



**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

**Board of Directors Meeting**

**January 2020**



# MINUTES



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



**Minutes for Meeting of Board of Directors**  
**December 12, 2019**

**A. ROLL CALL**

President Woo called the meeting to order at 9:01 am. Director Rupp conducted the roll call. Directors Fuller, Hecathorn, Latt, Rupp and Woo were present. General Manager John Friedenbach, Superintendent Dale Davidsen, Business Manager Chris Harris and Board Secretary Sherrie Sobol were present. Samantha Ryan, Regulatory Analyst was present for a portion of the meeting. Pat Kaspari of GHD and Legal Counsel Ryan Plotz were present for a portion of the meeting and Legal Counsel Anne Baptiste participated via telephone for a portion of the meeting.

**B. FLAG SALUTE**

President Woo led the flag salute.

**C. ACCEPT AGENDA**

On motion by Director Latt, seconded by Director Fuller, the Board voted 5-0 to accept the agenda.

**D. MINUTES**

On motion by Director Rupp, seconded by Director Hecathorn, the Board voted 5-0 to approve the Minutes of the November 14, 2019 Regular Meeting.

**E. PUBLIC COMMENT**

No public comment was received.

**F. CONSENT AGENDA**

On motion by Director Rupp, seconded by Director Fuller, the Board voted 5-0 to accept the Consent Agenda.

**G. CORRESPONDENCE**

There was no correspondence to discuss.

**H. CONTINUING BUSINESS**

Water Resource Planning

Local Sales

Mr. Friedenbach stated Nordic Aquafarms is moving forward. The District will meet with their water quality staff in January.

Transport

Mr. Friedenbach shared that the Board of Supervisors may be changing their support for the Sites Reservoir. This reservoir is the closest reservoir for our water to potentially go into the state project. Director Rupp noted that the County's concerns are about diverting water out of the Trinity River. Although he is supportive of the Sites Reservoir, he is against diverting water from the Trinity.

Instream Flow

President Woo stated the process for dedicating instream flow is moving forward. The committee will be meeting next week to narrow down and define the project description.

Cannabis affecting Mad River Watershed

Mr. Friedenbach shared articles regarding cleanup and enforcement of illegal grows. Director Rupp commented that increased taxes and increased regulatory environment undermines the ability to have a good cannabis program in Humboldt County. This results in more illegal and unregulated grows to achieve a higher profit.



Minutes for Meeting of Board of Directors  
December 12, 2019

Ordinance 13 PUBLIC HEARING

President Woo opened the Public Hearing at 9:15 a.m. She outlined the process stating staff will provide a report, the public will have opportunity to comment and then the Board will deliberate after receiving the information. Ms. Harris provided the staff report. She stated there are no retail water rate changes proposed in this revision. A notice regarding the public hearing was published twice in the newspaper and postcards were sent out to the customers as well. She noted the main change to Ordinance 13 is Appendix A, policy on discontinuance of residential water service. The appendix includes notifications, payment arrangements, account appeals, fees, service discontinuance and service reconnection. This policy complies with all aspects of the Water Shutoff Protection Act (SB998) effective February 1, 2020. President Woo opened the public hearing. Having received no public comment, she closed the public hearing and the Board began deliberations. On motion by Director Latt, seconded by Director Fuller, the Board voted 5-0 by roll vote to approve the revised Ordinance 13.

Board Vacancy

Last month, the Board directed staff to follow the appointment process for a new Director for Division 3. Mr. Friedenbach outlined the process and stated the notice is scheduled to run three times in the North Coast Journal, is posted at the District and on our website as well at Humboldt Community Services District, Freshwater School and the Moose Lodge in Cutten. Applications are due by 5 pm on January 8, 2020. The Board can review the applications at the regular Board Meeting on January 9. Candidate questions will be distributed on the 10<sup>th</sup> and Mr. Friedenbach suggested scheduling Special Meetings to review the responses from the questions, and to conduct interviews. The Directors agreed to have Special Meetings on January 29 at 4 pm and February 26 at 3 pm.

Emergency Succession Plan Policy

Last month the Board discussed the General Manager Emergency Succession Plan Policy and recommended some changes. The policy is was brought back with the changes outlined in red based on previous input. Director Latt suggested leaving out names of staff and only listing job titles. The Board concurred. On motion by Director Fuller, seconded by Director Rupp, the Board voted 5-0 to approve the General Manager Emergency Succession Plan Policy as amended.

CLOSED SESSION

President Woo recused herself from the first item of discussion due to a potential conflict and left the room. The Board entered into closed session at 2 pm with legal counsel for anticipated litigation/ initiation of litigation pursuant to paragraph (4) of subdivision (d) of Section 54956.9 (2 cases). Director Latt reported out on the first item. He stated there was no reportable action. President Woo, who returned after completion of the closed session on the first matter, reported out on the second item and stated there was no reportable action.

Short-Term Vacant Land Rental Agreement with Vivid Green, LLC for a one-acre portion of the District's real property located at 17350 Mad River Road, Ruth, California, Trinity County Assessor Parcel Number 020-100-35-00

On motion by Director Rupp, seconded by Director Hecathorn, the Board voted 5-0 to approve the Short-Term Vacant Land Rental Agreement with Vivid Green, LLC.





Minutes for Meeting of Board of Directors  
December 12, 2019

I. **NEW BUSINESS**

Resolution 2019-20 Recognizing and Honoring the Outstanding Service of Barbara Hecathorn

President Woo read Resolution 2019-20 honoring the service of Director Hecathorn. The Board voted 5-0 by roll call vote to approve the resolution. The Directors expressed their appreciation for Director Hecathorn’s service and stated her presence will be greatly missed.

Resolution 2019-21 Recognizing and Honoring the Outstanding Service and Achievements of Brian and Lisa Newell

Mr. Friedenbach stated typically the employee would be present to receive the resolution. Brian and Lisa Newell will be at Essex tomorrow and the resolution will be presented to them then. Director Rupp read Resolution 2019-21 honoring the service of Brian and Lisa Newell. The Board voted 5-0 by roll call to approve the resolution.

Safety Incentive Reward

Mr. Friedenbach stated employee and public safety is a top priority for the District. The Board previously approved a safety incentive program to recognize this. He asked the Board to consider expanding the program given various safety complexities involved with the various job classifications here at the District. The Board had a lengthy discussion with options ranging from increasing the amount and number of awards to eliminating the program altogether. The majority of the Board agreed they did not want to take away the financial incentive but suggested another focus. They requested staff bring back a suite of alternatives for discussion at the next Board meeting.

Retail Rate Study 2020

As required by Proposition 218, retail water rates must not exceed the cost-of service. To ensure this requirement is met, the industry standard is to conduct a retail rate study every five years. Ms. Ryan stated the District’s last rate study was conducted in 2015 and the rates were approved through June 30, 2021. She reviewed the three analyses used in the study (revenue requirement, cost-of-service and rate-design) and the next steps in the process. Staff proposed the following schedule: present preliminary numbers to the Board in August 2020, hold a public hearing in February 2021 and retail rates for Humboldt Bay customers would go into effect July 1, 2021 if passed at the public hearing. Director Rupp inquired if this was being done in-house or via a consultant. Ms. Harris stated it is primarily being done in-house. Staff may request consultation services from Rebecca Crow at GHD given her experience in this area and past experience with District retail rate studies.

J. **REPORTS (from Staff)**

1. **Engineering**

12kV Switchgear Replacement (\$441,750 District Match) construction contract

Mr. Kaspari stated the bid opening was December 10, 2019. The low bid is higher than the Engineer’s estimate for construction. He contacted CalOES and they believe they can fund the additional costs. A formal request for supplemental HMG grant funding will be submitted to CalOES. The apparent low bidder is Sequoia Construction Specialties. Mr. Kaspari stated they are a local contractor and he has worked with them previously and they do a good job. He contacted references and Sequoia received glowing references for the projects they worked on. He recommended the Board award the 12kV Switchgear Relocation Project to Sequoia Construction Specialties in the amount of \$2,448,063. On motion by Director Rupp, seconded by Director Fuller, the Board voted 5-0 to award the bid to Sequoia Construction Specialties.



Minutes for Meeting of Board of Directors  
December 12, 2019

Mad River Cross Sections

GHD has been conducting the Cross-Section Surveys for over a decade. Mr. Kaspari stated this year, there were two areas of concern. The first one was the weir area downstream of Collector 1 and upstream of Pump Station 6. They had a game plan to fix it but it needs to be revised. The other area is near Collector 4. They tried to match the bank elevation with gravel this year but will have to see what the river does this winter to determine if the storm damage emergency repair work was effective and long lasting.

Lazzar Easement Amendment

Mr. Friedenbach stated the District has a floating easement for its pipelines. When property owners request that our pipeline easement be fixed at thirty-foot, the District works to ensure it retains repair and maintenance access to our pipelines within the 30-foot pipeline easement. Mr. Lazzar has agreed to a twelve and a half-foot buffer on either side of the thirty-foot easement for a total of 55 feet. Mr. Lazzar stated his attorney had not reviewed the agreement as of this morning. Mr. Friedenbach requested the Board approve the agreement pending review by Mr. Lazzar's attorney and authorize staff to make minor adjustments if needed. It is understood that any proposed significant changes would come back before the Board for decision. On motion by Director Fuller, seconded by Director Rupp, the Board voted 5-0 to approve the easement and allow staff to make minor adjustments if needed.

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

Mr. Kaspari stated CalOES has forwarded the project to FEMA for funding consideration. It will likely be about six months before funding is approved or denied.

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

Mr. Kaspari stated he is hopeful the project funding approval will be received in Spring 2020.

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

This project has been waitlisted by FEMA.

Status report re: other engineering work in progress

The North Coast ASCE dinner is February 8, 2020 and the District Board and management are invited. The Mad River Crossing will be discussed.

**2. Financial**

Financial Report

Ms. Harris provided the November 2019 financial statement & vendor detail report. She noted the Salary and Employee Benefits budget is close to target but dues and subscriptions is a bit higher than expected. Director Rupp reviewed the bills and stated all was in order. On motion by Director Rupp, seconded by Director Latt, the Board voted 5-0 to approve the November financial report and vendor statement in the amount of \$303,488.47.

Humboldt County Quarterly Interest Apportionment Rate Report April-June 2019

Ms. Harris stated the latest data goes through June 30, 2019. No current data is available.

CalTrust Investment Options and Investment Policy Revision

At the November meeting, staff was asked to provide additional information regarding moving District Reserve Funds currently held in Humboldt County Investment Trust Accounts to other investment options. Ms. Harris provided three detailed scenarios of options for LAIF and CalTrust investments. She stated her concerns with the County investment is not the rate of return but the lack of transparency



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



**Minutes for Meeting of Board of Directors**  
**December 12, 2019**

and timely reporting by the County. The reports are consistently late and it is difficult to get an accurate accounting of the District's funds. Staff is recommending the Board join CalTrust as regular member, not a JPA member and approve a revised investment policy reflecting the change. The Board discussed the options and confirmed liquidity and references. The Board was leaning towards Option Two which takes advantage of investment accounts with the highest returns and potentially increasing investment returns by \$20,000. After additional discussion, on motion by Director Rupp, seconded by Director Latt, the Board voted 5-0 to approve staff recommendation to join CalTrust as a participating member, choose investment Option Two and approve the revised Investment Policy reflecting the changes.

**3. Operations**

Mt. Davidsen provided the November Operational Report. A new crane inspection service was on site to inspect all District cranes. They were very thorough and detailed and the inspections went well. Several staff went to training for Water Diversion reporting and Instrumentation Calibration in Ukiah. The Safety Meeting topics included SDS and Community Right To Know. Spill Prevention and Sexual Harassment Prevention.

The power went out at Essex on November 26 due to a storm and did not come back on until the evening of November 29. This was considered a long outage and staff did a great job ensuring generators were running and reservoirs were filled.

Mr. Davidsen requested approval to surplus 28 bags of unused Sika products. These are left over from spillway repairs. The product has a short shelf life and will be not be usable for repairs next year if needed. On motion by Director Rupp, seconded by Director Latt, the Board voted 5-0 to approve the surplus of the Sika products.

**K. MANAGEMENT**

**CSDA**

Mr. Friedenbach stated the Humboldt Area Chapter met last week. There are about ten core people that attend on a regular basis. At the meeting, he was elected Treasurer for calendar year 2020.

**Humboldt Coastal Resilience Project Phase 3 Beach-Dunes Transect Profiles**

Mr. Dan Edrich addressed the Board and stated a resilience grant should add plants, not remove them. He stated the dunes are being adversely impacted by the District's grant and he inquired what the Board intended to do and who would be assigned to keep an eye on the process. Mr. Friedenbach clarified this is not the District's grant. The District previously contributed some funding to the Dunes Climate Ready Project to gain scientific data regarding transects along the District pipeline. The Humboldt Coastal Resilience Project (a new grant to continue the previous three- year grant) is being continued for three years through grants from the Ocean Protection Council and the California State Coastal Conservancy. Director Rupp stated our interest in the Dunes Climate Ready Project was our infrastructure, not the grant overall. Mr. Edrich asked again what is the resilience factor of a destabilized dune and who will be assigned to watch the District pipeline. President Woo thanked Mr. Edrich for taking the time to speak to the Board. Mr. Friedenbach stated the pipeline in the dunes area is inspected regularly. Last spring the pipeline had an area of exposure of about two feet in length and two inches in depth. This was a result foot traffic via pedestrians taking shortcuts to access the beach. The pipeline has been covered and a sign requesting pedestrians stay on the path is in place.

**Report out on ACWA Conference**

Mr. Friedenbach reported out on his attendance at the Fall ACWA Conference. He attended informative sessions and shared information on Jurassic Parliament.



Minutes for Meeting of Board of Directors  
December 12, 2019

**L. DIRECTOR REPORTS & DISCUSSION**

**1. General -comments or reports from Directors**

Director Fuller stated she will be arriving late at the January meeting.

Director Rupp stated the Eureka Chamber of Commerce received a small grant to develop a leadership program. Tuition will be about \$1700 per person. Director Latt inquired how the Chamber will select leadership students, given their previous partisan leaning. Director Fuller noted that Ms. Gelinas has a leadership program that has been in existence for some time now.

President Woo stated the General Manager’s review will be coming up. She asked the Directors to start thinking about the process.

Director Hecathorn stated she will miss everyone and thanked the Board and staff for a good experience as Director.

**2. ACWA**

Director Rupp reported out on his attendance at the Fall ACWA Conference. He shared information on Carrum Health, membership, desalination and cybersecurity.

He also attended a Region 1 meeting. The next meeting will be on January 13, 2020 at Valley of the Moon in Sonoma County.

**3. ACWA – JPIA**

Director Rupp stated the property and liability rates have increased between 50 and 70 percent however, the rate increase was not passed down to the members. Instead, reserves were used to cover the increase this year however we can anticipate increases in future years.

**4. Organizations on which HBMWD Serves: RCEA, RREDC**

President Woo state RCEA is moving forward with their strategic plan. Director Latt stated the RREDC meeting was cancelled.

**ADJOURNMENT**

The meeting adjourned at 4:00 pm.

Attest:

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

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

**CONSENT**

# My Word: Looking past Terra-Gen, to our energy future

SECTION F PAGE NO. 1

By GEORGE WALLER |

December 21, 2019 at 8:00 am *Times-Standard*

I am amazed by all the work on the Terra-Gen project process, what a marathon of hard work by those who put in the hours necessary to get us to this point! Many thanks to these folks.

So there is a loss of the benefits from this project, but we do gain in maintaining the possibility of a better project. This opportunity is still ours because the tribal community and so many others stood up to defend our resources and local control over how we use them. Thank you again!

I like the idea of a locally controlled Community Service District to deal with utilizing our energy resources. Humboldt Bay Municipal Water District can be a model for this. The HBMWD makes all of its decisions for planning, production, delivery, and billing of our water resources, based on what is best for the members, who are the users of the water in Arcata, Eureka, McKinleyville, Fieldbrook, Manila. If we members do not like any of these decisions, we members can go to the meetings and work it out, adjust things, or vote for a new directors. All of the benefits from our water resource go to the members, the users, of the water. There is no corporation reaping profit benefits from us for delivering our own water to ourselves.

The Terra-Gen model would have been much like the Pacific Gas and Electric Co. model. In this case, all of the decisions regarding planning, construction, upkeep, production, and billing are made on behalf of investors. I am not throwing stones here — we need our investors — but it is just a fact that the top priority for all corporate business is, by definition, return for the stockholders. We have seen where that gets us with PG&E's deferring infrastructure maintenance while paying dividends to its investors.

I like the idea of the local Tribal community and their supporters, providing guidance to an elected local board which would direct the planning, building, implementation, and production of our energy resources. I like the idea of this board making the energy interests of it's members and the protection of resources (including culture and climate) its first priorities. I like the idea of the community owning the infrastructure rather than a publicly traded corporation owning it and charging us every month, like rent, to pay its investors.

The good news is that we still have opportunity to own and operate our own energy resources (PG&E may be having a fire sale), to insure ourselves a reliable supply of energy and then we can sell any abundance of energy to the California grid at the going price. We can do this in a thoughtful way that uses our natural gifts of wind and sun respectfully, in concert with the tribal Elders, for local and global benefits, and not for a profit to out-of-county stockholders.

What a gift to our children! Not only a respected and protected local environment supplying reliable energy, with a CSD model our children will not be saddled with sending money to global investors every month, as I have been for over 50 years as part of my PG&E bill ... but not my water bill!

You may call me a dreamer, but we already have a great local model for a resource CSD, which is the HBMWD. They operate the dam at Ruth Lake and provide water delivery to most of Northern Humboldt. We members/users own the dam and the infrastructure and all the benefits come to us and stay local. We can do the same thing with our energy resources. Sacramento did an electric CSD. Humboldt can, too!

*George Waller resides in McKinleyville.*



## Throwback Thursday: Remembering the big flood 55 years later

Christmas delayed for many because of disaster



Fred Dutton, right, is pictured in Weott along with an Army pilot (not name known) in December 1964. (U.S. Army photo, courtesy of Pat Dutton)

By **HEATHER SHELTON** | [hshelton@times-standard.com](mailto:hshelton@times-standard.com) | Times-Standard  
December 26, 2019 at 1:55 am

It was 55 years ago, but the floods that devastated parts of Humboldt and Del Norte counties during the height of the 1964 Christmas holiday season are still fresh in Pat Dutton's mind.

Her husband, Fred Dutton, was a deputy sheriff stationed at the Garberville sub-station when the relentless storms arrived and the damaging flood ensued.

According to Times-Standard archives, the flood officially began Dec. 21, 1964, and reached its peak on Dec. 23, though flooding continued until early January 1965. The flood caused more than \$190 million in damage to the North Coast region, according to "California High Water 1964-1965," a publication put out in 1966 by the California Department of Water Resources. Some 2,400 residences, 400 small businesses and more than 1,100 farm buildings were destroyed or heavily damaged. Twenty-nine people died as a result of the 1964 disaster.



Pictured is the front page of the Humboldt Standard on Dec. 23, 1964. (Times-Standard archives)

Pat Dutton had just moved to Humboldt County with her new husband in August 1964. According to Times-Standard archives, Fred Dutton was a 1958 Eureka High School graduate and was attending Santa Rosa Junior College, majoring in law enforcement, when he met his wife-to-be in the spring of 1959. He began his law enforcement career in 1961 with the Sonoma County Sheriff's Office. He later served in the U.S. Army before returning in late 1963 to Humboldt County, where he served with the Sheriff's Office until he retired in December 1997.

Fred Dutton — who lived in Redway with his wife — was working in the heavily hit Weott area during the 1964 flood and, for a time, Pat Dutton said she wasn't sure of her husband's safety or well-being.

"I didn't know if he was dead or alive," she said in a phone interview with the Times-Standard. "... When he and ... the lieutenant at the time, when they drove into the yard, I ran out the door and I fell flat in the mud."

Pat Dutton — who moved from Humboldt County to Redding about a year ago to be closer to family — also remembers that the holidays were celebrated a little later than usual because of the flood.

"Christmas didn't happen for us until March when my family could get through," she said.

Fred Dutton passed away in 2008. He and his wife — who have three sons, Rick, Scott and Steven — had been married for 43½ years.

## **PG&E leaders meet privately with sheriff's office, Rex Bohn to discuss future outages**

By **RUTH SCHNEIDER** | [rschneider@times-standard.com](mailto:rschneider@times-standard.com) | Eureka Times-Standard  
PUBLISHED: December 9, 2019 at 4:31 pm | UPDATED: December 9, 2019 at 4:36 pm

The following is a press release from the Humboldt County Sheriff's Office:  
On Oct. 31, 2019, Supervisor Rex Bohn and Sheriff William Honsal sent a letter to Pacific Gas and Electric Company (PG&E) outlining the community's concerns and frustration with PG&E's handling of the Public Safety Power Shutoffs (PSPS). In response to that letter, PG&E executives and Humboldt County officials met today, December 9, to discuss the recent PSPS events, the concerns of our community regarding these events and progress towards the county being powered by local power generating facilities.

Among those in attendance were PG&E President and CEO of Utilities Andrew Vesey, Supervisor Rex Bohn, Sheriff William Honsal, OES Manger Ryan Derby, PG&E Senior Manager Carl Schoenhofer, Senior Public Safety Specialist Jeff Lee, Humboldt Bay Generating Station Director Steve Royall and PG&E Public Affairs specialist Alison Talbot.

During the meeting, PG&E committed to explore the feasibility of utilizing the local Humboldt Bay Generating Station to maintain power for portions of Humboldt County during future PSPS events. A project is currently underway to determine the best way to generate and regulate power from the Humboldt Bay Generating Station, with a goal of completion being mid-year 2020. PG&E also committed to keep the county's power grid energized for as long as possible when adverse fire weather could trigger a PSPS, allowing county residents more time to prepare and plan for an outage.

Both PG&E and Humboldt County are dedicated to improving communication with the utility company to ensure that county residents remain informed and prepared. Both Supervisor Bohn and Sheriff Honsal were pleased with the meeting with CEO Andrew Versey.

"This is a solid step in the right direction to ensure good communication and coordination with PG&E for future PSPS events," Sheriff Honsal said.

PG&E CEO Versey pledged to have future meetings to update the county on the progress PG&E is making with the local power generating station and the North State power grid. As progress is made, county leadership will keep the community informed.

Sheriff Honsal and Supervisor Bohn would like to thank all of our local PG&E employees for working so hard to keep the power on for this community.



## **HUMBOLDT COUNTY BOARD OF SUPERVISORS ASKS FOR ADDITIONAL ENVIRONMENTAL REVIEW OF PROPOSED DIVERSIONS OF TRINITY RIVER WATER TO SACRAMENTO RIVER**

---

December 10, 2019 Robin Fleckles One comment

**Press release from Save California Salmon: *(Please remember that this is not neutral reporting but a press release from one side of a situation).***



**Spring Chinook [Photo from the Salmon River Restoration Council and Watershed Research  
And Training Center]**

Today the Humboldt County Board of Supervisors unanimously voted to reconsider its support for the proposed Sites Reservoir project in the Central Valley due to concerns it would have serious impacts on the Trinity River fishery and the county's water rights.

The board voted to send a letter to the Sites Authority asking for an additional environmental review of the project, and a letter requesting protections for the Trinity River's water and reservoir carry over storage in all future water rights proceedings.

"Congratulations to all five Humboldt County Supervisors for doing the right thing to protect Humboldt County's water rights, environment and economy by sending the two letters." said Tom Stokely from the Pacific Coast Federation of Fishermen's Associations and Save California Salmon. Stokely helped write the letters with the supervisors.

The decision was based on a new hydrology report that shows temperature impacts to the Trinity River from the Sites Reservoir Project diversions to the Sacramento River. The Trinity River is the only out of basin diversion to the Central Valley state and federal water projects.

Over a dozen people from the Klamath and Trinity River commented in support of the resolutions, and expressed concern that other proposals such as the controversial permanent water contract for Westlands Water District and the new federal water project operations proposed by the Trump administration would also negatively impact the Klamath and Trinity River salmon. Those testifying included Hoopa High school and Trinidad elementary students.

“I should be in school learning geometry, figuring out what I want to do with my life, said Kylee Sorrell a sophomore at Hoopa High School, “but I am here fighting for my culture, for the water and most importantly for the salmon.”

The Yurok Tribe, who recently forced agencies to reconsider Klamath River flows and helped to win a major water rights taking lawsuit related to the 2001 Klamath River fish kill also expressed support for the board’s decisions.

“The Trinity River is a foundation of our fish runs, and our duty is to protect them,” said Mike Belchik Senior Water Policy Analyst for the Yurok Tribe. “ We stand firm in our belief that the Trinity River must be protected from harm as a result of the proposed operation of Sites Reservoir, and we fully support and join in Humboldt County’s actions to protect the Trinity River.”

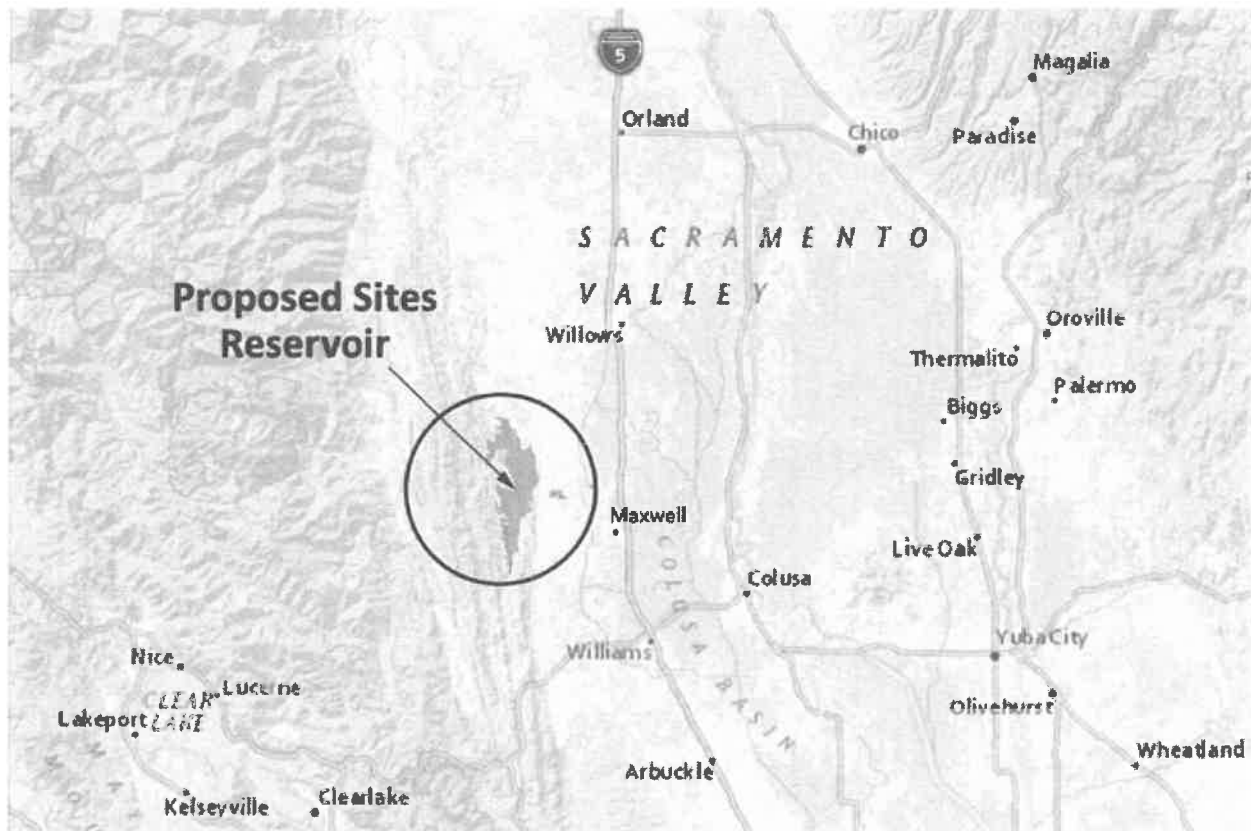
LOST COAST OUTPOST

RYAN BURNS / TUESDAY, DEC. 10, 2019 @ 4:24 P.M.

## TODAY in SUPES: County Asks for Assurance That Trinity River Water Won't Get Diverted to New Central Valley Reservoir

Humboldt County officials are rethinking their support for a massive new reservoir being developed in the Central Valley after learning that the project could negatively impact the Trinity River.

The project in question is called Sites Reservoir, a proposed \$5.1 billion water storage facility that's been in the works for more than 20 years. The massive reservoir, capable of holding 1.8 million acre feet of water, would be located in Glenn and Colusa counties, northeast of Clear Lake along the I-5 corridor.



