comments from the public. Chair Avis closed the public comment period.

5.3. California Community Power Long-Duration Storage Agreement with LS Power (Tumbleweed)

Power Resources Director Engel reported on the state procurement mandates to ensure grid reliability, this mandate's requirement of construction of new long-duration energy storage which can discharge electricity at full capacity over eight hours or longer, and the joint powers authority (JPA) formed by community choice aggregators to jointly procure mandated new energy resources. The Tumbleweed long-duration storage project has received attention for being one of the first long-duration storage contracts to near execution in California by a JPA of Community Choice Aggregators rather than an investor-owned utility. The novelty of the collective procurement arrangement necessitated complex agreement structures and new contingency arrangements which were reviewed in more detail by a Board ad hoc subcommittee. The work to develop these agreements to satisfy both procuring entities and developers will benefit future large-scale energy resource development projects such as offshore wind.

M/S: Losey, Grover: Delegate authority to the Executive Director to execute on behalf of Redwood Coast Energy Authority as a member of California Community Power the following agreements and any necessary ancillary documents for the Tumbleweed Energy Storage for Long Duration Storage with a delivery term of 15 years starting at the Commercial Operation Date on or about June 1, 2026, for an RCEA share not to exceed 3.82 MW:

- a. **Project Participation Share Agreement (PPSA) by and among Redwood Coast Energy Authority, California Community Power and participating community choice aggregators (CCAs),**
- b. **Energy Storage Service Agreement (ESSA) - Buyer Liability Pass Through Agreement (BLPTA) by and among Redwood Coast Energy Authority, California Community Power and Tumbleweed Energy Storage, LLC,**
- c. **Operations Agreement (COA) by and among Redwood Coast Energy Authority, California Community Power and participating CCAs for Tumbleweed (agreement to be developed).**

The motion passed with a unanimous roll call vote. Ayes: Avis, Castellano, Curran, Grover, Losey, Schaefer, F. Wilson, M. Wilson, Woo. Noes: None. Absent: None. Abstain: None.

NEW BUSINESS

6.1. Community Advisory Committee Annual Report to the RCEA Board

Executive Director Marshall described the process to institute an annual Community Advisory Committee report to the Board to encourage a more interactive process between the CAC and Board.

CAC Chair Goldberg reviewed the committee's past year accomplishments in the areas of assessing alternate biomass uses, drafting agency comments on the North McKay Ranch Project in relation to RePower Humboldt strategic plan goals, bond and alternate financing energy resilience project identification, and community outreach. Chair Goldberg reviewed the CAC's 2022 work goals, on which the Board was previously asked to comment and provide feedback.

CAC members in attendance described the committee's good internal working relationship despite differences of opinion and the CAC's function as a liaison to the community about RCEA projects, programs and issues. The need for the CAC to explain the region's energy challenges and opportunities to the community was discussed, as was the committee's coordination with staff and knowledge of agency efforts. The directors thanked the CAC members in attendance for their work, for their input, for being a venue for in-depth conversation about energy issues, and for bringing value to the agency. Director Schaefer introduced herself as the new Board liaison to the CAC.

Chair Avis invited public comment. There were no comments from the public. Chair Avis closed the public comment period.

STAFF REPORTS

7.1. Report from Executive Director Matthew Marshall

Executive Director Marshall reported that the Harbor district did not receive the federal infrastructure grant for which RCEA contributed funds to develop a proposal. The developed proposal material will be used to pursue other harbor redevelopment funding. A summary of RCEA's work in February is available on the Board of Directors webpage. The CPUC has delayed making a solar net energy metering tariff decision. Staff is watching for a revised proposal.

Chair Avis commented that rural counties have a poor record of winning grants and that working with a good grant writer is a worthwhile investment to win infrastructure grants.

There were no responses from the public to Chair Avis' invitation for comment. Chair Avis closed the public comment period.

FUTURE AGENDA ITEMS

There were no requests for future agenda items from the directors or the public.

The meeting was adjourned at 4:40 p.m.

Lori Taketa
Clerk of the Board



Redwood Region Economic Development Commission
 325 2nd Street, Suite 203, Eureka, California 95501
 Phone 707.445.9651 Fax 707.445.9652 www.rredc.com

REDWOOD REGION ECONOMIC DEVELOPMENT COMMISSION

The Regular Meeting of the Board of Directors, March 28, 2022, has been cancelled.

A Special Meeting of the RREDC Board will be held March 31, 2022 at 4 pm PT
 at Jefferson Community Center, 1000 B Street (at Clark Street) in Eureka

- I. **Call to Order**
- II. **Approval of Agenda for March 31, 2022 and Minutes from February 28, 2022**
- III. **Public Input for non-agenda items**
- IV. **Program – Facilitator Heather Equinoss – Envisioning RREDC Board Priorities for Next Five Years, and Setting Goals**
- V. **New Business** None
- VI. **Old Business** None
- VII. **Reports – No Action Required** None
- VIII. **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.