*Detail of a Sites Reservoir Project map. | Image courtesy County of Humboldt.*

Last year the county asked for and received assurances that this project won't cause any additional diversions of Trinity River water to the Sacramento Basin. We say "additional" because much of the Trinity's flow already gets diverted via the Central Valley Project, which sends water from Trinity Lake into the Sacramento River.

In January of 2018, the chair of the Sites Project Authority (the government agency that would own and operate the reservoir), responded to the county's concerns with a letter to the Humboldt County Board of Supervisors promising that no Trinity River water would be diverted as a result of the project.

However, a technical report conducted on behalf of the Pacific Coast Federation of Fishermen's Association and Save California Salmon suggested otherwise. It identified potentially significant impacts to the Trinity.

And so today, the Board of Supervisors voted unanimously to send a pair of letters requesting further environmental review and renewed promises from both the Sites Project Authority and the U.S. Bureau of Reclamation.

A draft letter to Sites Project Authority Chairman Fritz Durst notes that modeling published in the project's draft environmental documents show the project "would likely cause irreversible harm to migrating salmon" in the Trinity. The letter asks that some binding language be added to the project's water rights application. Here's that proposed language:

Trinity River water shall not be used to fill Sites Reservoir unless the Trinity River Division of the Central Valley Project is releasing water as a result of storage conditions requiring "Safety of Dams" releases beyond normal operating plans and concurrently when Shasta Reservoir is making flood control releases. Furthermore, Humboldt County's 1959 water contract with the Bureau of Reclamation, Trinity River Record of Decision (ROD) flows, and releases to implement the Bureau of Reclamation's Long-Term Plan to Project Adult Salmon in the Lower Klamath River shall not be reduced or negatively impacted in any way as a result of any Sites Reservoir decisions, modeling, operational plans, and water rights petitions.

If the Sites Project Authority can't agree to the county's terms, the letter states, "we will consider whether to withdraw our conditional support for the proposed Sites Reservoir Project."

The second letter approved at today's meeting will be sent to both Durst and the regional director of the Bureau of Reclamation. It asks that the Draft Environmental Impact Statement/Environmental Impact Report be "revised and recirculated prior to certification due to significant new information regarding the expected adverse environmental effects of the project's proposed operations."

The letter notes that significant impacts to the Trinity River "would cause irreversible harm to Humboldt County's commercial, sport, and tribal fisheries."

The people who got up and spoke publicly on this issue echoed those sentiments.

"The Trinity River has zero extra water," said Weitchpec resident Isaac Kinney.



Daniel Cordalis, a member of the Yurok Tribe, said, "Every drop of water that comes out of the Trinity now is an extreme fight," and he voiced support for the two letters.

Margot Robbins said she'd traveled to the meeting with five students from Hoopa High School. "Our future is tied to the river, and our river is so sad," she said. "When our animals drink it in the summer, they die." With any more diversions the Trinity would be unable to support fish, she said, and she argued that the project's environmental assessment should be redone.

Denver Nelson, a retired neurosurgeon, longtime river advocate and former member of the Humboldt County Planning Commission, was the lone voice of support for the Sites Project. He called it "a good thing to happen" and said it has "no connection to the Trinity River."

Nonetheless, the board was united in its decision to send the two letters. "It's about time," said Fifth District Supervisor Steve Madrone.

"I totally support this as well," Second District Supervisor Estelle Fennell said.

Board Chair Rex Bohn, who represents the First District, said, "I'm not gonna say I don't support the Sites Project, but it does need to be fixed." The Environmental Impact Report needs to be "tightened up," he said, though he argued that the state does need new water storage solutions.

"I think Sites will get there," Bohn said, "hopefully without impacting the Trinity."

## Humboldt County: Trinity River salmon could face ‘irreversible harm’

Concerns raised about Sites Reservoir project diversions to Sacramento Basin

By **SHOMIK MUKHERJEE** | [smukherjee@times-standard.com](mailto:smukherjee@times-standard.com) | Times-Standard

PUBLISHED: December 10, 2019 at 5:51 pm | UPDATED: December 10, 2019 at 5:57 pm

The Humboldt County Board of Supervisors unanimously approved two letters on Tuesday threatening to yank back support for a reservoir project that would divert more water from the Trinity River and pose further harm to its fishery.

The board’s vote was met with widespread public support as tribal members and water rights advocates called on the county to stand against the latest environmental impact report for the Sites Reservoir project, an off-stream storage of water that partly diverts Trinity River water to the Sacramento Basin.

In its letters, the county states that the project’s current design would take too much water out of the Trinity River, which science indicates would leave the water temperature too high for salmon populations to be healthy.

“Humboldt County has a vested interest in this project because significant impacts to the Trinity River, which is partially diverted into the Sacramento River, would cause irreversible harm to Humboldt County’s commercial, sport, and tribal fisheries,” one county letter states.

The county had offered support for the project in 2018, under conditions that no further water be diverted from the basins and that stakeholders explore options to reduce out-of-basin transfers of Trinity River water.

As a result of past diversions, the Trinity River’s water supply has been spent and its quality diminished, leaving salmon in the lower Klamath River in peril.

Tom Stokely of environmental group Save California Salmon emphasized on Tuesday the county has a “huge stake” in the Trinity River. He called on the county to insist upon a stronger agreement with Sites Reservoir that protects water and salmon interests.

“I’ve never seen anyone get anything in the water world by being nice,” said Stokely, who has worked for decades in natural resource planning. “Unless you play hardball, I don’t think you’re going to have your interests looked out for.”

Ali Forsythe of Sites Reservoir spoke in defense of the project, assuring the board that it will be a “good steward” of the rivers. She apologized for a “delay” in protecting the Trinity River’s water rights and said Sites remains committed to the county’s 2018 conditions.

“We understand as an organization that the better the fish are, the better the ecosystems are and the better the people of the state of California are,” Forsythe said.

Tuesday’s meeting also featured public comments from a handful of Native American tribal members who rely on the Trinity River’s fishery and historically have sacred ties to the river water.

With all of the water diversions, there’s no water left to funnel elsewhere, said one Hoopa tribal member.

“You guys have got to really study this before making a decision,” the tribal member said. “I go to happy hour — my bar is the river bar. You guys go to the local pub; we go to the river. You guys should think about saving it.”

*Shomik Mukherjee can be reached at 707-441-0504.*



**BOARD OF SUPERVISORS  
COUNTY OF HUMBOLDT**

825 5th Street, Suite 111, Eureka, CA 95501-1153  
Telephone (707) 476-2390 Fax (707) 445-7299

Fritz Durst, Chairman  
Sites Project Authority  
P.O. Box 517  
Maxwell, CA 95955

Subject: Request to Protect Humboldt County's Trinity River Interests from Adverse Impacts caused by the Sites Reservoir Project

Dear Chairman Durst:

In a letter dated January 9, 2018, the Humboldt County Board of Supervisors expressed conditional support for the proposed Sites Reservoir Project, if robust and binding assurances are provided that:

1. Construction and operation of the Sites Reservoir Project will result in no additional demands for diversions of Trinity River water to the Sacramento Basin, and
2. The Sites Project Authority and the Bureau of Reclamation will work with Humboldt County and other Trinity River stakeholders to identify opportunities to reduce out-of-basin transfers of Trinity River water as part of the coordinated operations of the Central Valley Project and the future Sites Reservoir Project.

You replied with a letter (dated January 15, 2018) to the chair of the Board of Supervisors in which you asserted that no Trinity River water would be diverted into Sites Reservoir and therefore no additional demands on the Trinity River would occur as a result of the project. However, we find that this letter is not sufficiently robust and binding.

Subsequently, we are in receipt of the January 21, 2019 report by Kamman Engineering and Hydrology in which two significant impacts affecting the Trinity River were identified within the Sites Reservoir Project Draft Environmental Impact Report/Environmental Impact Statement ("Draft EIR/EIS") as follows:

1. The surface water modeling does not include an accounting of Humboldt County's 1959 water contract with the Bureau of Reclamation for annual releases of not less than 50,000 acre-feet of Trinity River water, nor does it include the anticipated flow releases described in the Bureau of Reclamation's Long-Term to Protect Adult Salmon in the Lower Klamath River (2017 Record of Decision), and
2. The surface water modeling identifies a significant change in the pattern of Trinity River exports to the Sacramento River from fall to spring in some water year types, thereby increasing residence time of water in Lewiston Reservoir and increasing Trinity River water temperatures. This change would likely violate North Coast Basin Plan Trinity River temperature objectives and SWRCB Water Right Order 90-05; however, the document fails to disclose the increased potential for temperature violations.

It is our understanding that Sites Project Authority representatives have stated that the temperature modeling results have limited accuracy due to the methods and assumptions; however, we are not reassured. Although your letter assured us that no harm would be caused to the Trinity River, we are concerned that the modeling results published in your Draft EIR/EIS show that the operations of the Sites Project would likely cause irreversible harm to migrating salmon and the document does not discuss alternatives or mitigations to address these impacts.

Based on the findings by Kamman Hydrology and the lack of robust and binding assurances, we specifically request that a water right term and condition be placed on the water rights application for the Sites Reservoir Project as follows:

*"Trinity River water shall not be used to fill Sites Reservoir unless the Trinity River Division of the Central Valley Project is releasing water as a result of storage conditions requiring "Safety of Dams" releases beyond normal operating plans and concurrently when Shasta Reservoir is making flood control releases. Furthermore, Humboldt County's 1959 water contract with the Bureau of Reclamation, Trinity River Record of Decision (ROD) flows, and releases to implement the Bureau of Reclamation's Long-Term Plan to Project Adult Salmon in the Lower Klamath River shall not be reduced or negatively impacted in any way as a result of any Sites Reservoir decisions, modeling, operational plans, and water rights petitions."*

Alternatively, we would consider entering into a Memorandum of Understanding with the Bureau of Reclamation and Sites Project Authority with clearly defined obligations and commitments to ensure that Humboldt County's 1959 water contract with the Bureau of Reclamation and our interests in the Trinity River are sufficiently protected.

We request a response by January 15, 2020, after which we will consider whether to withdraw our conditional support for the proposed Sites Reservoir Project.

Sincerely,

Rex Bohn, Chairman  
Humboldt County Board of Supervisors

cc: Senator Dianne Feinstein  
Senator Kamala Harris  
Congressman Jared Huffman  
Congressman John Garamendi  
Congressman Doug LaMalfa  
Senator Mike McGuire  
Trinity County Board of Supervisors  
Karuk Tribal Council  
Hoopa Valley Tribal Council  
Yurok Tribal Council  
California Water Commission  
Charles Bonham, Director CA Dept. of Fish and Wildlife  
Karla Nemeth, Director CA Department of Water Resources  
Ernest Conant, Regional Director Bureau of Reclamation



**BOARD OF SUPERVISORS  
COUNTY OF HUMBOLDT**

825 5th Street, Suite 111, Eureka, CA 95501-1153  
Telephone (707) 476-2390 Fax (707) 445-7299

Fritz Durst, Chairman  
Sites Project Authority  
P.O. Box 517  
Maxwell, CA 95955

Ernest Conant, Regional Director  
Bureau of Reclamation, Mid-Pacific Region  
2800 Cottage Way  
Sacramento, CA 95825

Subject: Request for Revision and Recirculation of Draft EIR/EIS for Sites Reservoir Project

Dear Chairman Durst and Regional Director Conant:

The Humboldt County Board of Supervisors requests that the Draft Environmental Impact Statement/Environmental Impact Report ("Draft EIR/EIS") for the Sites Reservoir Project be revised and recirculated prior to certification due to significant new information regarding the expected adverse environmental effects of the project's proposed operations. After the comment period on the Draft EIR/EIS ended in 2017, serious deficiencies have been identified in the document warranting revision of the impacts analysis and new or modified alternatives and/or mitigation measures. Humboldt County has a vested interest in this project because significant impacts to the Trinity River, which is partially diverted into the Sacramento River, would cause irreversible harm to Humboldt County's commercial, sport, and tribal fisheries.

Specifically, we are in receipt of the January 21, 2019 report by Kamman Engineering and Hydrology in which two significant impacts affecting the Trinity River were identified within the Sites Reservoir Project Draft EIR/EIS as follows:

1. The surface water modeling does not include an accounting of Humboldt County's 1959 water contract with the Bureau of Reclamation for annual releases of not less than 50,000 acre-feet of Trinity River water, nor does it include the anticipated flow releases described in the Bureau of Reclamation's Long-Term Plan to Protect Adult Salmon in the Lower Klamath River (2017 Record of Decision), and
2. The surface water modeling identifies a significant change in the pattern of Trinity River exports to the Sacramento River from fall to spring, thereby increasing residence time of water in Lewiston Reservoir and increasing Trinity River water temperatures. This change would likely violate North Coast Basin Plan Trinity River temperature objectives and SWRCB Water Right Order 90-05; however, the document fails to disclose the increased potential for temperature violations.

Issuing a final EIR/EIS without correcting these serious modeling problems will not meet the basic purpose and substantive legal requirement of the California Environmental Quality Act ("CEQA") to prevent significant, avoidable damage to the environment by requiring changes in projects through the use of feasible alternatives or mitigation measures (CEQA Guidelines 15002). Moreover, failure to remodel the proposed action and alternatives in a recirculated Draft EIR/EIS

will not provide the public with an opportunity to review and comment on the actions, alternatives, and potential mitigation measures as required for transparency, and therefore it will not procedurally comply with CEQA Guidelines 15088.5.

An additional issue of concern that has potential adverse impacts on Humboldt County is your proposed minimum instream flows on the Sacramento River. In a letter dated January 12, 2018, to the Sites Project Authority, the California Department of Fish and Wildlife recommended a bypass flow requirement to maintain at least 13,000 cubic feet per second (cfs) past all diversion facilities, while you are proposing 3,250 cfs (Red Bluff), 4,000 CFS (Hamilton City), and 5,000 cfs (Wilkins Slough). This discrepancy greatly concerns us and we believe this issue requires at a minimum further analysis, and potentially revision of the selected alternative and mitigation measures, in a revised and recirculated Draft EIR/EIS.

The successful migration, spawning, and rearing of native wild Sacramento River salmon is critical to ensure the "harvestable surplus" of these stocks that is required for the success of Humboldt County commercial and sport fishing industries and our resource-dependent communities. If your project cannot be economically feasible without taking flows in the Sacramento River below state recommended **minimum** instream flows, we question the benefits to salmon and environmental neutrality that you have professed for your project. A revised and recirculated Draft EIR/EIS with a comparison of alternatives with various minimum instream flow volumes is required to adequately compare what it would mean to reduce the Sacramento River to such low flows.

We request a timely response from both the Sites Project Authority and the Bureau of Reclamation to the Humboldt County Board of Supervisors so we can take appropriate action to secure the public and private interests of our constituents on these important issues.

Sincerely,

Rex Bohn, Chairman  
Humboldt County Board of Supervisors

cc: Senator Dianne Feinstein  
Senator Kamala Harris  
Congressman Jared Huffman  
Congressman John Garamendi  
Congressman Doug LaMalfa  
Senator Mike McGuire  
Trinity County Board of Supervisors  
Karuk Tribal Council  
Hoopa Valley Tribal Council  
Yurok Tribal Council  
California Water Commission  
Charles Bonham, Director CA Dept. of Fish and Wildlife  
Karla Nemeth, Director CA Department of Water Resources





## San Francisco Bay Area scenario

A [landmark report](#) in 2018 by the U.S. Geological Survey estimated that at least 800 people could be killed and 18,000 others injured in a hypothetical magnitude 7 earthquake rupturing on the Hayward fault through Oakland, Berkeley, Richmond, Hayward and Fremont.

Hundreds more could die from fire following an earthquake along the ruptured 52-mile section of the fault in this [HayWired](#) scenario. More than 400 fires could ignite, burning the equivalent of 52,000 single-family homes, and a lack of water for firefighters caused by old pipes shattering underground could make matters worse, USGS geophysicist Ken Hudnut has said.

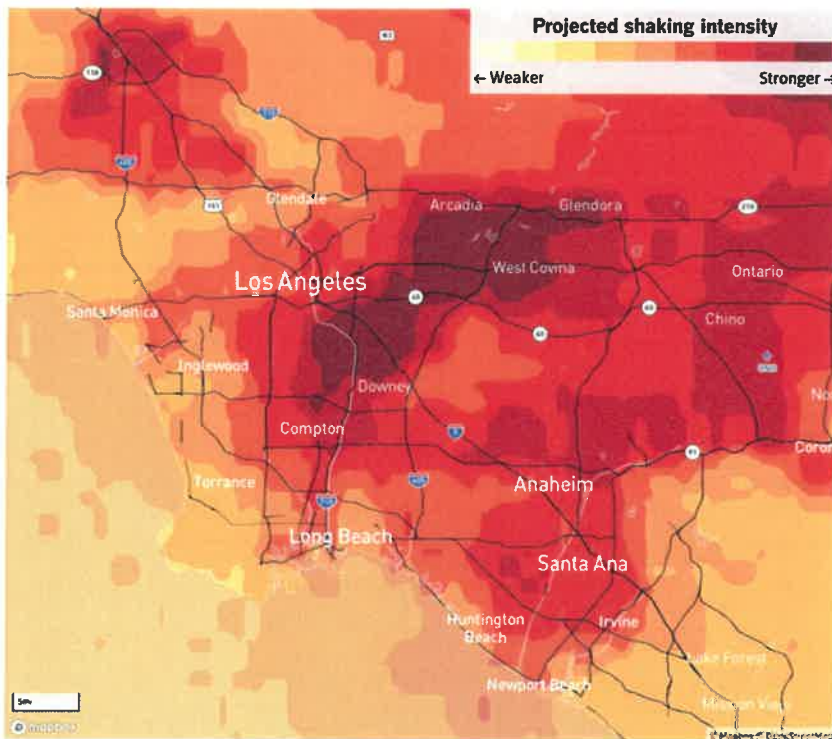
“This fault is what we sort of call a tectonic time bomb,” USGS earthquake geologist emeritus David Schwartz said of the Hayward fault. “It’s just waiting to go off.”

The Hayward fault is so dangerous because it runs through some of the most heavily populated parts of the Bay Area, spanning the length of the East Bay from San Pablo Bay to Milpitas.

Out of the region’s population of 7 million, 2 million people live on top of the fault.

The so-called HayWired scenario envisions a scale of disaster not seen in modern California history — 2,500 people needing rescue from collapsed buildings and 22,000 being trapped in elevators, Hudnut said. More than 400,000 people could be displaced from their homes, and some East Bay residents may lose access to clean water for as long as six months.

The earthquake would cause 8,000 structures to collapse, 100,000 to be red-tagged — meaning they’re too damaged to enter — and 390,000 to be yellow-tagged, meaning occupancy is limited due to significant damage, Keith Porter, a University of Colorado Boulder research professor who coordinated the HayWired report’s engineering section, has said.



A plausible magnitude 7.8 earthquake on the San Andreas fault could bring widespread severe, violent and extreme shaking across wide swaths of Southern California, noted by the three reddest colors on this map. (Casey Miller / Los Angeles Times)

### **Southern California scenario**

The U.S. Geological Survey published a [hypothetical scenario](#) of what a magnitude 7.8 earthquake on the San Andreas fault would look like. The [ShakeOut](#) scenario could result in the deaths of about 1,800 people.

More than 900 people could die from fire; more than 400 from the collapse of vulnerable steel-frame buildings; more than 250 from other building damage; and more than 150 from transportation accidents, such as car crashes due to stoplights being out or broken bridges.

Los Angeles County could suffer the highest death toll, more than 1,000, followed by Orange County, with more than 350 dead. San Bernardino County could have more than 250 dead and Riverside County more than 70 dead. Nearly 50,000 could be injured.

Main freeways to Las Vegas and Phoenix that cross the San Andreas fault would be destroyed in this scenario; Interstate 10 crosses the fault in a dozen spots, and Interstate 15 would see the roadway sliced where it crosses the fault, with one part of the roadway shifted from the other by 15 feet, seismologist Lucy Jones, an author of the report, has said.

The aqueducts that bring in 88% of Los Angeles' water supply and cross the San Andreas fault all could be damaged or destroyed, Jones said.

A big threat to life would be collapsed buildings.

As many as 900 unretrofitted brick buildings close to the fault could come tumbling down on occupants, pedestrians on sidewalks and even roads, crushing cars and buses in the middle of the street. Fifty brittle concrete buildings housing 7,500 people could completely or partially collapse. Five high-rise steel buildings — of a type known to be seismically vulnerable — holding 5,000 people could completely collapse. From 500,000 to 1 million people could be displaced from their homes.

### **Christchurch earthquake, 2011**

A magnitude 6.2 earthquake that hit New Zealand on Feb. 22, 2011, resulted in the deaths of 185 people. Many died in the collapse of just two downtown concrete office buildings, the six-story Canterbury Television building, killing 115 people, and the five-story Pyne Gould Corp. building, causing 18 deaths.

Two others came close to catastrophe: the 27-story Hotel Grand Chancellor nearly collapsed; at the Forsyth Barr Building, 18 stories high, many occupants became trapped when both sets of stairways collapsed.

More than 40 people were killed from older unreinforced masonry or brick buildings or block structures. The vast majority of them had been outside of the collapsing structures, including pedestrians and those riding by in vehicles.

So many buildings came tumbling down that Christchurch's city center was cordoned off to the public, some areas for more than two years.

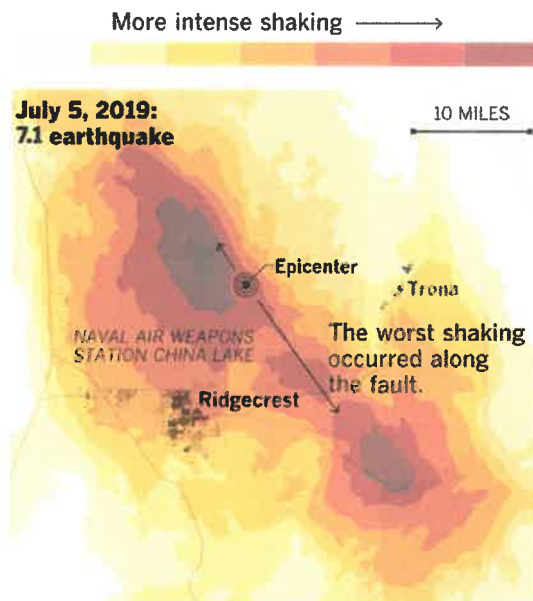
The quake redrew the geography of Christchurch. Downtown is now flatter and smaller, with 1,500 buildings in the Central Business District having been demolished. Some businesses left for the suburbs and never came back. Officials also bought and demolished 8,000 houses along rivers, the coast and in the hills and restricted those areas from future development.

Christchurch's closest port, Lyttelton — New Zealand's third-largest — suffered massive devastation, incurring more than \$320 million in damage so extensive that the rebuilding process was expected to take

at least 12 to 15 years. A big blow to Christchurch was that Lyttelton's damaged wharves no longer allowed large cruise ships to dock. Large cruise ships are expected to return to Lyttelton next year.

### Spared from the worst shaking

Ridgecrest and Trona actually received less intense shaking from a magnitude 7.1 earthquake than much of the San Fernando and Santa Clarita valleys did in the 1994 magnitude 6.7 Northridge earthquake.

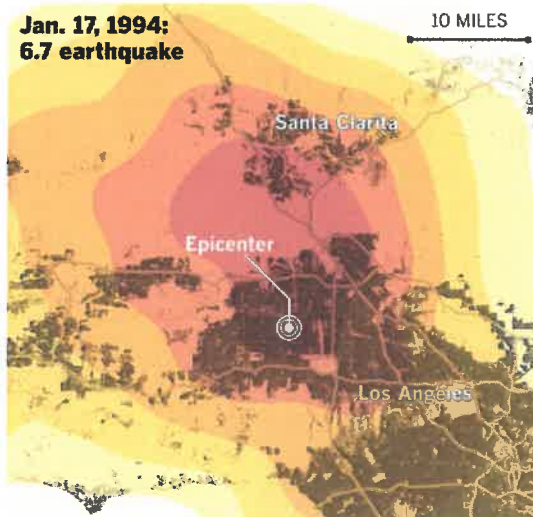


(Jon Schleuss / Los Angeles Times)

### Ridgecrest earthquake, 2019

The magnitude 7.1 earthquake that hit near Ridgecrest on July 5 was the strongest to strike California in two decades.

The earthquake caused an [estimated \\$5 billion in damage](#) to Naval Air Weapons Station China Lake, the U.S. Navy's largest base for developing and testing weapons of warfare, located in the Mojave Desert. An official told the Navy Times in August that more than half of the base's damaged buildings were built before 1980 and did not meet seismic standards.



The nearby town of Ridgecrest, overall, suffered relatively little damage. The town, which began growing up near the Navy base during World War II, does not have a stock of unretrofitted brick buildings like those constructed before the 1933 Long Beach earthquake, USGS seismologist Susan Hough has said. There are also very few "soft-story" apartments with weak ground floors built to accommodate parking.

While mobile homes were torn off foundations, chimneys fell, gas lines leaked and some homes caught fire, [many buildings did fine](#) — and many businesses were up and running within a day or two of the biggest shock. The [local newspaper said](#) the Ridgecrest Cinemas, which

Sources: USGS, Microsoft, OpenStreetMap

Jon Schleuss / Los Angeles Times

suffered a roof collapse in one theater during the July 5 earthquake, reopened most of its screens later that month.

[Trona](#), an unincorporated town southwest of Death Valley with a population under 2,000, appeared to have been hit harder than Ridgecrest. More than 30 homes were red-tagged as uninhabitable in Trona and other San Bernardino County communities. In the days after the earthquakes, there was no running water, electricity was unstable, and many residents resorted to sleeping in their cars or yards.

### **Northridge earthquake, 1994**

The magnitude 6.7 earthquake killed at least 57 people and left more than 80,000 residential and commercial units damaged or destroyed, as well as more than 5,000 mobile homes. Some 125,000 people were temporarily homeless after the earthquake.

The worst shaking was felt in a small section of L.A. County, with most damage in the San Fernando Valley. Wide swaths of the county did not suffer major damage.

The earthquake delivered its worst shaking to relatively newer buildings in the San Fernando and Santa Clarita valleys, recorded as “severe” shaking on the Modified Mercalli Intensity Scale, a strength that can damage poorly built structures.

Two concrete buildings collapsed catastrophically: a Bullock’s department store and a Kaiser Permanente medical office in the San Fernando Valley. Hundreds could have died had the earthquake occurred during the workday, and not at 4:31 a.m.

The shaking nearly caused a new steel-frame Automobile Club of Southern California building in Santa Clarita to collapse. A total of about 200 steel-frame buildings had significant cracking, raising questions about the safety of such structures in a severe earthquake.

The shaking also seriously damaged or destroyed 200 wood-frame apartment buildings with flimsy ground stories, known as “soft-story” buildings. One that catastrophically collapsed on its ground floor killed 16 people, most of whom were sleeping.

In 2015, L.A. officials passed laws requiring retrofit of soft-story and brittle concrete buildings. There is no L.A. retrofit law for steel-frame buildings, although two nearby cities, Santa Monica and West Hollywood, do have that requirement.

The Northridge earthquake caused \$20 billion in damage and \$49 billion in economic losses.

# When ordinary water needs boiling

- By HELOISE
- Dec 17, 2019

**Dear Readers:** We take our water as a given, but what if there's a problem? A water main break can affect water quality, and less-than-average pressure from a storage tank can contaminate the water with harmful bacteria.

Your water provider may issue a "boil water advisory." There are two kinds: precautionary (loss of water pressure) and mandatory (confirmed contamination).

Here are some things to know if an advisory is posted:

- Discard ice cubes and foods made with tap water.
- Bring tap water to a rolling boil (large bubbles) for a few minutes, then cool completely and store in the refrigerator for drinking, or use bottled water.
- Give pets water that has been boiled and cooled.
- You can shower, but don't take any water in your mouth.
- Doing laundry is OK.
- Don't use the dishwasher; wash dishes by hand with the boiled water.

Once the advisory is lifted (you'll know from media outlets), flush your faucets. Check your water provider's website for more complete information.



## Precipitation above normal in Southern California and adding up in the north

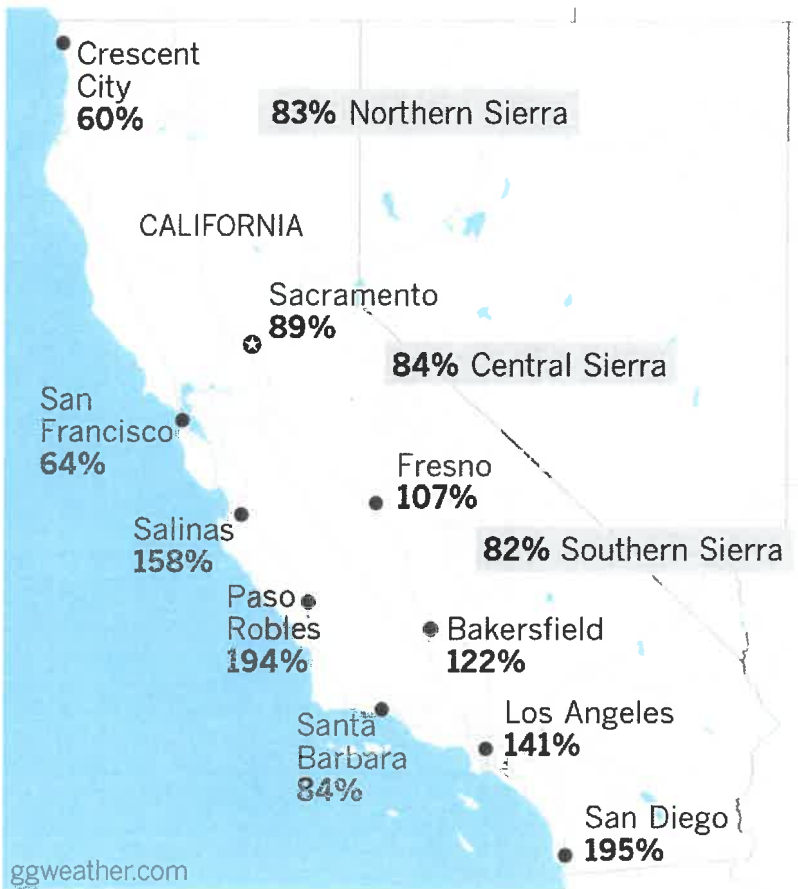
By **PAUL DUGINSKI** GRAPHICS AND DATA JOURNALIST  
 DEC. 10, 2019 8:08 PM LOS ANGELES TIMES

Skiers and snowboarders already know this: California's recent storms have lifted the state's precipitation totals to the respectable range in the northern part of the state, and to well above normal in the south, according to Jan Null of Golden Gate Weather Services.

The statewide distribution of precipitation for the period from July 1 to Dec. 9 has been irregular, said Null, showing the effects of concentrations caused by atmospheric rivers. For example, areas from the southern Bay Area south to Big Sur received especially heavy rain from one of these fire hose-like systems during Thanksgiving week.

### California rainfall snapshot

Percentage of normal, July 1 to Dec. 9 at 4 p.m.



Snowpack in the Sierra Nevada is especially critical for California's water supply. Shown here are selected cities and the Sierra Nevada indices of stations operated by the state Department of Water Resources. (Paul Duginski / Los Angeles Times)

Also, Null cautions that percent-of-normal figures can be a little deceiving. Roughly 3.5 inches of rain in Los Angeles from the beginning of the rainfall season on July 1 through Dec. 9 amounts to

141% of normal when that normal is 2.5 inches. But a similar amount, 3.7 inches, is just 64% of normal in San Francisco, where 5.8 inches would be expected during the same period.

This year, Northern California got a late start on its rainfall season while Southern California got an early start with some big storms that brought rain statewide. Ordinarily, the rainfall season would begin first in the northern part of the state, then follow a little later in the south.

But for getting a late start, the northern Sierra is off to a decent start. An eight-station index of measuring locations in the mountains north of Lake Tahoe is at 83% of normal. This is an area that includes the Sacramento, American and Feather rivers, as well as the state's biggest dams. This area is crucial for water customers throughout the state, and in particular for Southern California.

The central Sierra Nevada's five stations stood at 84% of normal as of Dec. 9, and the six stations in the southern Sierra were at 82% of normal.

Of course, how the season ultimately plays out is a tossup, especially since there's no El Niño or La Niña in the equation this year. But skiers and snowboarders up and down California are putting their hopes in a repeat of a snow-choked winter like the last one.



SNOW ABC NEWS

## Sierra snowpack off to healthiest start since 2010, water officials say

The Sierra snowpack is off to its best start in years, according to the California Department of Water Resources.

Sunday, December 22, 2019 6:40PM

LAKE TAHOE, Calif. (KGO) -- The Sierra snowpack is off to its best start in years, according to the California Department of Water Resources.

Thanks to all the recent storms, it's at 109 percent of where it should be for this time of year.

Last year, it was at 82 percent of average.

The last time the snowpack was this healthy was 2010 when it was a whopping 169 percent of normal.

The only region where the snowpack is below average is in the northern part of the state.

Government Technology/Emergency Management

## PUBLIC SAFETY & HOMELAND SECURITY

### **Atmospheric Rivers Can Be Too Much of a Good Thing**

*Atmospheric rivers are generally beneficial, but with the intensity of storms increasing and a couple of close calls, California is ripe to get hit with a storm that could be devastating to communities and the economy.*

BY JIM MCKAY / DECEMBER 17, 2019



*Water flows through a break in the wall of the Oroville Dam spillway, Thursday, Feb. 9, 2017, in Oroville, Calif. The torrent chewed up trees and soil alongside the concrete spillway before rejoining the main channel below. AP*

Atmospheric rivers are long, narrow bands of moisture that descend from the tropics to higher latitudes like from Hawaii to California. They used to be referred to mostly as a pineapple express.

They are mostly good, replenishing the water supply and putting out fires at the end of the wildfire season. But there can be too much of a good thing. These rivers in the sky can transport 10 times the volume of the Mississippi River in water vapor. When that vapor rises over coastal mountains, it drops rain and snow and can cause devastating flooding.

A study by researchers at the Scripps Institution of Oceanography suggests that one of these events could cause catastrophic damage to California and its economy and thus the nation's

economy. The state has had a couple of near misses, including the 1997 floods and the Oroville Dam spillway incident in 2017. The study suggests that because forecast models predict more intense atmospheric rivers in decades to come, the state should be ready and take steps to mitigate possibly devastating effects.

The areas around Sacramento and Sonoma counties are the most likely to suffer catastrophic consequences, according to the study. Research shows that the biggest hit so far by one of these storms has caused about \$3 billion in damages. That's not a huge number given the state's economy, but the damages were concentrated.

A previous study suggested that a one-in-100-year storm could cost California \$860 billion in damages, according to Thomas Corringham, professor at the University of California, San Diego, who participated in the Scripps study.

Corringham said parts of California have been lucky to avoid catastrophe so far. "Sacramento had a close call in 1997 and also there was the Oroville incident with the spillway in 2017 when they had to evacuate 180,000 people," he said. "If that dam had failed and a significant amount of water had gone over, the damages would have been catastrophic."

The research is straightforward. All the models show increased intensity for these types of storms. "If you put more carbon into the atmosphere, you retain more of the heat, and as you increase the heat you get more evaporation and more moisture in the air so all storm systems — hurricanes, atmospheric rivers — they all become more intense," Corringham said.

The Center for Western Weather and Water Extremes at Scripps has begun an atmospheric river reconnaissance program where they fly jets into the storms to collect data. It's like what's done with hurricanes. The hope is that the data will provide information to expand forecasts. "As we develop forecasting capabilities, we should be able to give people a week to evaluate, move their cars to higher elevation or move the contents of their homes up in the attic," Corringham said.

Longer-term interventions are needed as well, such as discouraging new development in flood plains, providing financial incentive for people to harden their homes and, in some communities, elevating them.

“And then probably the biggest one, after a big flood event instead of providing assistance for people to rebuild in place, we should be providing assistance for people to move to safer communities,” Corringham said.

He acknowledged that it’s politically difficult to do. “Especially for the higher-value properties, like coastal properties. It’s a large source of tax revenue for the municipality, so the idea of moving people comes with the loss of revenue.”

Another issue is paying someone market value for a home that they may have lived in for 20 or 30 years and been a part of the community is not enough. “But if we provide just compensation, I think the payoff on the long-term would be significant rather than having people rebuild decade after decade, just do a one-time payment and put people in a safer area.”

## [Bloomberg Environment & Energy Report](#)

# EPA Lead Proposal, Derided as Weak, May Be Sneakily Strong

Dec. 17, 2019, 3:31 AM

- Landmark update to lead standards requires full pipe inventory
  - Release of inventory results may spur faster lead pipe removal, utility industry watchers say
- A provision tucked within the EPA's proposal to overhaul the way it regulates lead in drinking water—initially derided as toothless—could have far-reaching consequences for public health, municipal policies, and even real estate transactions, water industry insiders now say.

The [proposal](#) would require all water utilities across the country to inventory the location of all of their lead pipes and then make that information public.

"If you were going to have to buy a house with a lead pipe on it, you'd probably say, 'Hey, you have to take that out,'" said Kurt Souza, an assistant deputy director within the California State Water Resources Control Board.

## Initial Disappointment

The proposal disappointed many environmental and public health activists when it was unveiled this fall. They wanted a mandate that would force utilities to replace lead pipes, the primary source of the toxic metal in tap water.

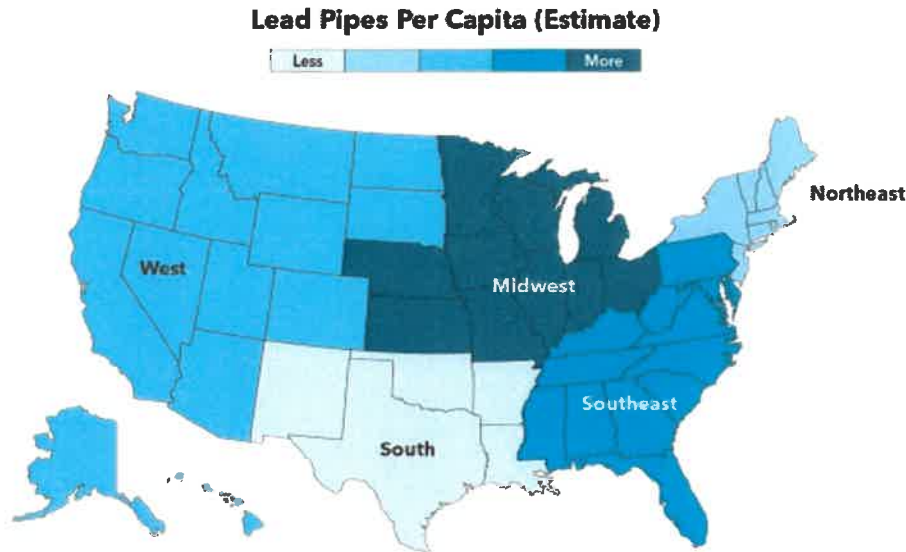
EPA overhaul of its lead regulations has been in the works since 2011, three years before the lead crisis in Flint, Mich., brought the issue to international prominence.

Karen Clay, an environmental economist at Carnegie Mellon University, said requiring the location of all lead pipes to be made public may be the Environmental Protection Agency's indirect way to get utilities to replace their lead pipes—without actually requiring them to do so, which would be a huge expense for municipalities.

A 2018 [estimate](#) from the EPA found that replacing lead pipes could cost up to \$12,300 per pipe. And the EPA said there are between 6 million and 10 million such pipes nationwide.

## The Leaded Country

Nearly 200 utilities responded to a 2016 survey about how many lead pipes are in use, and the results varied from region to region.



Source: National Survey of Lead Service Line Occurrence, Journal AWWA, April 2016

Bloomberg Environment

“In the current environment, this is as much as the EPA can reasonably do,” Clay said of requiring that the location of lead pipes be publicized. “Certainly, it puts pressure on public utility commissions and state legislatures to do something. And I think there’s enough of a furor around lead at the moment that many of them probably will.”

The EPA, which is taking public comment on the proposal through Jan. 13, 2020, wouldn’t comment on the record for this story.

## Knowledge Is Power?

Lead is a potent toxin that can cause irreversible neurological damage in children and in the prenatal stage. Though it can be found in paint, dust, and soil, exposure to lead from water has become a major concern since the crisis in Flint, when aging pipes leached lead into taps after the city switched to a more corrosive water source.

Despite this concern, current EPA regulations require utilities to rip out their lead pipes only if lead levels in their water spike for an extended period of time. Many activists had hoped the agency would change this and force utilities to remove all of these pipes, full stop, in the long-awaited regulatory proposal issued in November.

It didn’t, opting instead to create a more complex set of conditions that, if met, would trigger wide-scale pipe replacement. For example, under this proposal, if samples show lead levels spiking, utilities would have to reassess their strategy for making their water less corrosive.

But the EPA also added in the requirement that utilities create a publicly available database of in-use lead pipes within three years and then update it annually.

## **'Right to Know'**

It's not difficult to envision how this provision might play out, since some utilities already have mapped out their lead pipes.

The District of Columbia Water and Sewer Authority (DC Water) released an [online map](#) in 2016 that shows the location of lead plumbing at each of the more than 126,000 properties it services across the city.

Maureen Schmelling, director of water quality and technology at the utility, said DC Water created the interactive map because it was the best way to communicate with its customers. She said the map caused a significant increase in requests to DC Water to replace lead service lines, which run from under-street water mains into homes.

"We did put this information on the water bill, but most people don't read it," she said.

If every utility will have to do what DC Water has already done, "You're going to get a surge of requests," Schmelling said. "The utility has to be able to handle that in a timely manner."

On a much larger scale, California began requiring its water utilities to inventory lead pipes last year. Souza, the California water regulator, said he thinks more information can in itself spur meaningful change.

"I think the customer has a right to know," he said. "And I hope they push their water system to take action."

## **Impact on Real Estate**

A publicly available database of properties serviced by lead pipes will become a factor in real estate transactions, said John Brady, deputy director of operations and engineering at the Central Coast Water Authority in California.

"That's going to have an impact on the property price," he said.

Brady used to work as an environmental analyst in the banking industry, and said he's seen first-hand how property owners react when they find out there may be a contamination problem that could hurt the value of their real estate. He said corporate clients who discover contamination on land they own are highly motivated to clean up that land to avoid having to devalue an asset.

In this way, the EPA's lead pipe inventory provision could be an elegant way to incentivize the private sector to help solve a problem that has bedeviled the agency for decades.

"By making this discoverable, you create a whole independent partner in remediating this," he said.

## **'Lead Is Bad'**

Ultimately, though, the EPA's proposal would still allow lead plumbing to stay in place and in use—indefinitely, in many circumstances.

Even some within the water industry—a group that typically isn't enthusiastic about costly new federal mandates coming down on them—said they would have preferred the EPA had simply outlawed lead in plumbing.

"Lead is bad," Scott Borman, the general manager of a regional utility in northwest Arkansas, said to agency officials at a recent public meeting. "I'd much rather you come out with a rule that says, 'Hey, get the lead out. You have 10 years to do it.'"

But Carrie Lewis, general manager of the water utility in Portland, Maine, said fully eradicating lead from the nation's water delivery system is going to require more money and more authority than either utilities or the EPA has at its disposal.

"There are a lot of things water utilities can't make property owners do. There are a lot of things the EPA can't make property owners do," she said at the Dec. 4 meeting. "This may be a rule where we're trying to wiggle around that."

To contact the reporter on this story: David Schultz in Washington at [dschultz@bloombergenvironment.com](mailto:dschultz@bloombergenvironment.com)

To contact the editors responsible for this story: Gregory Henderson at [ghenderson@bloombergenvironment.com](mailto:ghenderson@bloombergenvironment.com); Cheryl Saenz at [csaenz@bloombergtax.com](mailto:csaenz@bloombergtax.com); Renee Schoof at [rschoof@bloombergenvironment.com](mailto:rschoof@bloombergenvironment.com)



**David Schultz**  
Reporter



BY GUEST COMMENTARY PUBLISHED: DECEMBER 24, 2019

## **California can solve its water shortage with the water we have. Here's how**

**By Heather Cooley, Special to CalMatters**

California is at a water crossroads.

We can continue our costly, 100-year-old pattern of trying to find new water supplies, or we can choose instead to focus on smarter ways of using – and reusing – what we already have.

With a population projected to top 50 million by mid-century, a booming economy and a changing climate, there is no question we need to shore up our water systems. But we don't need an all-of-the-above strategy that sacrifices affordability and environmental health. Just like with energy, we must focus on the solutions that are better for our planet and pocketbooks.

The cheapest water is the water we save.

Californians have made real strides to conserve over the past several decades. San Francisco and Los Angeles use the same amount (or less) water today as they did 30 years ago, despite substantial growth.

And farmers have dramatically increased economic output over the last 30 years while using the same amount of water – effectively producing more food and income for every drop of water.

But far more can be done.

Research from the Pacific Institute found that appliance and fixture upgrades, leak repair and landscape changes could reduce urban water use by up to 5 million acre-feet annually – enough water to supply more than 13 million families for a year.

On farms, precision irrigation and other water-wise practices could reduce water use by 6 million to 7 million acre-feet annually while maintaining food production and farmer income. This untapped potential for water efficiency should always be our first step towards water security.

There are also new, innovative sources of local supply.

Less than 20% of urban wastewater is being reused. There are still more than a million acre-feet of treated water we could reclaim to meet local needs. Water reuse opportunities can be found across the state, but are especially important in coastal areas, where waste(d) water is discharged into and pollutes estuaries and the ocean.

Urban runoff is another viable local option. Our cities were designed to remove rainwater to reduce flood risk, literally flushing freshwater down storm drains. Rain gardens, green streets, and parks can help us catch and store more rain.

While gray infrastructure like pipes and pumps will continue to play an important role in our water system, green infrastructure can turn urban spaces into a sponge that allows water to sink into the ground to replenish underground aquifers for later use.

Water efficiency, reuse and rainwater capture not only save money compared with costly sources like seawater desalination, they also save energy and reduce greenhouse gas emissions, which will be key for avoiding unmanageable climate impacts.

Water conservation during California's last drought saved enough electricity to power the cities of Berkeley, Burbank and Santa Cruz for a year. Less energy use means less power plant pollution, helping California achieve our clean air and climate goals.

There are other benefits to consider as well. Reuse reduces the need to divert water from streams already stressed by rising temperatures and shrinking snowpack and can curb ocean pollution associated with sewage outfalls. Plants used to soak up runoff also filter out oil, fertilizer and other chemicals before they reach our water supply. And, of course, green spaces help to cool and beautify communities while providing a place for people to enjoy the outdoors.

California has a chance to model what a truly resilient water system looks like, combining nature and technology to make the most of every drop and dollar. Just as we are doing in the energy sector, we should be focusing on no-regrets water projects that make economic and environmental sense.

As state leaders work to meet Gov. Gavin Newsom's call for 21<sup>st</sup> Century California water plan, I urge them to focus on sources that are both cost-effective and climate smart.

---

*Heather Cooley serves as director of research at the Pacific Institute, [hcooley@pacinst.org](mailto:hcooley@pacinst.org). She wrote this commentary for CalMatters.*

# Naples Daily News

PART OF THE USA TODAY NETWORK

## Were the predictions we made about climate change 20 years ago accurate? Here's a look

[Doyle Rice](#), USA TODAY Published 6:00 a.m. ET Dec. 24, 2019 | Updated 9:30 a.m. ET Dec. 24, 2019

[CONNECT](#) [TWEET](#) [LINKEDIN](#) [COMMENT](#) [EMAIL](#) [MORE](#)

When it comes to climate change, did we accurately predict in 2000 what would be happening now?

"What the models correctly told us 20 years ago is that if we continued to add fossil fuels at an increasing rate to the atmosphere, we'd see an increasing range of consequences, including a decline in Arctic sea ice, a rise in sea levels and shifts in precipitation patterns," Weather Underground meteorologist Robert Henson told USA TODAY.

Overall, we're running quite close to the projections made in 2000 for carbon dioxide concentration, global temperature and sea level, Henson said.

Here's a look at climate change indicators for 2020:

### Carbon dioxide

Carbon dioxide is the greenhouse gas that scientists say is most responsible for global warming.

Since the early 1990s, the carbon dioxide level in the Earth's atmosphere has jumped from about 358 parts per million to nearly 412 ppm, according to the National Oceanic and Atmospheric Administration. That's a 15% rise in 27 years.

### Sea-level rise

Since 1992, the global sea level has risen on average 2.9 millimeters a year. That's a total of 78.3 millimeters, according to NOAA.

Penn State University meteorologist Michael Mann argued that we underestimated the rate of ice sheet collapse, which has "implications for future sea-level rise."

Both of the world's giant ice sheets have lost tremendous amounts of ice in the past two to three decades: The Greenland ice sheet lost 5.2 trillion tons of ice from 1993 to 2018, according to a study in the Proceedings of the National Academy of Sciences.

The Antarctic ice sheet lost 3 trillion tons of ice from 1992 to 2017, according to a study in the journal Nature.

## Weather disasters

Mann told USA TODAY that we "underestimated the dramatic increase in persistent weather extremes like the unprecedented heat waves, droughts, wildfires and floods we've witnessed in recent years."

Since 1993, there have been 212 weather disasters that cost the United States at least \$1 billion each, when adjusted for inflation.

In total, they cost \$1.45 trillion and killed more than 10,000 people. That's an average of 7.8 such disasters per year since 1993, compared with 3.2 per year from 1980 to 1992, according to NOAA.

"Just as climate models almost certainly underestimate the impact climate change has already had on such weather extremes, projections from these models also likely underestimate future increases in these types of events," Mann wrote in The Washington Post last year.

"By and large, our models have gotten it right, plus or minus a little bit," said Zeke Hausfather, a University of California-Berkeley scientist.

## Global temps rising

Henson noted it's clear that global climate models were on the right track 20 years ago: Global temperatures would continue to rise as greenhouse gases continued to accumulate in the atmosphere.

That's been borne out: The global average temperature rose a tad more than a degree Fahrenheit since the mid-'90s, according to NOAA.

"The global temperature projections were just about on the money," Mann said.

These climate models weren't designed to predict decade-by-decade variability, Henson said, so we didn't fully anticipate the slowdown in global atmospheric warming in the first

decade of this century and the much more rapid increase in the 2010s, both of which were linked to the evolving rate of heat storage in the ocean.

The annual average extent of Arctic sea ice has shrunk from 4.7 million square miles in 1992 to 3.9 million square miles in 2019, according to the National Snow and Ice Data Center. That's a 17% decrease.

## Droughts and wildfires

"Another thing beyond the scope of year-2000 outlooks were some aspects of regional climate change," Henson said. "For example, it's now clear that droughts in California are much more likely to be 'hot' droughts, and this has laid the groundwork for longer, more devastating wildfire seasons."

The number of acres burned by wildfires in the USA has more than doubled from a five-year average of 3.3 million acres in the 1990s to 7.6 million acres in 2018, the National Interagency Fire Center said.

## 'Sunny day' flooding

"We're also appreciating the threat posed by 'sunny day' flooding much more than we did in 2000," Henson said. "Tidal flooding is far more frequent on many parts of the Gulf and Atlantic coast than it was 20 years ago, and NOAA has projected that some locations could see more than 80 flood days a year as soon as the 2040s."

*Contributing: The Associated Press*

## New Advisory Group Selected to Help Focus Safe and Affordable Drinking Water Funding Efforts

By California Water News Daily on December 17, 2019



The State Water Resources Control Board recently announced the members of an advisory group formed to help identify needs and designate spending priorities for the recently created Safe and Affordable Drinking Water Fund.

The Advisory Group is made up of 19 members chosen from among 50 applicants and include representatives from public water systems, technical assistance providers, local agencies, nongovernmental organizations, the public and residents served by community water systems in disadvantaged communities, state small water systems, and domestic wells.

“The level of community interest was notable and encouraging,” said Chair E. Joaquin Esquivel. “We wanted to ensure broad-based representation. Unfortunately, not all who applied could be chosen, but that doesn’t limit participation on this critical work. There will be significant ongoing opportunity for engagement at the Board and with the Group, as we collectively identify community needs for safe drinking water.”

The Advisory Group was formed pursuant to Senate Bill 200, which established the Safe and Affordable Drinking Water Fund and provides \$130 million a year for 10 years to help local water systems provide safe, reliable drinking water to communities across California and begin closing the safe drinking water gap for more than one million Californians. The legislation was signed by Governor Gavin Newsom on July 24.

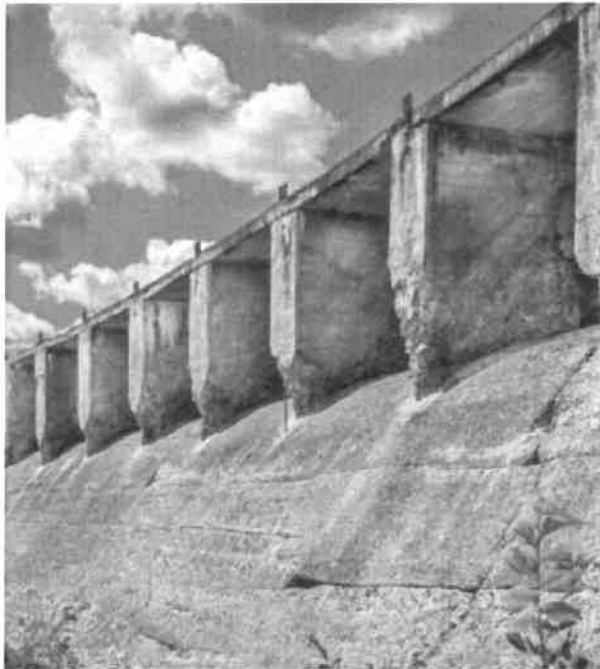
SB 200 calls for the formation of an Advisory Group to advise the Board in developing a fund expenditure plan. The group also will assist the Board in tracking the program’s progress, including its impact on the number of Californians with safe drinking water, the effectiveness of water system administrators, and outcomes of water system consolidations.

The Advisory Group will meet quarterly in locations throughout the state to provide as many opportunities as possible for public and community input. The first meeting will be held in Sacramento in January 2020.

Home > Infrastructure > Senator Kirsten Gillibrand's call to action on funding our nations dams

## Senator Kirsten Gillibrand's call to action on funding our nations dams

By California Water News Daily on December 20, 2019



Senator Kirsten Gillibrand began a compassionate plea for our aging dam infrastructure earlier this week in a letter to leaders of the Senate Environment and Public Works Committee, which is crafting a new water resources bill.

Gillibrand, a member of the committee, expressed concern about the genuine threats that surround the lives of the people who live around the 1,688 identified high-risk dams and sent out an active call for preventative action.

These 1,688 dams have been reported as having a rating of either inadequate or unsatisfactory as recently as 2018 in federal data and reports and pose an immediate danger. As of last year, 44 states and Puerto Rico all reported a known hazardous dam within their state.

Mark Ogden, technical specialist with the Association of State Dam Safety Officials and a former Ohio dam safety official was quoted as saying "There are thousands of people in this country that

are living downstream from dams that are probably considered deficient given current safety standards,”

The real number has yet to be discovered since in many states no rating has been done at all, due to lack of staff to handle such an enormous task, lack of funding and since dams are privately owned, the lack of authority to mandate such ratings even be done. The nation’s dams are, on average, over 50 years old.

Originally built for recreation, water supply, industrial waste storage, irrigation, flood control, or hydropower, many of these dams are unable to handle the changing and increased flooding and rainfall and climate changes that have taken place over the past 50 years.

Seventy billion dollars is the number being thrown around to rehab the federal and non-federal dams in the United States in a 2019 report from the Association of State Dam Safety Officials (ASDSO). The cost to rehab the high-risk dams is running over 23 billion dollars. High-risk dams are those dams that a failure or operational mishap would lead to potential loss of life.

This problem is not new and has been ongoing with reports about the danger and need for rehabbing the infrastructure going back as far as 2003.

Gillibrand said she would push for full funding for the program in 2021. Establishing regulations that would be mandated across the board that would be flexible enough to aid dam owners but still allow the Army Corps participation.



<https://apnews.com/897e0a39b1a324e13aaa680013a2679e>

AP

## US senator proposes money, oversight to boost dam safety

By DAVID A. LIEB Associated Press

Dec 17, 2019



FILE - In this Oct. 15, 2019, file photo, reservoir No. 1, a 180 million-gallon water supply that has been out of service much of the past few decades, sits against the backdrop of the city skyline in Atlanta. U.S. Sen. Kirsten Gillibrand, D-N.Y., is proposing Tuesday, Dec. 17, 2019, to boost federal efforts to fortify the nation's dams following an Associated Press investigation that found scores of potentially troubling dams around the country.

David Goldman

U.S. Sen. Kirsten Gillibrand on Tuesday called for more federal money and oversight to shore up the nation's aging dams following an Associated Press investigation that found scores of potentially troubling dams located near homes and communities across the country.

Gillibrand said new legislation in the works should ensure that federal standards are in place to make dams more resilient to extreme weather events that are becoming more common because of a changing climate. She also called for greater funding for federal grants to fix unsafe dams that pose a risk to the public.

“We should not wait for a catastrophic dam failure or major flooding event to spur us to action,” Gillibrand, a Democrat from New York, said in a letter to leaders of the Senate Environment and Public Works Committee, which is crafting a new water resources bill. Gillibrand is a member of the committee.

She cited an AP analysis published last month that used federal data and state open records laws to identify at least 1,688 high-hazard dams rated in poor or unsatisfactory condition as of last year in 44 states and Puerto Rico. The AP analysis noted that the actual number is almost certainly higher, because some states haven't rated all their dams and several states declined to release full data.

The AP's investigation focused on high-hazard dams — which could kill people if they were to fail — that were found by inspectors to be in the worst condition. Georgia led the way with 198 high-hazard dams in unsatisfactory or poor condition, followed by North Carolina with 168 and Pennsylvania with 145. New York had 48 such dams.

Inspection reports cited a variety of problems: leaks that can indicate a dam is failing internally; unrepaired erosion from past instances of overtopping; holes from burrowing animals; tree growth that can destabilize earthen dams; and spillways too small to handle a large flood.

The nation's dams are on average more than a half-century old, but there is no national standard for inspecting them. That's led to a patchwork of state regulations in which some high-hazard dams are inspected annually while others wait up to five years.

Gillibrand said states should be required to inspect all high hazard dams yearly.

She said lawmakers should “proactively address dam safety” in the next Water Resources Development Act, which authorizes programs overseen by the U.S. Army Corps of Engineers and other agencies related to levees and dams.

“We have to set a uniform national dam safety standard that takes into account the projected effects that climate change will have on our infrastructure,” Gillibrand told reporters in a conference call.

A spokesman for the Senate Environment and Public Works Committee said its chairman, Republican Sen. John Barrasso of Wyoming, will consider Gillibrand's request while working on the legislation next year.

The 2016 version of the federal water resources law authorized \$445 million in grants over 10 years to repair, improve or remove high hazard dams that have failed safety standards and pose an unacceptable risk to the public. But Congress didn't fund the \$10 million annual allotment for 2017 or 2018, and funded just \$10 million of the \$25 million authorized for 2019.

A 2020 spending plan unveiled this week by House leaders would again allot \$10 million for the program – well short of the \$40 million authorized for this year under the 2016 law. The program's authorization is to rise to \$60 million in 2021.

Gillibrand said she will push for full funding for the program in 2021 while seeking to ensure that its regulations are flexible enough to channel aid to dam owners. She wants the Army Corps to be able to assist with the planning, design and construction of non-federal dam rehabilitation projects, especially if the dams were originally built by the Corps.

In 2019, the Federal Emergency Management Agency distributed a portion of the grant money to 26 states that applied. But the grants were limited to paying for preliminary steps such as risk assessments and engineering designs, not actual repairs. State or local entities were required to provide a 35% match.

---

Follow David A. Lieb at: <http://twitter.com/DavidALieb>

Copyright 2019 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.

## State says damaged Shasta County dam not an emergency

Damon Arthur, Redding Record Searchlight Published 6:12 p.m. PT Dec. 9, 2019

A dam Shasta County officials say is creating conditions of "extreme peril" after it was damaged during storms earlier this year does not rise to the level of an emergency, according to state officials.

The Shasta County Board of Supervisors had asked the California Office of Emergency Services to declare an emergency over the condition of Misselbeck Dam in western Shasta County.

Two 30-inch pipes used to let water out from behind the dam 17 miles west of Redding are plugged with debris and covered with sediment, forcing water over a 100-year-old spillway state officials have told the dam owners not to use because it is damaged and unsafe.

But on Nov. 27, Cal OES wrote a letter to Leonard Moty, Shasta County Board of Supervisors chairman, stating there was no emergency.

"As a result, Shasta County's request for a state of emergency and CDAA (California Disaster Assistance Act) funding to address the imminent threat of spillway failure at Misselbeck Dam are denied," the letter to Moty says.

The state's response to pleas for help from the dam owner, the Igo Ono Community Services District, has left officials there frustrated and perplexed.



The spillway at Misselbeck Dam west of Redding has been deemed unsafe by state officials. (Photo: Igo Ono Community Services District)

"What really hurts our feelings with this letter we got today is we've been dealing with this for months. They've been stringing us along. They could have told us this four months ago," said Charlie Tucker, president of the community district board of directors.

The district has been trying unsuccessfully since last summer to get help from state and federal officials to help pay the cost of cleaning out the outlet pipes.

The district estimates the work would cost from \$1.7 million to \$2.1 million, more than the district can afford. The district provides irrigation water to 50 to 60 customers in the Ono area.

To help the district qualify for federal and state emergency funds, the board approved a local emergency due to the dam back in July and renewed the declaration in November.

The emergency resolution says "conditions of extreme peril to the safety of persons and property," exist at Misselbeck Dam.

Tucker said the outlet pipes are covered with about 20 feet of sediment and other debris that were washed into the lake from the surrounding hillsides.

The 2018 Carr Fire left a burn scar covering 90% of the 12-square-mile watershed above 113-acre Rainbow Lake, according to a letter the district sent to the supervisors last summer.

District officials say the 2018 Carr Fire left hillsides devoid of vegetation that would normally hold in place soil, ash and other debris. All that debris and sediment washed into the lake and plugged the outlet pipes.

John Moore, also a member of the district board of directors, said funding has been denied because federal and state officials don't believe the issues at the dam are a result of the Carr Fire.

If the district can show a direct relationship to the fire, they would be more likely to receive financial help, he said.

"If you take away the fire, we don't have all the runoff with leaves and sticks and sediment and whatnot," Moore said.

District officials have also enlisted the help of state and federal elected officials, who have written to the state and the Federal Emergency Management Agency.

Back in October, U.S. Rep. Doug LaMalfa wrote a letter to FEMA asking it to determine the problems at the dam be categorized as a "direct effect from the Carr Fire and eligible for federal disaster aid."

"Obviously, this is one of those items that we just need to see fixed and quickly," LaMalfa's chief of staff, Mark Spannagel said.

Moore said he didn't understand why the federal and state governments issued more than \$10 million in grants to do erosion control to keep ash and other debris from being washed into Shasta County streams following the Carr Fire, but won't help the Igo Ono district recover from similar Carr Fire-caused damage.

Moore said the Western Shasta Resource Conservation District in Anderson received the money to do the work.

"But on our side of the ridge, we get the 'sorry fellas, but all this ash and debris is not due to the Carr Fire,'" said Moore, who is also a director for the conservation district.

District officials are worried that over the winter, more logs and debris will be washed into the lake and block water from going over the spillway. If the water rises too high it could overtop the dam and cause it to fail, the board wrote in a letter to the board of supervisors.

The district says a study by the Office of Water Safety at Sacramento State University estimates that if water overtops the dam, the structure "would be destroyed for its entire height and nearly its entire width in a period of 6 minutes."

"Failure of the dam or spillway would endanger lives and property between the dam and Cottonwood," the district said.

Several structures on Sunny Hill Road downstream of the dam would be inundated with 20 feet of water within 15 minutes of dam breach and multiple structures on Gas Point Road would be under 10 feet of water, the district said.

It would take about 2 hours for water flowing down the North Fork of Cottonwood Creek from the dam to reach the area of Lower Gas Point Road, and at that point the water would be about 17 feet deep, according to an inundation map made by Sacramento State.

It would take about 9 hours for the water to reach Interstate 5 where it crosses over Cottonwood Creek, the map says. At that point, the water would be about 8 feet deep.

Structures near the main stem of Cottonwood Creek and structures on Ponder Way and Denise Way would also see water up to 5 feet deep, the district said.

"The worst-case scenario is the dam breach occurring when Cottonwood Creek is already at flood stage, which is the more likely scenario given the current outlet works condition," the district said.

# Scientists explore connection between phosphorus and river water quality

LAKE COUNTY NEWS REPORTS  
28 DECEMBER 2019

Phosphorus is an essential nutrient for plants and animals.

However, excessive phosphorus in surface water can cause explosive growth of aquatic plants and algae.

This can lead to a variety of water-quality problems, including low dissolved oxygen concentrations, which can cause fish kills and harm other aquatic life.

Rivers connect our terrestrial landscape with downstream lakes, reservoirs, and coastal environments.

High phosphorus concentrations and associated water-quality degradation are a key water-quality concern in many of our nation's rivers and streams.

A team of US Geological Survey scientists recently published a paper that investigates the potential sources of phosphorus that contribute to degraded river water quality.

Here's what the lead author, Sarah M. Stackpoole, had to say about the study.

## **Q: What question were you trying to answer with your recent study?**

**Stackpoole:** The link between agriculture, excess phosphorus, and excess algal growth in freshwater ecosystems is well established.

Management efforts to reduce the movement of excess agricultural phosphorus to surface waters have been in place for decades, but we have not seen widespread improvements in water quality.

This may be because the source of phosphorus leading to degraded water-quality conditions may not actually be linked to the manure and fertilizer currently being applied to nearby farms and fields.

Phosphorus contributions to current river water-quality degradation can also come from older, historical manure and fertilizer inputs that have built up in soils, and sometimes these phosphorus sources can be more than 20 years old.

We wanted to determine if historical phosphorus was a nutrient source to rivers and whether it was masking the effects of current conservation efforts.

## **Q: What's unique about this study?**

**Stackpoole:** Previous studies that have looked at current and historical phosphorus sources and their effects on water quality have been more limited in either space (number of watersheds) or time (period of analysis). Our study looked at water quality at 143 river sites for a 20-year time period, 1992–2012.

**Q: What insights did you gain about current agricultural phosphorous management?**

**Stackpoole:** The way we evaluated current agricultural phosphorus management was called an agricultural phosphorus balance, defined by phosphorus inputs and outputs. Two key inputs were fertilizer and manure applications to soils. One key watershed phosphorus output is crop uptake and removal of crop plant material in harvest.

You can think about the agricultural phosphorus balance in a similar way as a bank balance. Based on how many dollars that you put in compared to how many dollars you take out, you can have a deficit, a zero balance, or a surplus (also called a savings).

The difference between your bank balance and an agricultural phosphorus balance is that you usually want a surplus in your bank account, but most conservation efforts have been trying to reduce the surplus of phosphorus on the landscape and are aiming toward a zero balance.

We found that 7 percent of the river sites had deficits, meaning that the inputs were less than what was taken up by the plants, 25 percent were balanced, meaning that the inputs were equal to what was taken up by the plants. However, 68 percent of the river sites had surpluses, meaning that inputs were greater than outputs.

**Q. What insights did you gain about historical phosphorus sources?**

**Stackpoole:** We documented that historical phosphorus was a source of river phosphorus at 49 of 143 sites. The agricultural balances at these sites showed us that older legacy phosphorus sources, probably manure and fertilizer inputs from the 1980s, were still having an effect today as a source of river phosphorus.

The study documented increased phosphorus transport by the Kansas River at Desoto, Kansas, between 1992 and 2012.

**Q: Did you see any indication that current conservation efforts are working?**

**Stackpoole:** Yes, there is some good news in our story. At 43 river sites, where the agricultural balance has decreased over time, the water quality improved.

**Q. What insights did you gain about current agricultural phosphorus management and water quality?**

**Stackpoole:** Agricultural management efforts to reduce non-point P sources have been effective in improving water quality in some watersheds. However, additional strategies are needed to promote the adoption of nutrient-conserving practices without compromising agricultural yields.

Because of legacy sources, reductions in agricultural phosphorus inputs alone may not be enough to reduce phosphorus. The most effective management actions will be system-specific and account for both the long-term effects of total historical P storage and reductions in contemporary surpluses.



**ENDANGERED SPECIES****Interior wordsmiths 'habitat' with eye on regulatory reach**

Jennifer Yachnin, E&E News reporter • Greenwire: Friday, December 27, 2019



The definition of "habitat" was a point of contention during a legal battle over protections for the dusky gopher frog. John Tupy/Fish and Wildlife Service

The Interior Department is moving to formally define "habitat" in the Endangered Species Act, part of an anticipated second wave of changes to the bedrock conservation law under the Trump administration.

According to a [notice](#) published Monday by the White House Office of Information and Regulatory Affairs, the addition to the ESA is undergoing interagency review.

Interior's Fish and Wildlife Service and the Commerce Department's NOAA Fisheries are overseeing the proposed revisions.

The issue became a point of contention during a legal battle over FWS plans to protect the dusky gopher frog in Louisiana and the rights of private landowners, including timber giant Weyerhaeuser Co.

Although the Supreme Court directed a lower court to examine the meaning of "habitat" in the ESA, the federal government and plaintiffs in the case reached a settlement and left unresolved

questions over how "habitat" should be defined in the law ([Greenwire](#), July 8).

The Trump administration issued final rules amending the ESA earlier this year — including language requiring "critical habitat" to have "one or more of the physical or biological features essential to the conservation of the species" — but it did not address the broader habitat issue.

"The new regulations are going to define habitat," Interior Deputy Solicitor for Parks and Wildlife Karen Budd-Falen told E&E News at that time ([Greenwire](#), Aug. 22).

In that **final rule**, however, FWS and NOAA Fisheries laid out similar requirements for future "habitat."

"The final rule has been modified in response to the decision to make clear that unoccupied habitat must be 'habitat,' by requiring reasonable certainty that at least one physical or biological feature essential to the conservation of the species is present," the agencies wrote.

The document continued: "While the [FWS and NOAA Fisheries] are considering further clarification of the meaning of habitat through separate rulemaking, we find that the [agencies'] and public's interests are served by clarifying the existing regulatory framework in this final rule without delay."

Environmental activists have raised concerns that too narrow a definition could impede efforts to protect endangered wildlife.

"It could have really big consequences depending on how the definition comes down," said Jacob Malcom, director of the Defenders of Wildlife Center for Conservation Innovation.

Malcom, who said he had not seen a draft of the proposed rule, noted that since its adoption in the early 1970s, the ESA has never had a specific standard for "habitat."

"Every listing has gotten its own evaluation," Malcom said, adding: "You know habitat when you see it."

He asserted that the new definition must be flexible enough to include "indirect areas" of habitat, such as watersheds where a species may not live but that significantly impacts its range. Malcom also said that any definition should address imminent shifts to habitat, including those caused by climate change.

"A definition of habitat has to consider where that habitat would be out to the horizon of the foreseeable future," he said.

*Reporter Kellie Lunney contributed.*

## The missing 99%: why can't we find the vast majority of ocean plastic?

United States of plastic

US news

Stephen Buranyi

Tue 31 Dec 2019 16.54 EST First published on Tue 31 Dec 2019 06.00 EST



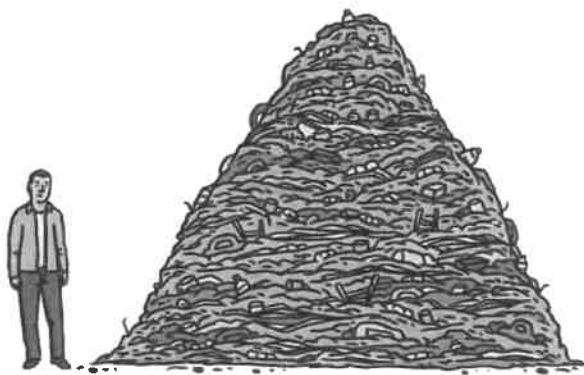
What scientists can see and measure, in the garbage patches and on beaches, accounts for only a tiny fraction of the total plastic entering the water.

Plastic retained in front of an extended cork line in the Pacific ocean. A Dutch inventor says that after setbacks his system for catching plastic floating in the Pacific between California and Hawaii is now working.

Every year, 8m tons of plastic enters the ocean. Images of common household waste swirling in vast garbage patches in the open sea, or tangled up with whales and seabirds, have turned plastic pollution into one of the most popular environmental issues in the world.

But for at least a decade, the biggest question among scientists who study marine plastic hasn't been why plastic in the ocean is so abundant, but why it isn't. What scientists can see and measure, in the garbage patches and on beaches, accounts for only a tiny fraction of the total plastic entering the water.

So where is the other 99% of ocean plastic? Unsettling answers have recently begun to emerge.



**Humans have made 8.3bn tons of plastic since 1950. This is the illustrated story of where it's gone**

What we commonly see accumulating at the sea surface is “less than the tip of the iceberg, maybe a half of 1% of the total,” says Erik Van Sebille, an oceanographer at Utrecht University in the Netherlands.

“I often joke that being an ocean plastic scientist should be an easy job, because you can always find a bit wherever you look,” says Van Sebille. But, he adds, the reality is that our maps of the ocean essentially end at the surface, and solid numbers on how much plastic is in any one location are lacking.

It is becoming apparent that plastic ends up in huge quantities in the deepest parts of the ocean, buried in sediment on the seafloor, and caught like clouds of dust deep in the water column.

Perhaps most frighteningly, says Helge Niemann, a biogeochemist at the Royal Netherlands Institute for Sea Research, it could fragment into such small pieces that it can barely be detected. At this point it becomes, Niemann says, “more like a chemical dissolved in the water than floating in it”.

**The 276 miles of coastline that runs** from the narrow mouth of San Francisco Bay, past the open water of Monterey Bay to the scenic mountains and redwood forests of Big Sur, is the land border of America’s largest National Marine Sanctuary. To anyone visiting the beaches near Santa Cruz or driving the coastal highways, it appears remarkably unspoiled. That is not the whole story.



Plastic waste and trash is seen on Versova beach in Mumbai, India. Photograph: Punit Paranjpe/AFP via Getty Images

For the past two years, scientists from the nearby Monterey Bay Aquarium Institute have been using customised remote-control submersibles to take samples of the near-invisible plastic drifting far below the surface. “Just because you don’t see it, doesn’t mean it isn’t there” says Anela Choy, a professor of oceanography at the University of California San Diego, and the lead researcher on the project. Below what she calls the “skin surface” of the ocean, the submersibles carefully filter seawater and take a snapshot of what’s in it.

Her team found that at a depth of 200m, there were nearly 15 bits of plastic in every liter of water, similar to the amount found at the surface of the so-called garbage patches. The remote samplers were still finding plastic at their maximum depth of 1km. But it is just the start of the hunt. “After two to three years of work the honest truth is we have only one set of samples from one portion of the world’s entire ocean,” she says.

The group's work is among the first to count the exact amount of plastic below the ocean surface, and to show that plastic waste is abundant at lower depths. Scientists have speculated about this for years. Richard Thomson, the oceanologist who first coined the term "microplastic" in 2004 to describe difficult-to-capture bits under 2mm in length, has suggested that large amounts could be found in the deep ocean and sea floor.

And a 2017 paper from Van Sebille's group predicted that, based on the amount of plastic entering the ocean and the potential ways it is known to sink, 196m tons of plastic may have settled from the surface into the deep ocean since 1950.

The next steps are to show where the plastic comes from, and to ascertain how it moves from the surface, where it is relatively easy to both find and track, to the depths.

The conventional view is that it is very hard to track ocean microplastic back to its source. But even very small bits of plastic don't necessarily look the same. By examining how laser light scatters when it hits different bits of plastic, researchers can create a fingerprint. The plastic found in Monterey Bay, for example, didn't resemble the plastics used in local fishing equipment, but was mostly Polyethylene terephthalate (PET), a polymer used in disposable packing, indicating it probably came from land.

How plastic descends to the deep ocean is, for the most part, a mystery. Because of its low density, most commercial plastic floats. It needs help to get below the surface. Plastic can become attached to ocean detritus that sinks, or fragment under the sun or waves, or find its way into something's stomach.

Choy's team identified two kinds of animals, red crabs and translucent, filter-feeding creatures called giant larvaceans, which consume plastic and moving it to deeper water – either by eating it near the surface and expelling it lower down, or in the case of the larvaceans, in a layer of mucous they periodically discard and let sink.

This sort of unwitting animal transit has been observed in many species. A 2011 study examining plastic in fish in the north Pacific Ocean estimated that they ingested around 12,000 tons a year. In a later paper Van Sebille's group noted that if the number held across the entire ocean, 100,000 tons of plastic could be inside animals at any one time.

**The search for the missing maritime plastic** has opened new frontiers of research. A decade ago the discovery of microplastics sparked a radical shift in the conception of plastic pollution. Scientists revealed the existence of billions of pieces of plastic almost too small to see, definitely too small to catch, and easily eaten by the tiniest sea creature. Now they are making startling new discoveries about the extent of plastic pollution.



Plastic waste washed up at Greta Beach, Christmas Island, Australia. Photograph: Daniela Dirscherl/Getty Images/WaterFrame RM

On a cool, gray June day in London, Alexandra Ter Halle, a researcher with Paul Sabatier University, in France, was on a sailboat just below Tower Bridge taking samples of water from the Thames. It was the crew's first stop on a tour of 10 European estuaries, and the other scientists on board were doing familiar work, counting microplastic particles with microscopes, and characterising the bacteria in the samples.

Ter Halle's samples, though, would have to wait until she was back at her university, where she has specialized equipment for the detection of nanoplastistics – plastics that have broken down to sizes below a thousandth of a millimeter, smaller than a single cell

Two years ago her group was the first to detect these particles in seawater. Ter Halle employs techniques similar to those used by forensic scientists to detect chemicals at crime scenes: the samples are ignited into a gas, bombarded with electrons, and separated across an electric field to measure their weight and charge. They can't be conventionally seen, only detected.

Nanoplastic research is still in its infancy. But laboratory tests show that unlike microplastics, nanoplastics are small enough to accumulate within the bloodstreams and cell membranes of a range of organisms, even passing the blood-brain barrier in a test on Japanese medaka fish, and cause various toxic effects, including neurological damage, and reproductive abnormalities.

"This question of where is all the plastic in the sea ... For 40 years we sought out plastic we could see. Now we reach the nanoscale, which is very particular, very reactive, and we have to begin again," says Ter Halle.

The huge amounts of plastic on the ocean surface were what originally sparked public and scientific interest in the plastic problem. In this way, they acted like a buoy, pointing the way to something much larger beneath the surface. The deep ocean is, as Choy puts it, "the world's largest habitat". We're just beginning the accounting of how much of our plastic has ended up there.

# **CORRESPONDENCE**



## Ruth Lake Community Services District

12200 Mad River Road

P.O. Box 6

Mad River, CA 95552

Telephone: 707-574-6332 Fax: 707-574-6080

Email: [ruthlakecsd@yahoo.com](mailto:ruthlakecsd@yahoo.com) Website: [www.ruthlakecsd.org](http://www.ruthlakecsd.org)

H.B.M.W.D. DEC - 6 2019

### 2019 QUAGGA INSPECTION SUMMARY

January 1, 2019 to November 30, 2019

	<b>Marina</b>	<b>Campground</b>	<b>Total</b>
Resident Registrations (Yellow)	196	144	340
Non Resident Inspections (Red)	466	391	857
Non Trailered Watercraft (Blue)	170	315	485
Total Registrations / Inspections	832	850	1682
Failed Watercraft	1	2	3

(3 boats denied entry for standing water, none from any known high risk areas)

Banded from 2018: Not tracked

Inspections done at other locations:

Reynolds RV (Fortuna) -	17
Bayleys (Hayfork) -	3
Browns Sporting (Garberville) -	5

**TOTAL OF WATERCRAFTS for 2019: 1,707**



<b>Year</b>	<b>2014<sup>^</sup></b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Resident *Yellow*	300	357	322	268	321	340
Non-Resident*Red*	1340	893	973	895	819	857
Non-Trailered *Blue*	564	569	589	501	455	485
<b>Total Registrations</b>	<b>2204</b>	<b>1819</b>	<b>1884</b>	<b>1664</b>	<b>1595</b>	<b>1682</b>
Failed Inspections	9	2	1	0	0	3

<sup>^</sup>Year of theTinity Fires

## **Ruth Lake Community Services District**

Telephone: (707) 574- 6332

Fax: (707) 574-6080

E-mail: ruthlakecsd@yahoo.net

**12200 Mad River Road  
Mad River, CA 95552**

### **2018 QUAGGA INSPECTION REPORT**

**In our 10<sup>th</sup> year of watercraft Registrations and inspections, the required inspections are generally understood and accepted with boaters utilizing the lake. The “clean, drain and dry” policy is understood and compliance to this procedure is adhered to.**

**This year, 1595 watercraft registrations and inspections were completed between the Ruth Rec. Campground and Marina inspection facilities.**

**QUAGGA INSPECTION SUMMARY**

January 1, 2018 – December 31, 2018

	Marina	Campground	Total
Resident registrations (yellow)	189	132	321
Non-resident inspections (red)	498	321	819
Non-trailer watercraft (blue)	161	294	455
Total registrations/inspections	848	747	1595
Craft that failed inspections	0	0	0

**Inspections:**

Banded from 2017 51

**Inspections at other locations**

Reynolds RV (Fortuna)	2
Bayleys (Hayfork)	1
Browns Sporting (Garberville)	2

## **Ruth Lake Community Services District**

Telephone: (707) 574- 6332

Fax: (707) 574-6080

E-mail: ruthlakecsd@yahoo.net

**12200 Mad River Road**

**Mad River, CA 95552**

### **2017 QUAGGA INSPECTION REPORT**

**In our 9<sup>th</sup> year of watercraft Registrations and inspections, the required inspections are generally understood and accepted with boaters utilizing the lake. The “clean, drain and dry” policy is understood and compliance to this procedure is generally adhered to.**

**This year, 1664 watercraft registrations and inspections were completed between the Ruth Rec. Campground and Marina inspection facilities. See Attachment.**

**Mike Francesconi  
District Manager  
Ruth Lake CSD**

# QUAGGA INSPECTION SUMMARY

January 1, 2017 to December 31, 2017

	Marina	Campground	Total
Resident registrations (yellow)	138	130	268
Non-resident inspections (red)	557	338	895
Non-trailerred watercraft (blue)	185	303	501
Total registrations/inspections	880	771	1664
Craft that failed inspection	0	0	0

## INSPECTIONS:

Banded from 2016

74

## Inspections done at other locations:

Reynolds RV (Fortuna)	0
Bayleys (Hayfork)	0
Browns Sporting (Garberville)	0
Lorin Fleming (Bass tournaments)	0
Mick Foley and Jackie Branham (Hobart)	13



## **Ruth Lake Community Services District**

12200 Mad River Road

Mad River, CA 95552

Telephone: 707-574-6332 Fax: 707-574-6080

Email: [ruthlakecsd@yahoo.com](mailto:ruthlakecsd@yahoo.com)

[www.ruthlakecsd.org](http://www.ruthlakecsd.org)

## **2016 QUAGGA INSPECTION REPORT**

In our 8<sup>th</sup> year of watercraft registrations and inspections the required inspections are generally accepted with the boaters and the "clean, drain and dry" policy is generally understood with little resistance to the procedure.

This season 1884 watercraft registrations/inspections were completed between the two sites, (Ruth Lake Marina and Ruth Rec Campground).

In 2015 - 1819 watercraft registrations/inspections were completed between the two sites.

The following is a summary of the 2016 inspections.

**QUAGGA INSPECTION SUMMARY**

Jan. 1, 2016 to Nov. 30, 2016

	Marina	Campground	Total
Resident registrations (yellow)	139	183	322
Non resident inspections (red)	498	447	973
Non trailered watercraft (blue)	223	366	589
Total registrations/inspections	860	996	1884
Craft that failed inspection	1	0	1
(1 boat denied entry, from Humboldt County for standing water, none from any known high risk areas)			

**INSPECTIONS:**

Banded from 2015

222

Inspections done at other locations:

Reynolds RV (Fortuna)	19
Bayleys (Hayfork)	4
Browns Sporting (Garberville)	2
Lorin Fleming (bass tournaments)	3



## **Ruth Lake Community Services District**

12200 Mad River Road

Mad River, CA 95552

Telephone: 707-574-6332 Fax: 707-574-6080

Email: [ruthlakecsd@yahoo.com](mailto:ruthlakecsd@yahoo.com)

[www.ruthlakecsd.org](http://www.ruthlakecsd.org)

## **2015 QUAGGA INSPECTION REPORT**

In our 7<sup>th</sup> year of watercraft registrations and inspections the impact of the drought and low water levels at other northern California lakes was once again clearly evident with an increase in boater registrations.

This season 1819 watercraft registrations/inspections were completed between the two sites, (Ruth Lake Marina and Ruth Rec Campground).

In 2014 - 2204 watercraft registrations/inspections were completed between the two sites.

The totals would have been much higher, but due to the fires and road closures we were virtually shut down the entire month of August (normally our busiest month).

The required inspections are generally accepted with the boaters and the "clean, drain and dry" policy is generally understood with little resistance to the procedure.

The following is a summary of the 2015 inspections.



**QUAGGA INSPECTION SUMMARY**

Jan. 1, 2015 to Nov. 30, 2015

	Marina	Campground	Total
Resident registrations (yellow)	169	188	357
Non resident inspections (red)	464	429	893
Non trailered watercraft (blue)	160	409	569
Total registrations/inspections	793	1026	1819
Craft that failed inspection	1	1	2

(2 boats denied entry, all from Humboldt County for standing water, none from any known high risk areas)

**INSPECTIONS:**

Banded from 2014 87      73      160

**Inspections done at other locations:**

Reynolds RV	11
Bayleys (Hayfork)	3



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

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

FAX 707-443-5731 707-822-8245

EMAIL [OFFICE@HBMWD.COM](mailto:OFFICE@HBMWD.COM)

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

**BOARD OF DIRECTORS**

SHERI WOO, PRESIDENT

NEAL LATT, VICE-PRESIDENT

J. BRUCE RUPP, SECRETARY-TREASURER

BARBARA HECATHORN, DIRECTOR

MICHELLE FULLER, DIRECTOR

**GENERAL MANAGER**

JOHN FRIEDENBACH

December 31, 2019

Jeanine Townsend, Clerk to the Board  
State Water Resources Control Board  
PO Box 100  
Sacramento, CA 95812-2000

Via email: [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)

Re: Comment Letter for Proposed Urban Water Conservation Reporting Regulations

Dear Ms. Townsend,

We are offering these comments on the reporting requirements for conservation and the prevention of waste and unreasonable use. Humboldt Bay Municipal Water District supplies wholesale water from the Mad River that ultimately is delivered to approximately 88,000 residents in Humboldt County. The water is stored in Ruth Reservoir and delivered 75 miles down the river to collection and treatment facilities near Arcata.

During the most recent drought, urban water suppliers complied with emergency water conservation measures, including monthly reporting, to comply with emergency regulations required by 23 CCR 3 §863-866. The State has proposed to continue monthly reporting for urban water suppliers under 23 CCR 3, chapter 3.5, article 2. The State's stated objectives in the continuation of reporting measures are to:

- Safeguard urban water supplies by minimizing waste and unreasonable use of water
- Provide information on potable water production and conservation measures that will ensure adequate supplies of potable water and encourage greater water conservation
- Increase the transparency of urban water use for the purpose of understanding the recent drought
- Increase conservation and promote a sense of shared responsibility among urban users reduce disruption in future water shortages

We respectfully request that the SWRCB introduce flexibility into its regulatory program to achieve the desired or necessary level of water conservation without over burdening water suppliers unnecessarily. The need for this monitoring does not exist in the Humboldt Bay Area.

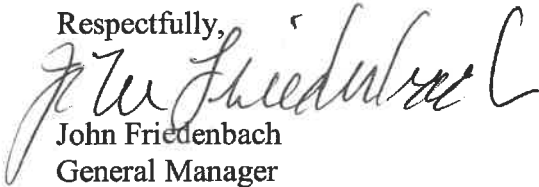
The hydrologic conditions are different in this area of the state. As communicated to the SWRCB during the recent drought years, our service area did not experience the diminution in water supply that was seen in other areas of the state. The reservoir levels followed normal patterns (including reaching full capacity each and every year during the four-year drought) and the water supply exceeded the demand levels.

Humboldt Bay Municipal Water District completed a conservative water supply reliability analysis in 2015 that determined the safe yield of our reservoir and water supply system is approximately 36.5 million gallons per day. Current peak demand on our system is 12.5 MGD, so even under extended drought conditions significantly worse than the most recent drought, our water supply would not be impacted and therefore conservation reporting is not necessary nor would it result in any beneficial decision making or future water supply. Our reservoir is un gated and once it fills and spills, the excess water travels to the Pacific Ocean.

We fully support voluntary conservation and the smart use of water at all times. But imposing mandatory regulations does not provide any future water shortage contingency or benefit to our service region.

The District respectfully requests that the SWRCB introduce flexibility into the new emergency regulations to account for varying local water supply conditions.

Respectfully,

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

John Friedenbach  
General Manager

Cc: ACWA



December 4, 2019

Collector 2 Cable Car Shed  
\$149,549

John Friedenbach  
General Manager  
Humboldt Bay Municipal Water District  
P.O. Box 95  
Eureka, CA 95502

H.B.M.W.D. DEC - 9 2019

Subject: Notification of Payment  
Public Assistance  
FEMA-4434-DR-CA, Cal OES ID: 023-91000

Dear Mr. Friedenbach:

The California Governor's Office of Emergency Services (Cal OES) has enclosed the approved copy of your Request for Reimbursement and/or Small Project Payment documents for your records. Please be advised that state warrants have a one-year period of negotiability.

As the recipient of federal funds, your organization is subject to the Federal Single Audit Act of 1984 and the Single Audit Act Amendments of 1996. Part of your report requirements under the Act and Amendments include the preparation of a Schedule of Expenditures of Federal Awards. You will need the following information in order to accurately complete the Schedule:

Federal Grantor Agency	U.S. Department of Homeland Security - Federal Emergency Management Agency
Pass-Through Agency	California Governor's Office of Emergency Services
Program Title	Public Assistance Grants
Federal CFDA Number	97.036
Pass-Through Grantor's Number	FEMA-4434-DR-CA, Cal OES ID: 023-91000

Please refer to the enclosed information detailing the payment made for this request. For assistance regarding this payment, or your audit requirements, contact the Grants Processing Unit at (916) 845-8110.

GRANTS PROCESSING UNIT

Enclosure(s)

c: Applicant's File



December 4, 2019

H.B.M.W.D. DEC - 9 2019

John Friedenbach  
General Manager  
Humboldt Bay Municipal Water District  
P.O. Box 95  
Eureka, CA 95502

*Collector 2 Supply Line Break  
# 50,454*

Subject: Notification of Payment  
Public Assistance  
FEMA-4434-DR-CA, Cal OES ID: 023-91000

Dear Mr. Friedenbach:

The California Governor's Office of Emergency Services (Cal OES) has enclosed the approved copy of your Request for Reimbursement and/or Small Project Payment documents for your records. Please be advised that state warrants have a one-year period of negotiability.

As the recipient of federal funds, your organization is subject to the Federal Single Audit Act of 1984 and the Single Audit Act Amendments of 1996. Part of your report requirements under the Act and Amendments include the preparation of a Schedule of Expenditures of Federal Awards. You will need the following information in order to accurately complete the Schedule:

Federal Grantor Agency	U.S. Department of Homeland Security - Federal Emergency Management Agency
Pass-Through Agency	California Governor's Office of Emergency Services
Program Title	Public Assistance Grants
Federal CFDA Number	97.036
Pass-Through Grantor's Number	FEMA-4434-DR-CA, Cal OES ID: 023-91000

Please refer to the enclosed information detailing the payment made for this request. For assistance regarding this payment, or your audit requirements, contact the Grants Processing Unit at (916) 845-8110.

GRANTS PROCESSING UNIT

Enclosure(s)

c: Applicant's File

# CONTINUING BUSINESS

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

To: Board of Directors  
From: John Friedenbach  
Date: January 2, 2020  
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**

Nordic Aquafarms and District staff will meet on January 14<sup>th</sup> to review water quality parameters and discuss supply operations. The District hired Engineering Solutions Services of Laguna Hills to prepare a grant application to the US Economic Development Agency seeking funding for rehabilitating Station 6.

Regarding the Clarifier facility, staff has initiated inquiries exploring available technologies that may exist outside the United States.

Staff met with the Samoa Peninsula Stakeholder Group to further discussions regarding peninsula infrastructure upgrades and funding. A progress report from this working group is scheduled to be released later in January.

**b) Transport**

No update

**c) Instream Flow Dedication**

Progress continues with the tasks contained in our WCB instream flow grant and claim reimbursements have been received.

## THIS JUST IN ... Series of December Storms Provides Good Start to Sierra Snowpack

January 2, 2020 Maven Breaking News



*From the Department of Water Resources:*



The Department of Water Resources (DWR) today conducted the first manual snow survey of 2020 at Phillips Station. The manual survey recorded 33.5 inches of snow depth and a snow water equivalent (SWE) of 11 inches, which is 97 percent of average for this location. The SWE measures the amount of water contained in the snowpack, which provides a more accurate forecast of spring runoff.

“While the series of cold weather storms in November and December has provided a good start to the 2020 snowpack, precipitation in Northern California is still below average for this time of year,” said DWR Director Karla Nemeth. “We must remember how variable California’s climate is and what a profound impact climate change has on our snowpack.”

More telling than a survey at a single location are DWR’s electronic readings from 130 stations scattered throughout the State. Measurements indicate that statewide, the snowpack’s SWE is 9.3 inches, or 90 percent of the January 2 average.

“It’s still too early to predict what the remainder of the year will bring in terms of snowpack,” said Sean DeGuzman, chief of DWR’s Snow Surveys and Water Supply Forecasting Section. “Climate change is altering the balance of rain and snow in California. That is why



it is important to maintain our measurements of the snowpack to document the change in addition to having critical information to forecast spring runoff.”

California traditionally receives about 75 percent of its annual precipitation during December, January and February, with the bulk of this precipitation coming from atmospheric rivers. Similar to last year, California experienced a dry start to this water year followed by cold, wet December storms that brought the state up to 74 percent of average annual precipitation for this time of year. Climate change is expected to lead to continued warming and fewer but more intense storms impacting the snowpack of the Sierra Nevada. These changes continue to impact the distribution of snow across elevations, its pattern of accumulation, and rate of melt.

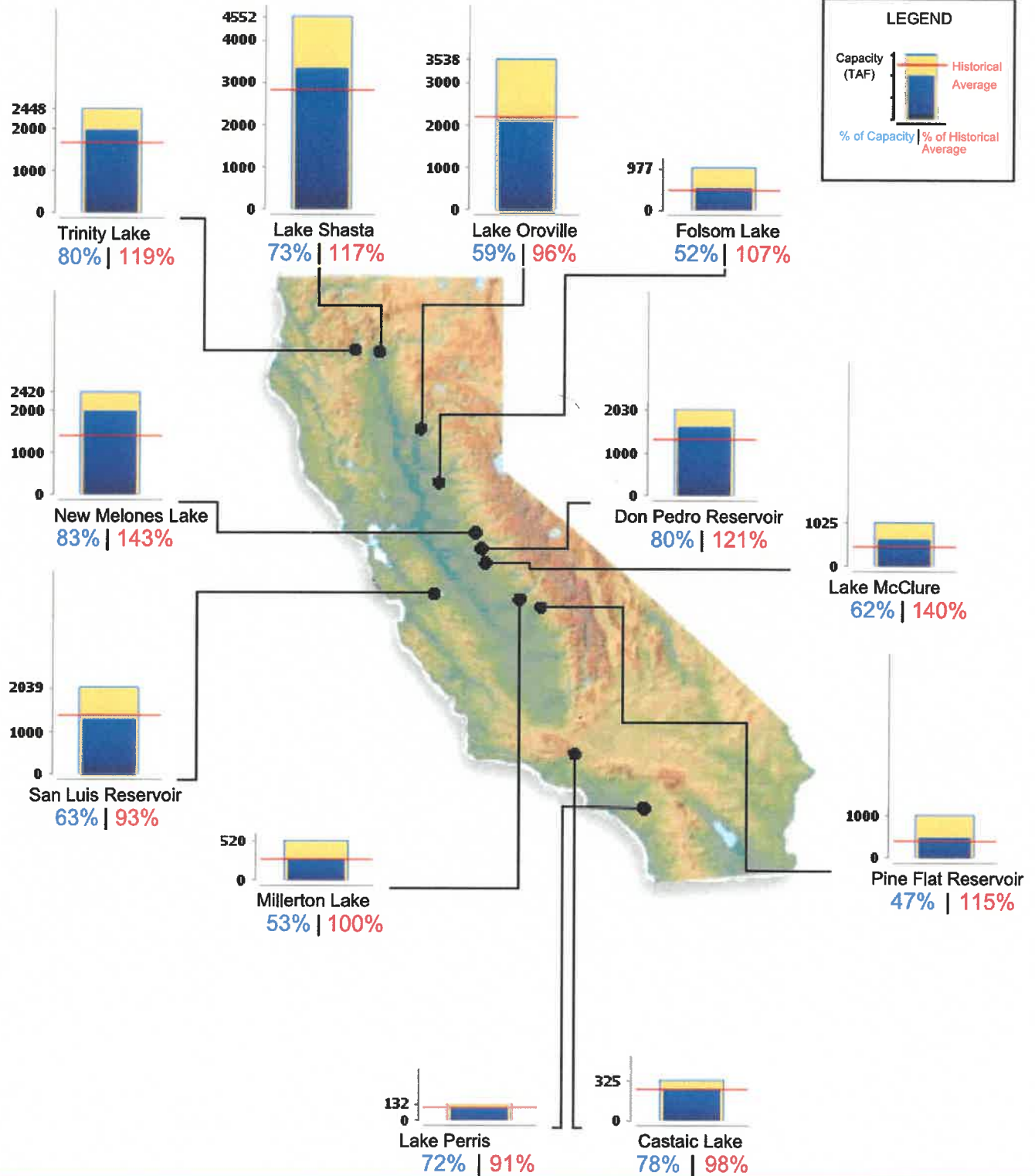
DWR conducts five media-oriented snow surveys at Phillips Station each winter in January, February, March, April and, if necessary, May. On average, the snowpack supplies about 30 percent of California’s water needs as it melts in the spring and early summer.



# Reservoir Conditions

Ending At Midnight - January 1, 2020

## CURRENT RESERVOIR CONDITIONS



# Snow Water Equivalents (inches)

## December 31, 2019

Provided by the California Cooperative Snow Surveys

Report generated: December 31, 2019 10:51

### SUMMARY BY SECTION

		Today	Yesterday
NORTH	Number of Stations Reporting	30	30
	Average snow water equivalent	9"	8"
	Percent of April 1 Reporting	29%	29%
	Percent of Normal for this date	81%	82%
CENTRAL	Number of Stations Reporting	41	41
	Average snow water equivalent	10"	10"
	Percent of April 1 Reporting	34%	34%
	Percent of Normal for this date	94%	96%
SOUTH	Number of Stations Reporting	27	27
	Average snow water equivalent	9"	9"
	Percent of April 1 Reporting	35%	35%
	Percent of Normal for this date	109%	112%

### STATEWIDE SUMMARY

Statewide Average SWEQ	9"	9"
Statewide Percent of April 1	33%	33%
Statewide Percent of Normal	94%	96%

To: Board of Directors  
From: John Friedenbach  
Date: January 2, 2020  
Subject: Board Vacancy

---

**TIMELINE:**

At the November Board meeting, the Board directed staff to follow the appointment process for replacing a Director and prepare the appropriate timeline to accomplish this within the 60 timeframe. Below is the timeline adopted by the Board to appoint a replacement for Director Hecathorn within 60 days from her vacancy date of December 31, 2019.

1. Post vacancy (applications due by January 8, 2020)
  - a. North Coast Journal: Will run in November 28 and December 12 and 19, 2019.
  - b. Currently posted in three public locations at:
    - Humboldt Community Services office; 5055 Walnut Drive, Cutten.
    - Freshwater Elementary School; 75 Greenwood Heights Drive; Eureka.
    - Moose Lodge Eureka: 4328 Campton Road; Eureka.
  - c. Also posted at District office and on HBMWD website
2. January 9, 2020 Board to review applications at regularly scheduled Board meeting.
3. January 10, 2020 Distribute Candidate Questions form.
4. Special Meeting January 29<sup>th</sup> 4:00 p.m. to review responses to Candidate Questions.
5. February 13, 2020 Regular Board meeting can discuss and narrow interview field if needed.
6. Special Meeting on February 26<sup>th</sup> 3:00 p.m. to interview candidates and select new Director.

***Must select new Director by February 28, 2020***



## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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

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

FAX 707-443-5731 707-822-8245

EMAIL [OFFICE@HBMWD.COM](mailto:OFFICE@HBMWD.COM)

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

### BOARD OF DIRECTORS

SHERI WOO, PRESIDENT

NEAL LATT, VICE-PRESIDENT

J. BRUCE RUPP, SECRETARY-TREASURER

MICHELLE FULLER, DIRECTOR

### GENERAL MANAGER

JOHN FRIEDENBACH

January 2, 2020

Ms. Kelly Sanders  
Registrar of Voters  
County of Humboldt  
2426 6<sup>th</sup> Street  
Eureka, CA 95501

### Re: Division 3 Director Vacancy

Dear Kelly,

I am writing to inform you that our Director, Barbara Hecathorn, for our Division 3 has voluntarily retired as of December 31, 2019. Our remaining directors have chosen to fill the vacancy by appointment within 60 days from December 31<sup>st</sup>. We have advertised the vacancy requesting letters of interest and posted a notice of vacancy at three locations within Division 3. Our directors intend to complete the appointment process by February 28, 2020.

Once our Board has made a decision, we will notify you of their selection.

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

Respectfully,

John Friedenbach  
General Manager

Cc: Barbara Hecathorn  
Ryan Plotz, District Counsel

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

To: Board of Directors  
 From: John Friedenbach  
 Date: January 2, 2020  
 Subject: District's Safety Program

---

**History**

Achieving employee safety and public safety is a top priority for the District.

The Board has adopted five goals which support our District Mission. Goal Number 1 is Safety and Public Health. It reads:

- ❑ Employ safe work practices to ensure worker and public safety at all times. Strive for no on-the-job reportable injuries each year.
- ❑ Operate the regional water system in accordance with state and federal safe drinking water laws and regulations at all times to protect public health.

The District has a "safety philosophy" as well as a strong safety program. The Board has consistently supported our safety philosophy and program. The District instituted a safety incentive/reward program for full-time regular employees. Currently, the District pays a \$200 incentive to each current employee who has been employed for at least six months and meets the criteria listed below. The District also awards one grand prize of \$500 (i.e. \$200 + \$300), based on a drawing of all eligible employees.

Criteria to be eligible for incentive award:

1. Participate in at least seventy five percent (75%) of monthly safety meetings during the calendar year. For newly hired employees that meet the eligibility requirements, percentage applies to eligible monthly safety meetings.
2. Wear appropriate PPE when required on the job.
3.
  - 3a. Provide one safety awareness or preventative suggestion to supervisor and have it documented at a safety meeting or with the Safety Committee.
  - 3b. Report an incident or near miss incident or unsafe conditions.
  - 3c. Receive a "satisfactory" rating on annual performance evaluation under the "Safe Practices" category.

One of 3 per calendar year	}	
-------------------------------------	---	--

**Discussion**

Last month staff had proposed modifying the grand prize incentive award to include an additional \$100 based on a drawing of all eligible employees at the Eureka office.

After lengthy discussion, the Board directed staff to bring back a list of options regarding the safety incentive program. To clarify, any change would become effective January 2020 for the incentive awards to be issued in February 2021.

The Board provided a variety of feedback at the December meeting:

- Separate the award funds from the “Safety” aspect
- Do not desire a “take-away” from District employees
- No separate “buckets” for Essex and the Office staff
- Do not reward for actions/work already required/compensated by the District
- Get input from other District employees

Below is a list of options for the Board to consider.

**Option 1:** No change to the existing safety incentive award program.

**Option 2:** Eliminate the safety incentive award program.

**Option 3:** Maintain safety incentive award program, but

- a. Eliminate the grand prize.
- b. Replace the grand prize with an employment “longevity” award.

**Option 4:** Replace the safety incentive award program entirely with an employment Anniversary Acknowledgment award program.

This Option proposes shifting funds previously used as the “Safety Award Program” to an “Anniversary Acknowledgment” instead. This would provide each employee an “Anniversary Acknowledgment” of \$200.00, paid on their annual anniversary date with the District. Also, based on feedback from employees, staff also suggests including the Districts permanent, part-time employees in this program as well.

The purpose would be to acknowledge continued loyalty of current employees, and could also be included as a “Benefits Offered by the District” as a (small) incentive to help attract new employees and differentiate the District from other competing employers.

Current Safety Award Program	27 FT Employees*	\$ 200 ea.
	<u>1 Bonus</u>	<u>\$ 300</u>
	Total Cost	\$5,700

Proposed Anniversary Acknowledgment	27 FT Employees*	\$ 200 ea.
	<u>2 PT/Perm Employee*\$</u>	<u>\$ 100 ea.</u>
	Total Cost	\$5,600

(\*These numbers represent a fully staffed District, currently the District is seeking one FT employee and one PT/Perm employee)

**Option 5:** Keep existing safety incentive award program and implement Anniversary Acknowledgment award program listed under Option 4. This could be factored into the FY 20/21 budget discussions.

**Recommendation**

As stated above, the District does enjoy a very strong safety culture which returns benefits that are not easily measured. How does one quantify accidents that don't happen? How does one quantify the value of uninjured workers who show up to work every day? How does one quantify the safety awareness and care that one employee shows to another to protect each other from harm?

Safety culture is the collection of the beliefs, perceptions and values that employees share in relation to risks within an organization. A strong safety culture does not just happen by accident nor without definition or continued reinforcement. As your general manager assigned the duties of managing District operations, it is my belief that degrading our existing safety incentive program will diminish the strong safety culture that has been established and maintained at our District for decades.

That being said, staff will implement any policy that the Board adopts.



# New Business

## HUMBOLDT BAY MUNICIPAL WATER DISTRICT Officers and Committee Assignments

Officers of the District	Incumbent/Member	Term
President	Sheri Woo	Until new appointment by Board (odd numbered years)
Vice President	Neal Latt	Until new appointment by Board
Secretary-Treasurer	J. Bruce Rupp	Until new appointment by Board
Assistant Secretary Treasurer	Barbara Hecathorn	Until new appointment by Board
General Manager	John Friedenbach	Until new appointment by Board
Attorney	Ryan Plotz and Russ Gans of Mitchell, Brisso, Delaney & Vrieze	Until new appointment by Board
Auditor	R.J. Ricciardi, Inc.	Until new appointment by Board
Other Assignments/Appointments		
ACWA Region 1 Board Member	J. Bruce Rupp	Next Election
ACWA-JPIA Board Member	J. Bruce Rupp (regular) John Friedenbach (alternate) Barbara Hecathorn (alternate)	Until new appointment by Board
JPIA Employee Benefits Committee	J. Bruce Rupp	Until new appointment
JPIA Executive Committee	J. Bruce Rupp	Until new appointment
ACWA Finance Committee, Vice Chair	J. Bruce Rupp	Until new appointment
RREDC Board Member	Neal Latt (regular) Barbara Hecathorn (alternate)	Until new appointment by Board
RCEA Board Member	Sheri Woo (regular) Barbara Hecathorn (alternate)	Until new appointment by Board
Countywide RDA Oversight Board Member	J. Bruce Rupp	Until Next Election Cycle
Committee Assignments (Charters Attached)		
Audit Committee	Secretary/Treasurer with Sheri Woo (2013)	Secretary/Treasurer is standing member and second Director appointed year-to-year

## HUMBOLDT BAY MUNICIPAL WATER DISTRICT Officers and Committee Assignments

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

### INACTIVE COMMITTEES Charters attached

Committee	Prior Members	Status
Ad Hoc Committee for Negotiating Wholesale Contracts	Barbara Hecathorn Bruce Rupp	Inactive Committee
Joint Agency Aquatic Invasive Species Committee	Barbara Hecathorn Michelle Fuller	Inactive Committee
Agenda Review Committee	Board President & Secretary/Treasurer	Inactive Committee



H.B.M.W.D. DEC 27 2019

Date: December 27, 2019  
 To: Board of Directors of Independent Special Districts  
 From: Colette Metz Santsche, Executive Officer  
**Subject: Request for Nominations for District Members to serve on LAFCo**

The term of office for one regular special district member on LAFCo expires on June 30, 2020. All terms are four years and end on June 30. There are no term limits.

### Current Special District Terms

Designation	Current Member	Term of Office (ends on June 30)
Regular Member	Debra Lake, Fruitland Ridge Fire Protection District	2016 - 2020*
Regular Member	Troy Nicolini, Samoa Peninsula Fire District	2018 - 2022
Alternate Member	David Couch, McKinleyville Community Services District	2018 - 2022

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

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

1. Each district may nominate one person. Nominees must be board members, not staff.
2. All nominations must be accompanied with a completed nomination form approved by a majority of your Board (enclosed).
3. A candidate information form (enclosed) or a letter of interest and qualifications may be submitted with the nomination. This is voluntary and will be kept on file at the LAFCo offices to be made available upon request. It will not be distributed with the ballots.
4. All nomination materials must be returned to Humboldt LAFCo, 1125 16<sup>th</sup> Street, Suite 202, Arcata, CA 95521, or faxed 707-825-9181.
5. Upon receipt of nominations, LAFCo will prepare and send a ballot to each district. The ballot will state the return date and how successful candidates will be notified.

**The deadline for submitting nominations is Friday, March 20, 2020.** Any nomination that is submitted after the deadline will not be considered.



**Special District Member Nomination Form 2020**

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

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

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

The Board hereby nominates \_\_\_\_\_ to fill the term beginning on June 30, 2020 and expiring June 30, 2024 as a Regular Member of the Humboldt Local Agency Formation Commission representing independent special districts of Humboldt County.

Board action taken on the \_\_\_\_\_ day of \_\_\_\_\_, 2020, by the following vote:

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

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

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

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

District Representative:

\_\_\_\_\_  
Signature

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



**Special District Member Candidate Information Sheet 2020**

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

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

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

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

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

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

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

Length of service with District:

Present Occupation:

Personal and Professional Background:

Summarize your interest in serving on LAFCo:

Summarize your qualifications for serving on LAFCo:

List local government and/or civic organization involvement:

**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: John Friedenbach  
Date: January 2, 2020

Re: Abandon Vehicles at Ruth

**Discussion**

Staff has become aware of numerous vehicles that have been abandon on District property in the Ruth area primarily at the upstream headwaters region of Ruth Lake. This area is relatively flat, easily accessible, and somewhat remote. There are currently four abandon vehicles (two motor homes and two trailers). See attached photos.

These vehicles pose an environmental hazard as they are either filled with trash and/or burned leaving behind potential hazardous ash and debris. They are located in an area above Ruth Lake that is susceptible to flooding and could potentially contaminate the water in the lake. Consequently, staff believes that these abandon vehicles need to be removed as quickly as possible and measures need to be implemented that would deter this situation from occurring in the future.

Staff proposes to contact the following agencies for assistance in addressing this issue/situation:

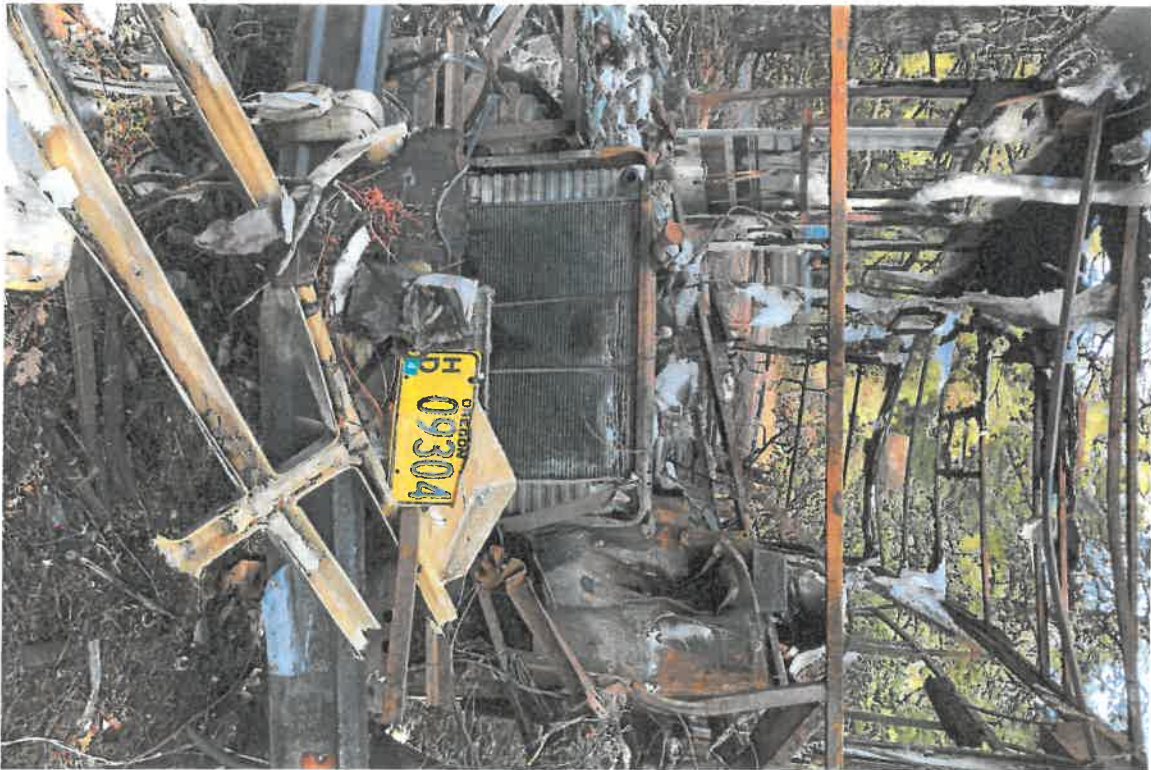
- Trinity County Sheriff
- California Highway Patrol – Trinity County
- Trinity County Roads Department
- Trinity County Health Department
- California Department of Motor Vehicles
- Oregon Department of Motor Vehicles
- California Department of Fish and Wildlife

In addition, staff will utilize the excess gravel from the dredging at Sheriff's Cove to restrict or eliminate vehicle access to these common areas above the lake where vehicle abandonment is occurring.

**Staff Request**

Staff requests that the Board authorize a current fiscal year budget of \$20,000 to accomplish the removal of the existing abandon vehicles on District property at Ruth and direct staff to seek recovery of funds spent from the last registered owners of the vehicles/trailers.















**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: Chris Harris  
Date: January 9, 2020  
Re: Surplus of Office Laptop and Business Manager Desktop Computer

**Background**

The District uses a 5-year replacement policy for most computer equipment. In the FY20 Budget, replacement of the Business Manager's desktop computer (purchased FY13) and the office laptop (purchased FY15) was approved. The replacement items have been purchased and are in use.

**Recommendation**

Staff recommends the District surplus the old Business Manager's desktop computer and the office laptop.

Engineering



**NOTICE TO PROCEED**

TO: Sequoia Construction Specialties  
Attn: Brian Pritchard  
PO Box 6061  
Eureka, CA 95502-6061  
  
707-442-3596  
brian@sequoiaconst.com

PROJECT: 12 kV Switchgear Relocation Project

You are hereby notified to commence Work in accordance with the Agreement on or before the 2<sup>nd</sup> day of January, 2020, and you are to complete the Work within 330 consecutive calendar days thereafter.

The date of completion of all Work is therefore the 26<sup>th</sup> day of November, 2020.

You are required to return an acknowledged copy of this Notice to Proceed to the Owner.

Dated this 31<sup>st</sup> day of December, 2019.

Owner: Humboldt Bay Municipal Water District

By:  Title: General Manager

**ACCEPTANCE OF NOTICE**

Receipt of the above Notice to Proceed is hereby acknowledged by:

\_\_\_\_\_  
(Name of Contractor)

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

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

Humboldt Bay Municipal Water District  
12 kV Switchgear Relocation Project

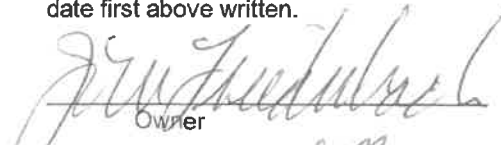
CONTRACT AGREEMENT


THIS AGREEMENT, MADE THIS 18th DAY OF December, 2019 by and between the Humboldt Bay Municipal Water District, hereinafter called "Owner," and Sequoia Specialties Inc; DBA: Sequoia Construction Specialties, doing business as corporation, hereinafter called "Contractor" (insert "a corporation," "a partnership," or "an individual" as applicable).

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The Contractor will commence and complete the: 12 kV Switchgear Relocation Project
2. The Contractor will furnish all of the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of the project described herein.
3. The Contractor will commence the Work required by the Contract Documents within 21 calendar days after the date of the Notice to Proceed and will complete the same within the time provided in Section B-35 of the General Conditions, unless the period for completion is extended otherwise by the Contract Documents.
4. The Contractor agrees to perform all of the Work described in the Contract Documents and comply with terms therein for the sum of \$ 2,448,063.00, or as shown in the Bid Proposal.
5. The Contract Documents consist of the Bid Requirements, Contract Forms, General Conditions, Specifications, Appendices, and the Plans, including all modifications thereof incorporated into the documents before their execution, and including all other requirements incorporated by specific reference thereto. These form the Contract.
6. The Owner will pay to the Contractor in the manner and at such times as set forth in the General Conditions such amounts as required by the Contract Documents.
7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in quadruplicate, each of which shall be deemed an original on the date first above written.

  
 \_\_\_\_\_  
 Owner  
 Title General Manager  
 Date 12-23-19

  
 \_\_\_\_\_  
 Contractor  
 Title PRESIDENT  
 Date 12/18/19

**From:** Chavez, Concepcion@CalOES <Concepcion.Chavez@CalOES.ca.gov>  
**Sent:** Thursday, December 12, 2019 8:43 AM  
**To:** Pat Kaspari  
**Cc:** Nathan Stevens; John Friedenbach; 'Chris Harris'; Dale Davidsen (supt@hbmwd.com); Jordan.King@ghd.com  
**Subject:** RE: 4240- PJ0054 Closeout site visit and PJ0017 Kickoff Site visit

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Good morning,

Pat management here has identified a funding increase for your project is tentatively approved. Please proceed with submitting to Cal OES a request letter with the required information along with an updated BCA.

Please let me know if you have any questions.

**Concepcion Chavez**, Hazard Mitigation Grants Specialist  
 Coastal Unit  
 Recovery - Hazard Mitigation Assistance Branch  
**California Governor's Office of Emergency Services**



Office: (916) 845-8854  
 Cell: (916) 767-4715  
[www.caloes.ca.gov/HMGP](http://www.caloes.ca.gov/HMGP)

**From:** Pat Kaspari <Pat.Kaspari@ghd.com>  
**Sent:** Wednesday, December 11, 2019 10:52 AM  
**To:** Chavez, Concepcion@CalOES <Concepcion.Chavez@CalOES.ca.gov>  
**Cc:** Nathan Stevens <Nathan.Stevens@ghd.com>; John Friedenbach <friedenbach@hbmwd.com>; 'Chris Harris' <Harris@hbmwd.com>; Dale Davidsen (supt@hbmwd.com) <supt@hbmwd.com>; Jordan.King@ghd.com  
**Subject:** RE: 4240- PJ0054 Closeout site visit and PJ0017 Kickoff Site visit

Thanks Concepcion,  
 Just FYI, with the additional \$1,073,063 in cost, the BCA still comes in at \$6,457,615 in benefits divided by \$2,903,093 in cost equals BCA of 2.22

**Patrick Kaspari, PE**  
 Associate Engineer

**GHD**





SECTION *J1a* PAGE NO. *4*  
**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

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

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

FAX 707-443-5731 707-822-8245

EMAIL [OFFICE@HBMWD.COM](mailto:OFFICE@HBMWD.COM)

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

**BOARD OF DIRECTORS**

SHERI WOO, PRESIDENT

NEAL LATT, VICE-PRESIDENT

J. BRUCE RUPP, SECRETARY-TREASURER

MICHELLE FULLER, DIRECTOR

**GENERAL MANAGER**

JOHN FRIEDENBACH

January 2, 2020

Ms. Concepcion Chavez, Hazard Mitigation Specialist  
California Office of Emergency Services  
3650 Schriever Avenue  
Mather, CA 95655-4203

Subject: **HMGP #4240-PJ0017**  
**Additional Grant Funds Request for**  
**Humboldt Bay Municipal Water District 12kV Switchgear Relocation**

Dear Ms. Chavez,

The Humboldt Bay Municipal Water District (HBMWD) respectfully requests an increase in grant funding for the completion of the HBMWD's 12-kV Switchgear Relocation Project (12kV Project) referenced above. Bids were solicited for this project and five bids were received on December 10, 2019 (see attached Bid Tabulation for details of each bid). The lowest responsible, responsive bid received was from Sequoia Construction Specialties in the amount of \$2,471,328. Unfortunately, this is \$1,096,328 over the construction portion of the original grant amount (see attached original cost estimate with actual bid amounts added). The overall scope of the project has not changed. The increase in costs are due to several factors, with the most pertinent being that the completion of the design identified additional components that are required but were not included in the original grant cost estimate. In addition, we discovered an oversight whereby we had not included the railroad authority site access license cost of \$60,000. Therefore, we are respectfully seeking additional project cost funding approval in the amount of \$1,156,328 ( 1,096,328 + 60,000 ).

We have also updated the original Benefit Cost Analysis to add the actual project cost of \$2,923,328 (1,767,000 + 1,156,328) vs the original project cost estimate of \$1,767,000. The revised BCA is 2.19. We have also attached a copy of the zipped BCA. Despite the increased project cost, the BCA reflects the importance of this project. The relocation of the switchgear out of the flood zone will help ensure that potable water can still be provided to over 88,000 customers in the Humboldt Bay area in the event of a major flood or dam break on the Mad River.

We greatly appreciate your assistance in this matter. If you have any questions, or require any additional information, please do not hesitate to contact us.

Sincerely,

  
John Friedenbach  
General Manager

Encl.

1. Bid Tabulation
2. Original Grant Cost Estimate with Bid Amounts Added
3. Revised Benefit Cost Analysis

cc: Patrick Kaspari, GHD

**Bid Tabulation Results from December 10, 2019 Bids**

Owner: Humboldt Bay Municipal Water District  
 Project Name: 12KV Switchgear Relocation Project  
 Project Location: HBIMWD Essex Control Center, Humboldt County, CA  
 Date of Bid: 12/10/2019  
 Prepared by: Patrick Kaspari

Item No.	Description	Units	Quantity	Sequoia		Pierison		Cal Electro		GR Sundberg		Mercer-Fraser	
				Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
1	Mobilization/Demobilization	LS	1	\$120,000	\$120,000	\$12,340	\$12,340	\$120,000	\$120,000	\$240,000	\$240,000	\$290,000	\$290,000
2	Sediment & Erosion Control	LS	1	\$10,000	\$10,000	\$15,870	\$15,870	\$18,000	\$18,000	\$35,000	\$35,000	\$20,000	\$20,000
3	Gravel Access Road	LS	1	\$32,500	\$32,500	\$17,330	\$17,330	\$14,000	\$14,000	\$19,000	\$19,000	\$45,000	\$45,000
4	Site Trenching, Backfill, Compaction, Wire Cable Terminations & Capping	LS	1	\$320,895	\$320,895	\$319,040	\$319,040	\$275,000	\$275,000	\$275,000	\$275,000	\$300,000	\$300,000
5	Precast Handholds/Vaults	LS	1	\$109,450	\$109,450	\$122,590	\$122,590	\$172,000	\$172,000	\$100,000	\$100,000	\$115,000	\$115,000
6	Concrete Pad of Integrated Power Assembly & Concrete Infill at NW End of Ramp	LS	1	\$108,020	\$108,020	\$161,640	\$161,640	\$115,000	\$115,000	\$180,000	\$180,000	\$165,000	\$165,000
7	Drainage Improvements	LS	1	\$24,453	\$24,453	\$33,980	\$33,980	\$15,000	\$15,000	\$75,000	\$75,000	\$68,000	\$68,000
8	Concrete Ramp & Retaining Wall	LS	1	\$91,070	\$91,070	\$92,200	\$92,200	\$101,000	\$101,000	\$300,000	\$300,000	\$230,000	\$230,000
9	Site Grading & Fill Material	CY	195	\$612	\$119,340	\$151,44	\$29,531	\$145	\$28,275	\$300	\$58,500	\$393	\$76,635
10	Security Fence & Gates	LF	235	\$214	\$50,290	\$235	\$55,305	\$225	\$52,875	\$250	\$58,750	\$200	\$47,000
11	Integrated Power Assembly	SF	668	\$606	\$404,808	\$670,43	\$447,847	\$560	\$374,080	\$550	\$367,400	\$750	\$501,000
12	PG&E Interconnection	LS	1	\$33,000	\$33,000	\$36,960	\$36,960	\$28,000	\$28,000	\$32,000	\$32,000	\$35,000	\$35,000
13	1200 A Utility Metering Compartment	LS	1	\$34,068	\$34,068	\$38,160	\$38,160	\$40,000	\$40,000	\$32,000	\$32,000	\$35,000	\$35,000
14	1200 A Main Breakers, PTs, CPT, Metering, Relays, and Compartment	EA	2	\$84,757	\$169,514	\$94,930	\$189,860	\$85,000	\$170,000	\$80,000	\$160,000	\$90,000	\$180,000
15	1200 A Feeder Section/Compartment w/ 2 1200 A Breakers & relays	EA	5	\$96,494	\$482,470	\$108,075	\$540,380	\$95,000	\$475,000	\$94,000	\$470,000	\$94,000	\$470,000
16	1200 A Bus Tie Breakers, Relays, & Compartment	EA	2	\$54,483	\$108,966	\$61,025	\$122,050	\$90,000	\$180,000	\$55,000	\$110,000	\$55,000	\$110,000
17	Switchgear Battery System	LS	1	\$57,108	\$57,108	\$63,960	\$63,960	\$70,000	\$70,000	\$55,000	\$55,000	\$60,000	\$60,000
18	Relocate Generator Controller, Converter & Add Remote Interface Panel	LS	1	\$43,287	\$43,287	\$48,480	\$48,480	\$120,000	\$120,000	\$42,000	\$42,000	\$45,000	\$45,000
19	Testing, Commissioning, Demonstration & Training	LS	1	\$116,186	\$116,186	\$130,130	\$130,130	\$90,000	\$90,000	\$115,000	\$115,000	\$120,000	\$120,000
20	Decommissioning of Existing Switchgear & Components	LS	1	\$45,903	\$45,903	\$50,170	\$50,170	\$115,000	\$115,000	\$70,000	\$70,000	\$65,000	\$65,000
<b>TOTAL BID AMOUNT</b>				<b>\$2,471,328.00</b>	<b>\$2,527,822.94</b>	<b>\$2,573,230.00</b>	<b>\$2,784,650.00</b>	<b>\$2,977,635.00</b>					

<b>SECTION V – COST ESTIMATE</b>				
<p>Some sample categories for projected expenditures are: Project Management, Engineering &amp; Design, Site Acquisitions, Labor, Materials &amp; Supplies, Equipment, Transportation. Additional line-item suggestions are included in sample budget categories on page 12 of sub-application instructions. Lump sum(s) in the unit of measure should not be commingled. Explain projected expenditures in detail in the Cost Estimate Narrative in Section V.  <b>You must use this spreadsheet. Do not copy or adjust.</b></p>				
<p>Refer back to the SUB-APPLICATION INSTRUCTIONS SECTION V - cost estimate for some ineligible items.</p>				
A.	Item name: Mobilization/Demobilization	Unit of Measure	Unit Cost	BID AMOUNTS
	1.00	LS	52,000.00	\$120,000
B.	Item name: Erosion and Sediment Control	Unit of Measure	Unit Cost	Cost Estimate
	2100.00	LF	3.00	6,500.00
**	Item name: Gravel Access Road (Not included with original Grant Cost Est)			0
C.	Item name: Site trenching, backfill, and compaction (including concrete)	Unit of Measure	Unit Cost	Cost Estimate
	250.00	LF	30.00	7,500.00
D.	Item name: Precast Handholes	Unit of Measure	Unit Cost	Cost Estimate
	2.00	EA	5,300.00	10,600.00
E.	Item name: Concrete Pad	Unit of Measure	Unit Cost	Cost Estimate
	10.00	CY	410.00	4,100.00
**	Item name: Drainage Improvements (Not included with original Grant Cost Est)			0
				\$24,453

**	Item name: Concrete Ramp & Retaining Wall (Not included with original Grant Cost Est)			0	\$81,070
**	Item name: Site Grading & Fill Material (Not included with original Grant Cost Est)			0	\$119,340
**	Item name: Security Fences & Gate (Not included with original Grant Cost Est)			0	\$50,290
**	Item name: PG&E Interconnect (Not included with original Grant Cost Est)			0	\$33,000
**	Item name: 1200 A Utility Metering (Not included with original Grant Cost Est)			0	\$34,068
F.	Item name: Conduit (4" PVC)	Unit of Measure	Unit Cost	Cost Estimate	
	500.00	LF	40.00	20,000.00	\$0 Inc. w/ Item C
G.	Item name: Wire (#4/U AWG, 15-KV 133%)	Unit of Measure	Unit Cost	Cost Estimate	
	23.00	CLF	1,600.00	36,800.00	\$0 Inc. w/ Item C
H.	Item name: Cable Terminations (15-kV)	Unit of Measure	Unit Cost	Cost Estimate	
	45.00	EA	700.00	31,500.00	\$0 Inc. w/ Item C
I.	Item name: NEMA 1 Switchgear Part 1	Unit of Measure	Unit Cost	Cost Estimate	
	1.00	EA	520,000.00	520,000.00	\$169,514 1200 A Main Breaker, PTs, etc
J.	Item name: NEMA 1 Switchgear Part 2	Unit of Measure	Unit Cost	Cost Estimate	
	1.00	EA	357,000.00	357,000.00	\$482,470 1200 A Feeder Section/Compartment etc.
K.	Item name: 15-kV 1200A Non-Seg Busduct	Unit of Measure	Unit Cost	Cost Estimate	
	1.00	EA	31,000.00	31,000.00	\$0 Inc. w. Item C
L.	Item name: Equipment Power Center				

Unit Qty:	Unit of Measure	Unit Cost	Cost Estimate	Integrated Power Assembly
1.00	EA	250,000.00	250,000.00	\$404,808
**	Item name: 1200 A Bus Tie Breakers, Relays & Compartments (Not included with original		0	\$108,966
**	Item name: Switchgear Battery System (Not included with original Grant Cost Est.		0	\$57,108
**	Item name: Relocate Generator Controller, Converted & Interface Panel (Not included w		0	\$43,287
**	Item name: Railroad Easement Cost (Not included with original Grant Cost Est.)		0	\$60,000
<b>M.</b>	Item name: Testing and Commissioning		Cost Estimate	
16.00	HR	500.00	8,000.00	\$116,186
<b>N.</b>	Item name: Decommissioning of Existing Switchgear		Cost Estimate	
60.00	HR	670.00	40,000.00	\$45,903
<b>TOTAL CONSTRUCTION COST</b>				<b>\$2,531,328</b>
<b>O.</b>	Item name: Project Management		Cost Estimate	
120.00	HR	125.00	15,000.00	
<b>P.</b>	Item name: Engineering Design		Cost Estimate	
1.00	See Attachment D (Soft Costs Breakdown)	143,000.00	143,000.00	
<b>Q.</b>	Item name: Environmental Permitting		Cost Estimate	
1.00	See Attachment D (Soft Costs Breakdown)	71,000.00	71,000.00	

Item name:	Construction Management	Unit of Measure	Unit Cost	Cost Estimate
R.				
Unit Qty:				
1.00	See Attachment D (Soft Costs Breakdown)		143,000.00	143,000.00
S.				
Item name:				
Unit Qty:				
		Unit of Measure	Unit Cost	Cost Estimate
				0.00
I.				
Item name:				
Unit Qty:				
		Unit of Measure	Unit Cost	Cost Estimate
				0.00
U.				
Item name:				
Unit Qty:				
		Unit of Measure	Unit Cost	Cost Estimate
				0.00
V.				
Item name:				
Unit Qty:				
		Unit of Measure	Unit Cost	Cost Estimate
				0.00
W.				
Item name:				
Unit Qty:				
		Unit of Measure	Unit Cost	Cost Estimate
				0.00
X.				
Item name:				
Unit Qty:				
		Unit of Measure	Unit Cost	Cost Estimate
				0.00
* Y.				
Item name:	<b>Subapplicant Pre-Award Costs</b>			
Unit Qty:				
1.00		Unit of Measure	Unit Cost	Cost Estimate
		Costs Breakdown	20,000.00	20,000.00
* Item Y	<b>SUB-APPLICANT PRE-AWARD COST</b>			
Allowable Pre-Award Project Costs: Costs incurred after the HMGP application period has opened, but prior to grant award, are identified as pre-award costs. Pre-award costs directly related to developing the application may be funded. Such costs may have been incurred to develop a BCA,				

to gather environmental and historic data, for preparing design specifications, or for workshops or meetings related to development and submission of the application. Sub-applicants who are not awarded sub-grant funds will not receive reimbursement for pre-award costs.

<b>TOTAL PROJECT COST ESTIMATE</b>		→	\$1,767,000.00	<b>REVISED COST PER BID</b>	\$2,923,328.00
<b>SPECIFY COST BREAKDOWN</b>					
SUB-APPLICANT (NON-FEDERAL) SHARE	→	\$441,750.00	25%		\$730,832.00
FEDERAL SHARE (MAX 75.00 % OF ELIGIBLE COSTS)	→	\$1,325,250.00	75%		\$2,192,496.00
<b>ESTIMATED TOTAL COST</b>			\$1,767,000.00	100%	
				↑	
				<b>Must Be 100%</b>	
<b>MATCH SOURCES (NON-FED SHARE) FUNDING</b>					
TOTAL PROJECT COST ESTIMATE	\$	1,767,000.00			\$2,923,328.00
PROPOSED FEDERAL SHARE	\$	1,325,250.00			\$2,192,496.00
FEDERAL SHARE PERCENTAGE			75%		75%
PROPOSED NON-FEDERAL SHARE	\$	441,750.00			\$730,832.00
NON-FEDERAL PERCENTAGE			25%		25%

<b>1. SOURCE :</b>	Select: Local Agency Funding, Other Agency Funding, Private Non-Profit, or State Agency Funding								
<b>SOURCE NAME:</b>	Local Agency Funding (HBMWD)								
<b>FUNDING TYPE:</b>	Cash from municipal customer rate payers (Select: Administration, Cash, Consulting Fees, Engineering Fees, Force Account Labor your agency personnel, Program Income, etc).								
<b>OTHER FUNDING TYPE:</b>	N/A								
<b>FUNDS AVAILABILITY DATE:</b>	→					July 1, 2016			
<b>FUNDS COMMITMENT LETTER DATE:</b>	→					May 27, 2016			



02 Jan 2020

**Project: Humboldt Bay Municipal Water District 12-kV Switchgear Relocation**

Pg 1 of 6

Total Benefits: **\$6,457,615**

Total Costs: **\$2,953,358**

BCR: **2.19**

Project Number: 16-0003

Disaster #:

Program: PDM

Agency: **Humboldt Bay Municipal Water District**

State: **California**

Point of Contact: John Friedenbach

Analyst: Nathan Stevens

**Project Summary:**

Project Number: 16-0003

Disaster #:

Program: PDM

Agency: Humboldt Bay Municipal Water District

Analyst: Nathan Stevens

Discount Rate: 0.070

Point of Contact: John Friedenbach

Phone Number: (707) 443-5018

Address: PO Box 95, Eureka, California, 95502

Email: [friedenbach@hbmwd.com](mailto:friedenbach@hbmwd.com)

Comments:

**Structure Summary For:**

12-kV Switchgear, 7270 West End Rd, Arcata, California, 95521, Humboldt

Structure Type: Utility

Historic Building: No

Contact: Pat Kaspari

Benefits: \$6,457,615

Costs: \$2,953,358

BCR: 2.19

Mitigation	Hazard	BCR	Benefits	Costs
Other flood proofing measures.	Damage-Frequency Assessment	2.19	\$6,457,615	\$2,953,358

02 Jan 2020 Project: **Humboldt Bay Municipal Water District 12-kV Switchgear Relocation**

Total Benefits: **\$6,457,615** Total Costs: **\$2,953,358** BCR: **2.19**

Project Number: 16-0003 Disaster #: Program: PDM Agency: **Humboldt Bay Municipal Water District**

State: **California** Point of Contact: John Friedenbach Analyst: Nathan Stevens

**Structure and Mitigation Details For:** 12-kV Switchgear, 7270 West End Rd, Arcata, California, 95521, Humboldt

Benefits: \$6,457,615 Costs: \$2,953,358 BCR: 2.19

**Hazard: Damage-Frequency Assessment - Flood**

Mitigation Option: Other flood proofing measures

Latitude: Longitude: Project Useful Life: 30

**Mitigation Information**

Basis of Damages: Expected Damages

Number of Damage Events: 2

Number of Events with Know Recurrence Intervals: 2

**Utilities**

Type of Service: Potable Water  
 Other:  
 Number of Customers: Served: 80,000  
 Value per Unit of Service: 103.00  
 Total Value of Service per Day: \$8,240,000

Facility Description:  
 See attached.

02 Jan 2020

Project: **Humboldt Bay Municipal Water District 12-kV Switchgear Relocation**

Pg 3 of 6

Total Benefits: **\$6,457,615**

Total Costs: **\$2,953,358**

BCR: **2.19**

Project Number: 16-0003

Disaster #:

Program: PDM

Agency: **Humboldt Bay Municipal Water District**

State: **California**

Point of Contact: John Friedenbach

Analyst: Nathan Stevens

**Expected Damages Before and After Mitigation**

Analysis Year: 2016

Analysis Duration: 56

Utilities (\$/day): \$8,240,000.00

Year Built: 1961

User Input Analysis Duration:

Buildings (\$/day):

Roads/Bridges (\$/day):

**Damages Before Mitigation**

**Damages After Mitigation**

RI: 9999.00

Are Damages In Current Dollars? Yes

Buildings (Days):

Utilities (Days): 0.0

Roads (Days):

Total	\$0

RI: 9999.00

Are Damages In Current Dollars? Yes

Buildings (Days):

Utilities (Days): 0.0

Roads (Days):

Total	\$0

02 Jan 2020

Project: **Humboldt Bay Municipal Water District 12-kV Switchgear Relocation**

Pg 4 of 6

Total Benefits: **\$6,457,615**

Total Costs: **\$2,953,358**

BCR: **2.19**

Project Number: 16-0003

Disaster #:

Program: PDM

Agency: **Humboldt Bay Municipal Water District**

State: **California**

Point of Contact: John Friedenbach

Analyst: Nathan Stevens

Damage Year:

RI: 475.00

Are Damages In Current Dollars? Yes

Buildings (Days):

Utilities (Days): 30.0

Roads (Days):

Total	\$247,200,000
Total Inflated	

**Volunteers Cost**

Number of Volunteers Required:

Cost of Volunteers Time (\$/Hour/Person):

Per-Person Cost of Lodging for a Volunteer:

Number of Hours Volunteered/Person:

Number of Days Lodging/Volunteer:

Cost of Volunteers:

Damage Year:

RI: 2000.00

Are Damages In Current Dollars? Yes

Buildings (Days):

Utilities (Days): 30.0

Roads (Days):

Total	\$247,200,000
Total Inflated	

**Volunteers Cost**

Number of Volunteers Required:

Cost of Volunteers Time (\$/Hour/Person):

Per-Person Cost of Lodging for a Volunteer:

Number of Hours Volunteered/Person:

Number of Days Lodging/Volunteer:

Cost of Volunteers:

**Social Benefits**

**Mental Stress and Anxiety**

**Lost Productivity**

02 Jan 2020

**Project: Humboldt Bay Municipal Water District 12-kV Switchgear Relocation**

Pg 5 of 6

Total Benefits: <b>\$6,457,615</b>	Total Costs: <b>\$2,953,358</b>	BCR: <b>2.19</b>
Project Number: 16-0003	Disaster #:	Program: PDM
Agency: <b>Humboldt Bay Municipal Water District</b>	Analyst: Nathan Stevens	
State: <b>California</b>	Point of Contact: John Friedenbach	Number of Worker: 0
Number of Person: 0	Treatment Costs per person: \$2,443.00	Productivity Loss per person: \$8,736.00
Total Mental Stress and Anxiety Cost: \$0.00	Total Lost Productivity Cost: \$0.00	

**BCR Calculation Results**

Expected Annual Damages Before Mitigation	Expected Annual Damages After Mitigation	Expected Avoided Damages After Mitigation (Benefits)
Annual: \$520,396 Present Value: \$6,457,615	Annual: \$0 Present Value: \$0	Annual: \$520,396 Present Value: \$6,457,615

Mitigation Benefits: \$6,457,615	Mitigation Costs: \$2,953,358
Benefits Minus Costs: \$3,504,257	Benefit-Cost Ratio: 2.19

**Cost Estimate**

Project Useful Life (years): 30	Construction Type:
Mitigation Project Cost: \$2,923,328	Detailed Scope of Work: Yes
Annual Project Maintenance Cost: \$2,420	Detailed Estimate for Entire Project: Yes
Final Mitigation Project Cost: \$2,953,358	Years of Maintenance: 30
Cost Basis Year:	Present Worth of Annual Maintenance Costs: \$30,030
Construction Start Year:	Estimate Reflects Current Prices: Yes
Construction End Year:	Project Escalation:

**Justification/Attachments**

02 Jan 2020

Project: **Humboldt Bay Municipal Water  
District 12-kV Switchgear  
Relocation**

Pg 6 of 6

Total Benefits: **\$6,457,615**Total Costs: **\$2,953,358**BCR: **2.19**

Project Number: 16-0003

Disaster #:

Program: PDM

Agency: **Humboldt Bay Municipal  
Water District**State: **California**

Point of Contact: John Friedenbach

Analyst: Nathan Stevens

Field	Description	Attachments
Annual Project Maintenance Cost	Staff spends 32 hours per year (equals \$800/year at \$25/hr) inspecting/cleaning switchgear (monthly inspections and annual cleaning). A contractor is hired every two years to clean switchgear components for approximately \$3,240 (\$1,620/year).	12-kV Switchgear maintenance Contract 4-12-16.pdf
Expected damages before mitigation	Please see the attached "Narrative Justification of Damages".	Narrative Justification of Damages.pdf; FEMA Flood Insurance Study.PDF; HumCo HMP.PDF; Matthews Dam Seismic Update_012716_Final.pdf
Number of years of maintainance	Set equal to "Project Useful Life"	
Project useful life	Used the useful life given in the "How do I determine Project Useful Life?" guidelines for electrical cabinets (30 years) to determine the useful life of this switchgear project.	
Unknown Frequency - Damages after Mitigation	There are no expected damages after mitigation. The recurrence interval "9999" was used to fill in the blank only and has no significance. Please see the attached "Narrative Justification of Damages".	Narrative Justification of Damages.pdf
Year Built	The attached letter documents the year the system was constructed.	customer base.pdf

**FINANCIAL**

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
STATEMENT OF FUND BALANCES

SECTION J29, PAGE NO. 1

<u>ACCOUNT BALANCES AT MONTH-END</u>	December 31, 2019	December 31, 2018
<b>US BANK ACCOUNTS</b>		
US Bank General Fund Account	2,795,516.70	51,798.55
US Bank Money Markey Acct (DWR/SRF Account)	166,159.01	300,331.27
US Bank CD Account (DWR/SRF Reserve)	547,336.94	547,336.94
Trust Account (PARS/UAL CalPERS)	773,545.94	672,510.47
<i>Subtotal</i>	<u>4,282,558.59</u>	<u>1,571,977.23</u>
<b>HUMBOLDT COUNTY INVESTMENT ACCOUNTS</b>		
Investment Account	1,708,452.75	1,802,284.64
DWFP Reserve Account	238,086.51	234,232.42
MSRA Reserve Account	-	428,703.81
SRF Loan Payment Account	50,411.36	49,526.92
ReMat Account	511,403.33	296,567.71
1% Tax Account	-	-
<i>Subtotal</i>	<u>2,508,353.95</u>	<u>2,811,315.50</u>
<b>OTHER ACCOUNTS</b>		
L. A. I. F Account	1,687.78	1,637.56
ReMat Deposit - Mellon Bank	27,000.00	27,000.00
Principle Investment Account	29,370.00	-
Cash on Hand	650.00	650.00
<i>Subtotal</i>	<u>58,707.78</u>	<u>29,287.56</u>
<b>TOTAL CASH</b>	<b>6,849,620.32</b>	<b>4,412,580.29</b>
<hr style="border-top: 1px dashed black;"/>		
<b>ENCUMBRANCES AND RESERVES</b>		
Prior-Year Price Factor 2 Rebate	(32,610.69)	(28,416.64)
Prior-Year Restricted AP Encumbrances	(57,250.00)	(40,750.00)
1% Tax Credit to Muni's	-	-
Advanced Charges - Bunkhouse	-	(403,212.78)
Advanced Charges - 12Kv Relocation	(351,887.00)	-
Advanced Charges - Chlorine Scrubber	(350,000.00)	-
Advanced Charges - Collector 2 Rehabilitation	(385,000.00)	-
Advanced Charges - TRF Emergency Generator	(225,000.00)	-
Advanced Charges - Three Tank Seismic	(30,000.00)	(255,000.00)
Advanced Charges - 18,000lb Excavator	(54,343.00)	-
Advanced Charges - Redundant Pipeline	-	(260,245.00)
DWR Reserve for SRF Loan	(547,336.94)	(547,336.94)
DWR Reserve for SRF Payment	(166,159.01)	(300,331.27)
Pension Trust Reserves	(773,545.94)	(672,510.47)
<i>Subtotal</i>	<u>(2,973,132.58)</u>	<u>(2,507,803.10)</u>
<b>BOARD RESTRICTED</b>		
Paik-Nicely Development	(4,158.00)	(4,158.00)
DWFP Reserves	(238,086.51)	(234,232.42)
MSRA Reserves	-	(428,703.81)
ReMat Deposit	(27,000.00)	(27,000.00)
ReMat Reserves	(511,403.33)	(296,567.71)
<b>UNRESTRICTED RESERVES</b>		
Accumulation for SRF Payment	(50,411.36)	(49,526.92)
Accumulation for Ranney/Techite Payment	5,526.59	51,559.02
Principle Investment Reserves	(29,370.00)	-
General Fund Reserves	(3,457,342.87)	(916,147.35)
<i>Subtotal</i>	<u>(4,312,245.48)</u>	<u>(1,904,777.19)</u>
<b>TOTAL NET POSITION</b>	<b>(7,285,378.06)</b>	<b>(4,412,580.29)</b>



HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 REVENUE REPORT  
 December 31, 2019

50% Of Budget Year

**A. REVENUE RETURNED TO CUSTOMERS VIA PF2**

	MTD RECEIPTS	YTD RECEIPTS	BUDGET	% OF BUDGET	PRIOR YEAR
Humboldt Bay Retail Water Revenue	34,872	242,864	318,394	76%	223,413
<b>General Revenue</b>					
Interest	0	570	30,000	2%	7,596
FCSO Contract (Maint. & Operations)	0	72,853	225,000	32%	135,076
Power Sales (Net ReMat)	4,398	33,790	220,000	15%	31,304
Tax Receipts (1% Taxes)	0	0	825,000	0%	50,917
Miscellaneous Revenue*	15,065	46,543	50,000	93%	178,015
<i>*Detail on following page</i>					
<b>TOTAL PF2 REVENUE CREDITS</b>	<b>54,335</b>	<b>396,620</b>	<b>1,668,394</b>	<b>24%</b>	<b>626,322</b>

**B. DISTRICT REVENUE**

	MTD RECEIPTS	YTD RECEIPTS	BUDGET	% OF BUDGET	PRIOR YEAR
<b>Industrial Water Revenue</b>					
Harbor District	0	169	0	0	0
Subtotal Industrial Water Revenue	0	169	0	0	0
<b>Municipal Water Revenue</b>					
City of Arcata	117,035	686,295	1,321,044	52%	641,337
City of Blue Lake	16,174	96,197	182,807	53%	90,783
City of Eureka	275,301	1,620,391	3,119,229	52%	1,529,031
Fieldbrook CSD	14,587	87,371	174,392	50%	84,809
Humboldt CSD	87,349	521,643	1,072,333	49%	514,874
Manila CSD	6,536	37,805	70,168	54%	31,078
McKinleyville CSD	92,775	547,912	1,066,249	51%	517,663
Subtotal Municipal Water Revenue	609,756	3,597,614	7,006,222	51%	3,409,574
<b>TOTAL INDUSTRIAL &amp; WHOLESALE REVENUE</b>	<b>609,756</b>	<b>3,597,783</b>	<b>7,006,222</b>	<b>51%</b>	<b>3,409,574</b>
<b>Power Sales</b>					
Power Sales (ReMat Revenue)	9,912	67,989	300,000	23%	58,671
Interest (ReMat Revenue)	0	0	0		
<b>TOTAL REMAT REVENUE</b>	<b>9,912</b>	<b>67,989</b>	<b>300,000</b>	<b>23%</b>	<b>58,671</b>
<b>Other Revenue and Grant Reimbursement</b>					
FEMA/CalOES Grant Revenue	200,003	373,930			
SWRCB In-Stream Flow Grant Revenue	158,617	158,617			
Quagga Grant (Pass-Through)	0	1,520			
Interest - Muni PF2 Retained	328	600			
Net Increase/Decrease PARS/Principle	12,197	24,827			
<b>TOTAL OTHER/GRANT REVENUE</b>	<b>371,145</b>	<b>559,494</b>			

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 MISCELANEOUS REVENUE - DETAIL REPORT  
 December 31, 2019

**B. MISCELLANEOUS RECEIPTS (RETURNED TO CUSTOMERS VIA PF2)**

	MTD RECEIPTS	YTD RECEIPTS
<b>Miscellaneous Revenue</b>		
ACWA/JPIA HR LaBounty Safety Award	-	-
ACWA/JPIA Insurance Claim	-	2,326
ACWA/JPIA Retrospective Premium Adj.	-	-
ACWA/JPIA Wellness Grant	-	960
Dividend - Principal Life	-	582
Fees - Park Use	-	50
Fees - Right of Way	-	-
Insurance - Claim Reimbursement	830	830
Insurance - Special Event Liability	-	-
Refund - GHD, TRF Generator Grant	-	6,549
Rebate - CALCard	277	277
Refund - Diesel Fuel Tax	-	-
Refunds - Hum. County Appeal (01/18)	-	2,263
Refunds - Miscellaneous	1,026	1,138
Reimb. - Copies & Postage	44	241
Reimb. - Gas	-	113
Reimb. - Telephone	4	3.50
Rent - Parking Lot	0	63
Rent & Deposit - Vivid Green	5,000	5,000
Retirees' Health Ins./COBRA Reimb.	6,684	24,069
Sale - Scrap Materials/Metals	600	600
Sale - Surplus Equipment	600	600.00
UB - Bad Debt Recovery	-	-
UB - Hydrant Rental Deposit	-	-
UB - Mainline Connection Charge	-	-
UB - Meter Installations	-	-
UB - Retail Connection Charge	-	-
UB - Water Processing Fees	-	300
<b><u>Ruth Area</u></b>		
Fees - Buffer Strip ROW License	-	-
Fees - Buffer Strip/PG&E ROW	-	-
Lease - Don Bridge	-	-
Permit - RLCSO-Water System	-	-
Permit - Ruth Area Water Use	-	100
Rent - Ruth Cabin	-	480
Sale - Merchantable Timber	-	-
Sale - Surplus Gravel	-	-
<b>TOTAL MISCELANEOUS REVENUE</b>	<b>15,065</b>	<b>46,543</b>

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 MONTHLY EXPENDITURE REPORT - PAGE 1 OF 3  
 December 31, 2019

50% Of Budget Year

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

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
<b><i>Compensation</i></b>					
Wages - Regular	170,033.39	902,843.52	1,008,760.77		
Wages - Sick	5,240.79	27,508.50			
Wages - Vacation	5,031.97	74,122.26			
<i>Subtotal</i>	180,306.15	1,004,474.28	1,008,760.77	2,310,391	43%
Wages - Overtime	1,787.26	13,916.31	13,186.74		
Wages - Holiday (Worked)	1,538.08	4,902.00	3,519.84		
<i>Subtotal</i>	3,325.34	18,818.31	16,706.58	30,000	63%
Wages - Part-Time	1,515.20	16,739.01	21,989.32	74,329	23%
Wages - Shift Diff	745.60	4,817.59	4,819.56	11,000	44%
Wages - Standby	10,465.63	47,231.96	39,796.41	81,000	58%
Director Compensation	2,000.00	11,120.00	12,320.00	26,000	43%
Secretarial Fees	262.50	1,575.00	1,575.00	3,200	49%
Payroll Tax Expenses	15,434.85	83,363.00	82,368.33	189,744	44%
<i>Subtotal</i>	30,423.78	164,846.56	162,868.62	385,273	43%
<b><i>Employee Benefits</i></b>					
Health, Life,& LTD Insurance	60,447.80	279,268.60	329,736.42	734,849	38%
Air Medical Insurance	65.00	1,950.00	1,820.00	2,145	91%
Retiree Medical Insurance	14,791.22	71,817.72	58,679.86	95,849	75%
Employee Dental Insurance	2,672.76	13,945.20	18,724.13	39,399	35%
Employee Vision Insurance	631.04	3,600.64	4,176.00	7,350	49%
Employee EAP	79.90	390.10	8,482.43	1,116	35%
457b District Contribution	2,650.00	15,650.00	15,600.00	30,600	51%
CalPERS Expenses	29,171.52	332,271.97	315,970.77	371,137	90%
Workers Comp Insurance	-	43,217.02	1,820.00	83,101	52%
<i>Subtotal</i>	110,509.24	762,111.25	755,009.61	1,365,546	56%
<b>TOTAL S.E.B</b>	<b>324,564.51</b>	<b>1,950,250.40</b>	<b>1,943,345.58</b>	<b>4,091,210</b>	<b>48%</b>

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
MONTHLY EXPENDITURE REPORT - PAGE 2 OF 3

December 31, 2019

50% Of Budget Year

**SERVICE & SUPPLY EXPENDITURES (S & S)**

	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
<b>Operations &amp; Maintenance</b>					
Auto Maintenance	7,797.33	26,890.42	27,519.34	40,000	67%
Engineering	1,996.75	13,638.50	24,377.52	75,000	18%
Lab Expenses	2,039.70	5,074.38	7,405.54	13,000	39%
Maintenance & Repairs					
General	3,241.17	28,742.74	25,186.78	58,000	50%
TRF	958.66	6,691.79	22,569.77	15,000	45%
<i>Subtotal</i>	<i>4,199.83</i>	<i>35,434.53</i>	<i>47,756.55</i>	<i>73,000</i>	<i>49%</i>
Materials & Supplies					
General	4,379.29	19,136.46	19,959.41	30,000	64%
TRF	14.36	9,689.39	3,615.69	40,000	24%
<i>Subtotal</i>	<i>4,393.65</i>	<i>28,825.85</i>	<i>23,575.10</i>	<i>70,000</i>	<i>41%</i>
Radio Maintenance	524.28	3,125.88	13,301.28	10,500	30%
Ruth Lake License	-	1,500.00	1,500.00	1,500	100%
Safety Equip./Training					
General	1,053.32	9,329.45	3,441.85	22,000	42%
TRF	-	598.84	1,051.79	2,000	30%
<i>Subtotal</i>	<i>1,053.32</i>	<i>9,928.29</i>	<i>4,493.64</i>	<i>24,000</i>	<i>41%</i>
Tools & Equipment	96.23	2,368.72	2,755.77	3,000	79%
USGS Meter Station	-	-	-	8,200	0%
<i>Operations Subtotal</i>	<i>22,101.09</i>	<i>126,786.57</i>	<i>152,684.74</i>	<i>318,200</i>	<i>40%</i>
<b>General &amp; Administration</b>					
Accounting Services	-	950.00	2,305.00	18,000	5%
Bad Debt Expense	-	-	-	-	0
Dues & Subscriptions	770.00	28,094.78	24,515.93	26,000	108%
General Manager Training	-	2,315.18	197.44	3,000	77%
IT & Software Maintenance	2,821.75	12,859.98	11,219.63	29,000	44%
Insurance	-	77,863.95	53,215.00	105,000	74%
Internet	790.29	4,030.85	-	11,000	37%
Legal Services	1,652.00	31,804.75	28,668.25	35,000	91%
Miscellaneous	3,032.73	12,264.72	7,179.53	11,500	107%
Office Building Maintenance	1,532.30	6,722.59	7,619.78	16,000	42%
Office Expense	7,382.93	34,217.17	17,460.10	40,500	84%
Professional Services	476.68	6,107.08	976.90	20,000	31%
Property Tax	945.00	945.00	945.00	1,100	86%

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 MONTHLY EXPENDITURE REPORT - PAGE 3 OF 3  
 December 31, 2019

50% Of Budget Year

<b>SERVICE &amp; SUPPLY EXPENDITURES (con't)</b>					
	Month-to-Date	Year-to-Date	Prior Year	Budget	% of Budget
Regulatory Agency Fees	11,428.00	68,797.59	62,639.80	139,000	49%
Ruth Lake Programs	-	-	\$0.00	5,000	0%
Safety Apparel	-	3,262.79	2,868.74	3,000	109%
Technical Training	513.50	5,830.06	3,756.19	14,500	40%
Telephone	3,600.67	24,129.99	31,523.98	50,000	48%
Travel & Conference	632.56	7,888.37	2,308.75	25,000	32%
<i>Gen. &amp; Admin. Subtotal</i>	<i>35,578.41</i>	<i>328,084.85</i>	<i>257,400.02</i>	<i>552,600</i>	<i>59%</i>

<b>Power</b>					
Essex - PG & E	52,822.43	361,323.78	\$325,190.24		
2Mw Generator Fuel	8,918.54	27,777.87	\$0.00		
<i>Subtotal Essex Pumping</i>	<i>61,740.97</i>	<i>389,101.65</i>	<i>325,190.24</i>		
All other PG & E	9,088.64	33,131.71	\$37,952.66		
<i>Subtotal All Power</i>	<i>70,829.61</i>	<i>422,233.36</i>	<i>363,142.90</i>	<i>680,800</i>	<i>62%</i>

<b>Total Service and Supplies incl. Power</b>	<b>128,509.11</b>	<b>877,104.78</b>	<b>773,227.66</b>	<b>1,551,600</b>	<b>57%</b>
---	-------------------	-------------------	-------------------	------------------	------------

**PROJECTS, FIXED ASSETS & CONSULTING SERVICES**

	Month-to-Date	Year-to-Date	Budget	% of Budget
	48,701.00	790,743.00	11,347,003	7%

<b>GRAND TOTAL EXPENSES</b>	<b>501,774.62</b>	<b>3,618,098.18</b>	<b>2,716,573.24</b>	<b>16,989,813</b>	<b>21%</b>
-----------------------------	-------------------	---------------------	---------------------	-------------------	------------

Debt Service - SRF Loan	273,668.48	273,668.48	-	547,337	50%
-------------------------	------------	------------	---	---------	-----

Debt Service - US Bank	-	81,094.05	81,094.05	162,200	50%
------------------------	---	-----------	-----------	---------	-----

**TOTAL EXPENSES WITH DEBT SERVICE**

	<b>776,210.86</b>	<b>3,982,232.67</b>	<b>2,797,667.29</b>	<b>17,699,350</b>	
--	-------------------	---------------------	---------------------	-------------------	--

**OTHER EXPENSES**

ReMat Consultant Expenses	767.76	9,371.96	5,139.80		
---------------------------	--------	----------	----------	--	--

# HUMBOLDT BAY MUNICIPAL WATER DISTRICT PROJECT PROGRESS REPORT

December 31, 2019

50% Of Budget Year

## A. CAPITAL PROJECTS

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
12kV Grant (Grant Funded) 2018/19 <i>(FEMA Grant and Advanced Charges)</i>	15,707	148,112	1,825,250	8%
Chlorine Scrubber Grant <i>(FEMA Grant and Advanced Charges)</i>	0	0	1,340,000	0%
TRF Emergency Generator Grant <i>(FEMA Grant, Adv. Charges, and Current Muni Charges)</i>	0	0	1,925,000	0%
Collector 2 Rehabilitation Grant <i>(NCRP Prop 1 Grant, Adv. Charges, and Current Muni Charges)</i>	0	0	1,225,000	0%
3x Tank Seismic Retro Grant <i>(FEMA Grant, Adv. Charges, and Current Muni Charges)</i>	0	0	2,830,000	0%
TRF Line Shed 5	0	0	28,250	0%
Ruth Residence Roof	(1,845)	20,963	30,000	70%
Collector 4 Emergency Repairs	113	62,480	0	0
<b>TOTAL CAPITAL PROJECTS</b>	<b>13,975</b>	<b>231,556</b>	<b>9,203,500</b>	<b>3%</b>

## B. FIXED ASSET PROJECTS

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
Essex - Admin Computers	0	3,107	4,750	65%
Customer Service Vehicle (Unit 3)	0	0	60,750	0%
SCBA Upgrade and Additional Equip	2,771	2,771	19,750	14%
Laptop SCADA Software Upgrade	0	0	4,500	0%
Replacement of UPS's (Phase 2)	0	49	28,000	0%
Fleet Maintenance Equipment	0	2,365	3,500	68%
Electrical Voltage Tools and Safety Equip	0	0	3,250	0%
Traffic Control Equipment	3,210	3,210	4,000	80%
Vegetation Management Equipment	0	0	4,250	0%
Portable Radio Replacements	0	4,862	4,750	102%
Meter Reader Handheld Unit	0	0	4,500	0%
Job Boxes	0	1,874	2,250	83%
Pipe Tapping Machine	0	3,494	3,750	93%
Grapple Attachment for JD 110	0	0	4,000	0%
18,000 Lb. Excavator	0	0	124,343	0%
Hydrant Meter and Backflow Preventer	0	0	2,250	0%

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
PROJECT PROGRESS REPORT - PAGE 2 OF 6

50% Of Budget Year

December 31, 2019

**B. FIXED ASSET PROJECTS (con't)**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
N-Poly Pump Skid Replacement <i>(Treatment Facility Project)</i>	0	0	12,250	0%
TRF Radio System Cabinet <i>(Treatment Facility Project)</i>	0	2,609	8,500	31%
Air Actuated Chemical Transfer Pump <i>(Treatment Facility Project)</i>	0	0	2,250	0%
Eureka - Administrative Computers	548	548	6,250	9%
File Cabinet Replacement	0	0	2,000	0%
Eureka Office ADA Upgrades	0	8,301	20,000	42%
Ruth SCADA Software Upgrade	0	0	4,750	0%
<b>TOTAL FIXED ASSET PROJECTS</b>	<b>6,529</b>	<b>33,191</b>	<b>334,593</b>	<b>10%</b>

**C. MAINTENANCE PROJECTS**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
Pipeline Maintenance	0	870	12,750	7%
12 kV Electric System Maintenance	0	0	4,000	0%
Main Line Meter Flow Calibration	0	0	10,000	0%
Technical Support and Software Updates	2,011	9,974	18,000	55%
Generator Services	46	46	3,500	1%
TRF Generator Service	178	178	500	36%
Hazard & Diseased Tree Removal	0	0	5,000	0%
Cathodic Protection	0	2,644	6,500	41%
Maintenance Emergency Repairs	123	10,395	50,000	21%
Fleet Paint Repairs	0	0	5,000	0%
Lab Instrument Calibration (Particle Counter)	0	936	1,250	75%
Chlorine Solution Line Replacement	0	0	10,500	0%
Paint Buildings at Winzler Control Center	0	131	2,250	6%
Chlorine Booster Pump Rebuild Kits	0	0	8,000	0%
Fleet Emergency Safety Beacons (Phase 2)	0	1,994	2,000	100%
Upgrade Essex Alarm Systems	0	0	4,750	0%
Cat 420 Backhoe Tires	0	0	2,250	0%
Gates at I/W Reservoir and SBPS	0	0	3,000	0%
TRF Limitorque Valve Retrofit Supplies <i>(Treatment Facility Project)</i>	8,623	8,623	10,250	84%
TRF Water Quality Instrumentation Inventory <i>(Treatment Facility Project)</i>	0	2,466	15,000	16%

## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

## PROJECT PROGRESS REPORT - PAGE 3 OF 6

December 31, 2019

50% Of Budget Year

**C. MAINTENANCE PROJECTS (con't)**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
TRF Rapid Mix Pump Rebuild Kit <i>(Treatment Facility Project)</i>	0	0	2,250	0%
TRF Flow Meter Test/Calibration (Phase 1) <i>(Treatment Facility Project)</i>	0	0	6,250	0%
Ruth Hydro Brush Abatement	0	0	6,500	0%
Howell Bungler Valve Inspection	0	0	1,110	0%
Ruth LTO Insurance	0	0	5,000	0%
Ruth Log Boom Inspection	0	130	1,000	13%
Hydro Plant Synchronizer Tuning	0	0	5,250	0%
Hydro Crane Rail and Lighting	0	0	5,000	0%
Ruth HQ Dock Decking	1,030	9,682	13,750	70%
Ruth Dead/Dying Tree Removal	0	0	20,000	0%
Ruth Slide Gate Hydraulic Oil	0	5,335	8,000	67%
<b>TOTAL MAINTENANCE PROJECTS</b>	<b>12,011</b>	<b>53,403</b>	<b>248,610</b>	<b>21%</b>

**D. PROFESSIONAL & CONSULTING SERVICES**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
Crane Testing/Certification	7,747	7,787	10,000	78%
Chlorine System Maintenance	5,470	7,713	16,750	46%
Backflow Tester Training	0	0	3,000	0%
Hydro Plant Electrical and Maintenance Insp.	0	0	2,050	0%
Crane Operator Re-Certification	0	2,084	3,000	69%
EAP Tabletop Exercise	0	15,671	12,000	131%
Essex Mad River Cross-Sectional Survey	0	9,365	10,000	94%
Technical Training	0	80	23,250	0%
O & M Training	0	0	20,000	0%
Essex Server B/U (Monthly Service Fees)	0	0	4,250	0%
Public Education Funds	0	1,000	5,000	20%
Electrical Technical Training	0	2,821	13,250	21%
SCADA Programming License	0	5,625	12,750	44%
Col. 2 Underground 12Kv Power/Fiber Optic	0	0	24,000	0%
Essex Control Building Expansion Plans & Specs	0	0	46,000	0%
299 Anode Bed Refurbishment	0	0	25,000	0%
Streambed Flow Enhancement Grant	833	56,447	612,700	9%
Annual PARS Contribution (FY20)	0	50,000	50,000	100%
Grant Applications Assistance	0	7,181	20,000	36%



**D. PROFESSIONAL & CONSULTING SERVICES (CONT)**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
Gravel Bar Work and Survey (PS 6)	0	0	76,100	0%
Water Resource Planning Assistance	0	0	5,000	0%
Climate Ready Grant	0	2,000	2,000	100%
Comp DW Pipeline Fitness	0	0	194,700	0%
FERC Dam Safety Surveillance (DSSMR)	283	383	5,000	8%
FERC Chief Dam Safety Engineer	0	3,665	10,000	37%
Dam Spillway Wall Monument Survey	0	9,671	14,000	69%
Matthews Dam Monument Survey	0	7,300	9,000	81%
Left Abutment Slide Area Survey	0	79	11,000	1%
Spillway/Dam Inspection/Reporting Assist.	28	4,503	10,000	45%
GHD - Log Boom Inspection	0	3,786	4,000	95%
<b>TOTAL PROF/CONSULTING SERVICES</b>	<b>14,361</b>	<b>197,159</b>	<b>1,253,800</b>	<b>15.7%</b>

**E. INDUSTRIAL SYSTEM PROJECTS**

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
Rebuild River Weir	0	238	75,000	0.3%
Refurbish PS-6 (Phase 1)	0	0	0	0
Water to PS6 During Low-Flow Months	0	0	13,250	0%
I/W System Evaluation Memo	0	0	26,000	0%
Industrial and Domestic System Intertie	0	0	11,000	0%
Surge Tower Replacement 2018/19	0	82,407	0	0
<i>(FEMA Grant, Adv. Charges, and ReMat Funds)</i>				
Industrial - Nordic	0	339	0	0
<b>TOTAL INDUSTRIAL SYSTEM PROJECTS</b>	<b>0</b>	<b>82,983</b>	<b>125,250</b>	<b>66.3%</b>

**F. CARRY-OVER PROJECTS FROM PRIOR YEAR**

Collector 5 Security & Anti-Vandalism Measures	0	0	7,500	0%
Mainline Valve Replacement FY17/18	0	0	50,000	0%
Ruth HQ Installation of Power Pole 2018/19	0	80	3,750	2%
Ruth Hydro Relay Replacement-Phase 2	0	0	120,000	0%
Storm Damage 2019	0	25,514	0	0
Ruth Cabin/Bunkhouse Replacement	0	24,045	0	0
<b>CARRYOVER PROJECTS TOTAL</b>	<b>0</b>	<b>49,638</b>	<b>181,250</b>	<b>27%</b>

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 PROJECT PROGRESS REPORT - PAGE 5 OF 6  
 December 31, 2019

50% Of Budget Year

	MTD EXPENSES	YTD TOTAL	BUDGET	% OF BUDGET
PROJECTS GRAND TOTAL	46,875	647,931	11,347,003	6%

Less Projects Funded from Other Sources (Grants/Loans/Advanced Charges/Reserves)	16,540	204,560	9,234,293	2%
Project Charges to Customers (excluding Debt Service)	30,335	443,371	2,112,710	21%

PROJECTS W/OUT GRANT FUNDING	30,335	443,371	1,589,053	28%
------------------------------	--------	---------	-----------	-----

USE OF ENCUMBERED FUNDS	1,826	142,812	200,062	71%
-------------------------	-------	---------	---------	-----

Total Project Budget:	11,347,003
Amount Charged to Customers:	2,112,710
Annual Debt Service Charges*:	162,200
Actual Customer Charges:	2,274,910
<i>*Ranney Collector 3 and Techite Pipeline Replacement Projects were partially funded with a 10-year loan. Only the annual debt service for these projects is charged to customers.</i>	

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
ENCUMBERED FUNDS RECONCILIATION REPORT  
December 31, 2019

SECTION J2a, PAGE NO. 12

	MTD EXPENSES	YTD TOTAL	AMOUNT ENCUMBERED	REMAINING
<b>A. CAPITAL PROJECTS</b>				
Essex Control Building Flooring Replacement	0	0	500	500
Collector Pump Oilers	0	330	300	(30)
<b>B. FIXED ASSET PROJECTS</b>				
Collector 1 Electrical Upgrade	0	57,693	88,705	31,012
Ruth HQ Washroom Remodel	0	0	1,000	1,000
Ruth Hydro Oil & Paint Storage Lockers	0	2,710	2,750	40
Fleet Servicing Equipment	0	0	700	700
<b>C. MAINTENANCE PROJECTS</b>				
Hazard & Diseased Tree Removal	0	7,750	6,500	(1,250)
Lead Free Brass Inventory	0	0	700	700
Replace 299 Cathodic Anode Well	283	11,063	16,000	4,937
Collector 2 Arc Flash Survey and Relay Test	0	2,200	3,600	1,400
<b>D. PROFESSIONAL &amp; CONSULTING SERVICES</b>				
Eureka - ADA Compliance Consultation	0	20,000	20,000	0
Hydro ReMat Electrical/Maintenance Insp.	0	0	2,000	2,000
Technical Training	0	0	1,600	1,600
<b>E. INDUSTRIAL SYSTEM PROJECTS</b>				
Clarifier Feasibility Study	0	20,265	15,500	(4,765)
<b>F. CARRY-OVER PROJECTS FROM PRIOR YEAR</b>				
Mainline Valve Replacement	1,544	20,801	38,666	17,865
<b>SPECIAL PROJECT ENCUMBERED FUNDS TOTAL</b>				
	1,826	142,812	198,521	55,709
MAINTENANCE & REPAIRS			86	86
SAFETY EQUIP & TRAINING			1,030	1,030
TRF SAFTEY EQUIP & TRAINING			145	145
OFFICE SUPPLIES			280	280
<b>ALL ENCUMBERED FUNDS TOTAL</b>				
	1,826	142,812	200,062	57,250

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 12/1/2019-12/31/2019Page: 1  
Jan 02, 2020 08:45AM

Vendor Name	Date Paid	Description	Amount Paid
<b>101 Netlink</b>			
101 Netlink	12/05/2019	<i>Ruth Data Link/Internet</i>	160.00
Total 101 Netlink:			160.00
<b>AC3</b>			
AC3	12/11/2019	<i>Annual Crane Certification</i>	7,550.00
Total AC3:			7,550.00
<b>Acme Rigging &amp; Supply Company</b>			
Acme Rigging & Supply Company	12/26/2019	<i>Crane rigging maintenance</i>	196.87
Total Acme Rigging & Supply Company:			196.87
<b>ACWA/JPIA</b>			
ACWA/JPIA	12/20/2019	<i>RETIREE MEDICAL</i>	14,571.42
ACWA/JPIA	12/20/2019	<i>COBRA Dental</i>	164.12
ACWA/JPIA	12/20/2019	<i>COBRA Vision</i>	55.68
ACWA/JPIA	12/20/2019	<i>Active Employee Medical Insurance</i>	702.41
Total ACWA/JPIA:			15,493.63
<b>Advanced Security Systems</b>			
Advanced Security Systems	12/05/2019	<i>Eureka Office Alarm System Maintenance</i>	330.00
Total Advanced Security Systems:			330.00
<b>AirGas NCN</b>			
AirGas NCN	12/05/2019	<i>safety equipment maintenance</i>	30.30
AirGas NCN	12/05/2019	<i>safety equipment maintenance</i>	321.68
Total AirGas NCN:			351.98
<b>Arcata Fire Prot. District</b>			
Arcata Fire Prot. District	12/26/2019	<i>Fire Assessment 2019/20</i>	945.00
Total Arcata Fire Prot. District:			945.00
<b>AT &amp; T</b>			
AT & T	12/18/2019	<i>Eureka/Essex Land Line</i>	35.05
AT & T	12/18/2019	<i>Arcata/Essex Land Line</i>	35.05
AT & T	12/18/2019	<i>Samoa/Essex Land Line</i>	235.01
AT & T	12/18/2019	<i>Eureka Office/Modem</i>	225.62
AT & T	12/18/2019	<i>Eureka Office Alarm Line</i>	121.26
AT & T	12/18/2019	<i>Samoa Booster Pump Station</i>	123.78
AT & T	12/18/2019	<i>Valve Building Samoa</i>	225.62
AT & T	12/18/2019	<i>Eureka Office</i>	499.58
AT & T	12/18/2019	<i>TRF</i>	219.06
AT & T	12/18/2019	<i>Ruth Hydro/Dataline</i>	218.24
AT & T	12/18/2019	<i>Essex office</i>	218.24
Total AT & T:			2,156.51
<b>AT&amp;T Advertising Solutions</b>			
AT&T Advertising Solutions	12/26/2019	<i>white page listing</i>	21.00

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 12/1/2019-12/31/2019Page: 2  
Jan 02, 2020 08:45AM

Vendor Name	Date Paid	Description	Amount Paid
Total AT&T Advertising Solutions:			21.00
<b>AT&amp;T Long Distance</b>			
AT&T Long Distance	12/10/2019	<i>Eureka Office Long Distance</i>	169.25
AT&T Long Distance	12/10/2019	<i>Valve Building-Samoa Long Distance</i>	115.14
AT&T Long Distance	12/10/2019	<i>Essex Control Long Distance</i>	21.90
AT&T Long Distance	12/10/2019	<i>Essex Water Quality Long Distance</i>	7.21
AT&T Long Distance	12/10/2019	<i>Eureka Office Long Distance</i>	7.00
AT&T Long Distance	12/10/2019	<i>Ruth Hydro/Dataline Long Distance</i>	191.20
Total AT&T Long Distance:			511.70
<b>ATS Communications</b>			
ATS Communications	12/18/2019	<i>Technical Support &amp; Software Updates</i>	840.00
ATS Communications	12/18/2019	<i>Technical Support &amp; Software Updates</i>	62.50
ATS Communications	12/18/2019	<i>5 year pbx subscription and support</i>	960.63
ATS Communications	12/26/2019	<i>Programming of TRF Firewall router</i>	330.00
Total ATS Communications:			2,193.13
<b>AWWA</b>			
AWWA	12/26/2019	<i>Annual Membership Renewal - Dale Davidsen</i>	105.00
Total AWWA:			105.00
<b>Biovir Laboratories, Inc</b>			
Biovir Laboratories, Inc	12/26/2019	<i>MPA testing</i>	1,508.85
Total Biovir Laboratories, Inc:			1,508.85
<b>Campton Electric Supply</b>			
Campton Electric Supply	12/30/2019	<i>Generator Installation</i>	13.51
Total Campton Electric Supply:			13.51
<b>Citi Cards</b>			
Citi Cards	12/26/2019	<i>Retirement Recognition</i>	48.79
Total Citi Cards:			48.79
<b>City of Eureka</b>			
City of Eureka	12/26/2019	<i>Renewal - Alarm Permit</i>	20.00
City of Eureka	12/09/2019	<i>Eureka office water/sewer</i>	104.04
Total City of Eureka:			124.04
<b>Coastal Business Systems Inc.</b>			
Coastal Business Systems Inc.	12/20/2019	<i>Eureka office copy and fax machine</i>	940.53
Total Coastal Business Systems Inc.:			940.53
<b>CRWA</b>			
CRWA	12/05/2019	<i>Annual Membership dues 2020</i>	545.00
Total CRWA:			545.00

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 12/1/2019-12/31/2019Page: 3  
Jan 02, 2020 08:45AM

Vendor Name	Date Paid	Description	Amount Paid
Cummins Pacific LLC			
Cummins Pacific LLC	12/30/2019	TRF Generator Repair	402.50
Total Cummins Pacific LLC:			402.50
<b>Dave Perkins</b>			
Dave Perkins	12/05/2019	auto mileage reimbursement	187.87
Dave Perkins	12/30/2019	auto mileage reimbursement	185.66
Total Dave Perkins:			373.53
<b>Downey Brand Attorneys LLP</b>			
Downey Brand Attorneys LLP	12/26/2019	Streambed Flow Enhancement Grant	42.00
Total Downey Brand Attorneys LLP:			42.00
<b>Eureka Oxygen</b>			
Eureka Oxygen	12/12/2019	cylinder rental	113.00
Total Eureka Oxygen:			113.00
<b>Eureka Rubber Stamp</b>			
Eureka Rubber Stamp	12/09/2019	Eureka office supplies	48.72
Total Eureka Rubber Stamp:			48.72
<b>Eureka-Humboldt Fire Ext.,Co, Inc</b>			
Eureka-Humboldt Fire Ext.,Co, Inc	12/05/2019	credit on account	.18-
Eureka-Humboldt Fire Ext.,Co, Inc	12/05/2019	Fire extinguisher signs	16.28
Total Eureka-Humboldt Fire Ext.,Co, Inc:			16.10
<b>Fastenal Company</b>			
Fastenal Company	12/05/2019	maintenance supplies	49.69
Fastenal Company	12/30/2019	Industrial Meter Building emergency generator repair	172.10
Fastenal Company	12/30/2019	Industrial Meter Building emergency generator repair - Return p	93.12-
Fastenal Company	12/30/2019	maintenance supplies	28.71
Total Fastenal Company:			157.38
<b>FEDEX</b>			
FEDEX	12/26/2019	ship SCBA for annual testing	52.15
FEDEX	12/26/2019	Return ACWA/JPIA safety training tape	10.15
Total FEDEX:			62.30
<b>FleetPride</b>			
FleetPride	12/30/2019	Unit 10 service	381.78
FleetPride	12/30/2019	TRF Generator maintenance	38.11
FleetPride	12/30/2019	TRF Generator maintenance	27.13
Total FleetPride:			447.02
<b>Found.Cross-Connection</b>			
Found.Cross-Connection	12/26/2019	Backflow Prevention Annual Membership - HB	31.20
Found.Cross-Connection	12/26/2019	Backflow prevention Annual Membership - FB	88.80

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 12/1/2019-12/31/2019Page: 4  
Jan 02, 2020 08:45AM

Vendor Name	Date Paid	Description	Amount Paid
Total Found.Cross-Connection:			120.00
<b>Frontier Communications</b>			
Frontier Communications	12/26/2019	Ruth HQ Phone	55.10
Frontier Communications	12/26/2019	Ruth Hydro/Ruth Dataline	179.94
Total Frontier Communications:			235.04
<b>GHD</b>			
GHD	12/26/2019	Streambed Enhancement Grant	791.25
GHD	12/26/2019	12 KV Upgrade -Grant	15,171.75
GHD	12/26/2019	Cathodic Protection System Survey/Evaluation	282.50
GHD	12/26/2019	Ruth Dam-FERC DSSMR Survey	282.50
GHD	12/26/2019	Spillway Bridge Inspection	113.00
GHD	12/26/2019	Collector 4 Storm Damage	113.00
GHD	12/26/2019	General Engineering - Essex	1,205.75
GHD	12/26/2019	General Engineering - Eureka	678.00
Total GHD:			18,637.75
<b>Harper Motors</b>			
Harper Motors	12/30/2019	Unit 4 repair	38.86
Harper Motors	12/30/2019	Unit 4 repair	16.85
Total Harper Motors:			55.71
<b>Health Equity Inc</b>			
Health Equity Inc	12/05/2019	HSA Admin Fee - 2 employees	5.90
Health Equity Inc	12/05/2019	HSA Admin Fee 8 employees	23.60
Total Health Equity Inc:			29.50
<b>Hensel Hardware</b>			
Hensel Hardware	12/30/2019	maintenance shop supplies	70.19
Hensel Hardware	12/30/2019	maintenance shop supplies	116.54
Hensel Hardware	12/30/2019	maintenance shop supplies	32.52
Total Hensel Hardware:			219.25
<b>Hensell Materials</b>			
Hensell Materials	12/30/2019	maintenance supplies	25.50
Hensell Materials	12/30/2019	maintenance shop tool	36.57
Total Hensell Materials:			62.07
<b>Henwood Associates, Inc</b>			
Henwood Associates, Inc	12/05/2019	Consultant Services Agreement - October 2019	383.88
Total Henwood Associates, Inc:			383.88
<b>Humboldt County Treasurer</b>			
Humboldt County Treasurer	12/05/2019	Fund No 2712 Account 800870	8,398.94
Humboldt County Treasurer	12/30/2019	Fund No 3876 Account 800870	45,611.43
Total Humboldt County Treasurer:			54,010.37

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 12/1/2019-12/31/2019Page: 5  
Jan 02, 2020 08:45AM

Vendor Name	Date Paid	Description	Amount Paid
<b>Humboldt Fasteners</b>			
Humboldt Fasteners	12/05/2019	Maintenance supplies	18.64
Humboldt Fasteners	12/30/2019	Industrial Meter Building Emergency Generator Maint	116.45
Total Humboldt Fasteners:			135.09
<b>Humboldt Redwood Company, LLC</b>			
Humboldt Redwood Company, LLC	12/09/2019	Mt Pierce Lease site	274.28
Total Humboldt Redwood Company, LLC:			274.28
<b>Hummel Tire &amp; Wheel</b>			
Hummel Tire & Wheel	12/26/2019	Unit 3 tires	642.71
Total Hummel Tire & Wheel:			642.71
<b>Industrial Electric</b>			
Industrial Electric	12/09/2019	Generator installation	209.14
Industrial Electric	12/30/2019	Generator installation	338.90
Total Industrial Electric:			548.04
<b>JAECO Fire &amp; Safety</b>			
JAECO Fire & Safety	12/26/2019	SCBA upgrade	2,770.71
Total JAECO Fire & Safety:			2,770.71
<b>John Friedenbach</b>			
John Friedenbach	12/30/2019	laptop computers for Directors	1,577.31
Total John Friedenbach:			1,577.31
<b>JTN Energy, LLC</b>			
JTN Energy, LLC	12/05/2019	Consultant Services Agreement - October 2019	383.88
Total JTN Energy, LLC:			383.88
<b>Keenan Supply</b>			
Keenan Supply	12/30/2019	main line valve replacement project	1,543.69
Total Keenan Supply:			1,543.69
<b>Kernen Construction</b>			
Kernen Construction	12/30/2019	Dump TRF sludge bed material	262.00
Kernen Construction	12/30/2019	Dispose of TRF sludge bed material	30.00
Total Kernen Construction:			292.00
<b>Les Schwab Tire Center</b>			
Les Schwab Tire Center	12/30/2019	Ruth HQ snow removal	121.49
Total Les Schwab Tire Center:			121.49
<b>Mad River Union</b>			
Mad River Union	12/05/2019	annual subscription	40.00



Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 12/1/2019-12/31/2019Page: 6  
Jan 02, 2020 08:45AM

Vendor Name	Date Paid	Description	Amount Paid
Total Mad River Union:			40.00
<b>Miller Farms Nursery</b>			
Miller Farms Nursery	12/30/2019	<i>equipment maintenance</i>	13.95
Total Miller Farms Nursery:			13.95
<b>Mission Linen</b>			
Mission Linen	12/05/2019	<i>maintenance supplies</i>	11.50
Mission Linen	12/05/2019	<i>Uniform Rental</i>	110.31
Mission Linen	12/05/2019	<i>Uniform Rental</i>	116.91
Mission Linen	12/05/2019	<i>Uniform Rental</i>	110.31
Mission Linen	12/05/2019	<i>Uniform Rental</i>	87.42
Mission Linen	12/05/2019	<i>maintenance supplies</i>	50.60
Total Mission Linen:			487.05
<b>Mitchell, Brisso, Delaney &amp; Vrieze</b>			
Mitchell, Brisso, Delaney & Vrieze	12/09/2019	<i>Legal Services- November 2019</i>	527.00
Total Mitchell, Brisso, Delaney & Vrieze:			527.00
<b>MRC Global</b>			
MRC Global	12/09/2019	<i>TRF Limitorque valve retrofit supplies</i>	8,622.80
Total MRC Global:			8,622.80
<b>Munnell &amp; Sherrill, Inc.</b>			
Munnell & Sherrill, Inc.	12/09/2019	<i>safety gear</i>	440.60
Total Munnell & Sherrill, Inc.:			440.60
<b>Napa Auto Parts</b>			
Napa Auto Parts	12/10/2019	<i>Unit 9 service</i>	56.42
Napa Auto Parts	12/10/2019	<i>Unit 1 service</i>	55.02
Napa Auto Parts	12/10/2019	<i>equipment maintenance</i>	15.72
Napa Auto Parts	12/10/2019	<i>Unit 1 service</i>	17.51
Napa Auto Parts	12/10/2019	<i>Return auto maintenance supplies</i>	21.27-
Napa Auto Parts	12/10/2019	<i>Unit 1 chains</i>	63.67
Napa Auto Parts	12/10/2019	<i>Unit 1 chains</i>	63.67
Napa Auto Parts	12/10/2019	<i>Unit 3 service</i>	47.59
Napa Auto Parts	12/10/2019	<i>Unit 3 service</i>	16.57
Napa Auto Parts	12/30/2019	<i>Generator service</i>	46.33
Napa Auto Parts	12/30/2019	<i>TRF standby generator service</i>	53.95
Napa Auto Parts	12/30/2019	<i>Generator enclosure</i>	78.21
Napa Auto Parts	12/30/2019	<i>Unit 4 repair</i>	181.42
Napa Auto Parts	12/30/2019	<i>Unit 4 repair</i>	197.21
Napa Auto Parts	12/30/2019	<i>Unit 4 repair</i>	60.53-
Napa Auto Parts	12/30/2019	<i>JD110 equipment repair</i>	18.31
Napa Auto Parts	12/30/2019	<i>Generator enclosure</i>	138.66
Napa Auto Parts	12/30/2019	<i>equipment maintenance</i>	97.64
Napa Auto Parts	12/30/2019	<i>equipment maintenance</i>	44.27
Total Napa Auto Parts:			1,110.37

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 12/1/2019-12/31/2019Page: 7  
Jan 02, 2020 08:45AM

Vendor Name	Date Paid	Description	Amount Paid
Network Management Services			
Network Management Services	12/26/2019	Upgrade Eureka office workstations	210.08
Network Management Services	12/26/2019	replace Eureka office UPS following PG&E Power Emergency	480.71
Network Management Services	12/26/2019	Computer Assistance - Eureka office	414.18
Network Management Services	12/26/2019	Essential Care Computer Service for Eureka office	1,086.19
Total Network Management Services:			2,191.16
<b>North Coast Journal, Inc</b>			
North Coast Journal, Inc	12/26/2019	Board Vacancy Notice	591.00
North Coast Journal, Inc	12/05/2019	position advertisement -Electrician/Instrumentation Technician	265.71
North Coast Journal, Inc	12/26/2019	position advertisement -Electrician/Instrumentation Technician	265.71
Total North Coast Journal, Inc:			1,122.42
<b>North Coast Laboratories</b>			
North Coast Laboratories	12/05/2019	lab tests	75.00
North Coast Laboratories	12/05/2019	lab tests	75.00
North Coast Laboratories	12/05/2019	lab tests	155.00
North Coast Laboratories	12/05/2019	lab tests	75.00
North Coast Laboratories	12/05/2019	lab tests	75.00
North Coast Laboratories	12/05/2019	lab tests	50.00
Total North Coast Laboratories:			505.00
<b>North Coast Unified Air Quality Mangemen</b>			
North Coast Unified Air Quality Mangemen	12/05/2019	Burn Permit - Ruth Area	20.00
North Coast Unified Air Quality Mangemen	12/05/2019	Burn Permit - Ruth Hydro	20.00
Total North Coast Unified Air Quality Mangemen:			40.00
<b>Northern California Safety Consortium</b>			
Northern California Safety Consortium	12/05/2019	membership fee	75.00
Total Northern California Safety Consortium:			75.00
<b>Pacific Gas &amp; Electric Co.</b>			
Pacific Gas & Electric Co.	12/20/2019	Ruth Bunkhouse	6.29
Pacific Gas & Electric Co.	12/20/2019	Eureka Office	368.00
Pacific Gas & Electric Co.	12/20/2019	Jackson Ranch Rectifier	15.28
Pacific Gas & Electric Co.	12/20/2019	299 Rectifier	108.48
Pacific Gas & Electric Co.	12/20/2019	West End Road Rectifier	118.86
Pacific Gas & Electric Co.	12/20/2019	TRF	7,625.08
Pacific Gas & Electric Co.	12/20/2019	Ruth Hydro Valve Control	28.36
Pacific Gas & Electric Co.	12/20/2019	Ruth Hydro	30.25
Pacific Gas & Electric Co.	12/20/2019	Samoa Booster Pump Station	744.77
Pacific Gas & Electric Co.	12/20/2019	Samoa Dial Station	43.27
Pacific Gas & Electric Co.	12/20/2019	Essex Pumping 11/1 - 11/30/2019	52,822.43
Total Pacific Gas & Electric Co.:			61,911.07
<b>Pacific Paper Co.</b>			
Pacific Paper Co.	12/30/2019	Eureka office supplies	106.19
Pacific Paper Co.	12/30/2019	Eureka office supplies	357.88
Total Pacific Paper Co.:			464.07

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 12/1/2019-12/31/2019Page: 8  
Jan 02, 2020 08:45AM

Vendor Name	Date Paid	Description	Amount Paid
Pape Material Handling			
Pape Material Handling	12/11/2019	John Deere 110 Backhoe repair	187.33
Pape Material Handling	12/11/2019	John Deere 110 Backhoe repair	187.33
Total Pape Material Handling:			374.66
<b>Pierson Building Center</b>			
Pierson Building Center	12/09/2019	credit on statement	3.24-
Pierson Building Center	12/09/2019	maintenance supplies	71.38
Total Pierson Building Center:			-68.14
<b>Pitney Bowes</b>			
Pitney Bowes	12/05/2019	postage meter supplies	63.90
Pitney Bowes	12/20/2019	refill postage meter	500.00
Pitney Bowes	12/31/2019	postage meter lease	256.66
Total Pitney Bowes:			820.56
<b>PitStop Cleaning`</b>			
PitStop Cleaning`	12/26/2019	Eureka office cleaning	80.00
Total PitStop Cleaning`:			80.00
<b>Platt Electric Supply</b>			
Platt Electric Supply	12/10/2019	Ruth Bunkhouse generator	203.77
Platt Electric Supply	12/10/2019	EPI Generator Installation	134.32
Total Platt Electric Supply:			338.09
<b>PPG Architectural Coatings</b>			
PPG Architectural Coatings	12/05/2019	paint supplies	4.44
PPG Architectural Coatings	12/05/2019	Collector 4 supply line manifold maintenance	48.52
Total PPG Architectural Coatings:			52.96
<b>Rebecca J. Moyle</b>			
Rebecca J. Moyle	12/26/2019	Eureka Office Petty Cash-Board Meeting	19.12
Rebecca J. Moyle	12/26/2019	Eureka Office Petty Cash- Essex Employee meeting	60.00
Rebecca J. Moyle	12/26/2019	Eureka Office Petty Cash- Fieldbrook-Glendale CSD office supp	6.85
Rebecca J. Moyle	12/26/2019	Eureka Office Petty Cash- Board Resolutions	17.79
Rebecca J. Moyle	12/26/2019	Eureka Office Petty Cash- Holiday Recognition	44.77
Total Rebecca J. Moyle:			148.53
<b>Recology Arcata</b>			
Recology Arcata	12/12/2019	Essex Garbage Service	616.03
Total Recology Arcata:			616.03
<b>Recology Humboldt County</b>			
Recology Humboldt County	12/10/2019	Eureka office garbage/recycling service	90.72
Total Recology Humboldt County:			90.72
<b>Renner Petroleum</b>			
Renner Petroleum	12/30/2019	55 gallons oil	1,076.70

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 12/1/2019-12/31/2019Page: 9  
Jan 02, 2020 08:45AM

Vendor Name	Date Paid	Description	Amount Paid
Renner Petroleum	12/05/2019	cardlock fuel - pumping & control	624.87
Renner Petroleum	12/05/2019	cardlock fuel - water quality	624.86
Renner Petroleum	12/05/2019	cardlock fuel - maintenance	624.87
Renner Petroleum	12/05/2019	cardlock fuel - customer service (Humboldt Bay Retail)	162.46
Renner Petroleum	12/05/2019	cardlock fuel - customer service (Fieldbrook-Glendale CSD)	462.39
Total Renner Petroleum:			3,576.15
<b>SCBA Safety Check, Inc</b>			
SCBA Safety Check, Inc	12/09/2019	SCBA maintenance	87.34
Total SCBA Safety Check, Inc:			87.34
<b>Sequoia Gas</b>			
Sequoia Gas	12/05/2019	Ruth Bunkhouse propane tank rental	74.25
Total Sequoia Gas:			74.25
<b>Sitestar Nationwide Internet</b>			
Sitestar Nationwide Internet	12/10/2019	Essex Internet	52.90
Total Sitestar Nationwide Internet:			52.90
<b>Specialty Supply Company</b>			
Specialty Supply Company	12/30/2019	Emergency Generator Installation	44.76
Total Specialty Supply Company:			44.76
<b>Staples</b>			
Staples	12/05/2019	Eureka office supplies	213.59
Staples	12/05/2019	Essex office supplies	119.66
Staples	12/30/2019	Essex office supplies	103.31
Staples	12/30/2019	Essex office supplies	5.75
Staples	12/30/2019	Essex office supplies	3.85
Staples	12/30/2019	Essex office supplies	39.80
Staples	12/30/2019	Ruth Hydro office supplies	101.88
Total Staples:			587.84
<b>Statewide Traffic Safety &amp; Signs</b>			
Statewide Traffic Safety & Signs	12/26/2019	Upgrade Traffic Control Equipment	3,030.85
Statewide Traffic Safety & Signs	12/26/2019	Upgrade Traffic Control Equipment	506.18-
Statewide Traffic Safety & Signs	12/30/2019	Upgrade Traffic Control Equipment	685.34
Total Statewide Traffic Safety & Signs:			3,210.01
<b>Streamline</b>			
Streamline	12/05/2019	Website maintenance membership fee	450.00
Streamline	12/31/2019	Website maintenance membership fee	450.00
Total Streamline:			900.00
<b>Sudden Link</b>			
Sudden Link	12/10/2019	Fieldbrook-Glendale CSD Internet	309.69
Sudden Link	12/05/2019	Essex internet	267.70
Sudden Link	12/05/2019	TRF Internet - Fieldbrook-Glendale CSD	47.29
Sudden Link	12/05/2019	TRF Internet - Blue Lake SCADA Monitoring	47.29

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 12/1/2019-12/31/2019Page: 10  
Jan 02, 2020 08:45AM

Vendor Name	Date Paid	Description	Amount Paid
Sudden Link	12/05/2019	TRF Internet	23.65
Sudden Link	12/10/2019	Eureka Internet	207.45
Total Sudden Link:			903.07
<b>Sunnybrae Ace Hardware</b>			
Sunnybrae Ace Hardware	12/26/2019	Generator Enclosure	26.04
Total Sunnybrae Ace Hardware:			26.04
<b>SWRCB Accounting Office</b>			
SWRCB Accounting Office	12/26/2019	Wholesaler Water System Annual Fees 7/2019 - 6/2020	11,388.00
Total SWRCB Accounting Office:			11,388.00
<b>T.P. Tire Service, Inc</b>			
T.P. Tire Service, Inc	12/05/2019	equipment maintenance	150.46
T.P. Tire Service, Inc	12/05/2019	Unit 6 tires	160.06
T.P. Tire Service, Inc	12/05/2019	Unit 6 tires	160.05
Total T.P. Tire Service, Inc:			470.57
<b>Telstar Instruments, Inc</b>			
Telstar Instruments, Inc	12/10/2019	Chlorine system maintenance	5,470.00
Telstar Instruments, Inc	12/10/2019	Lab supplies	339.32
Total Telstar Instruments, Inc:			5,809.32
<b>Thatcher Company, Inc</b>			
Thatcher Company, Inc	12/30/2019	replenish chlorine	4,807.20
Thatcher Company, Inc	12/30/2019	replenish chlorine - container credit	2,000.00-
Total Thatcher Company, Inc:			2,807.20
<b>The Mill Yard</b>			
The Mill Yard	12/30/2019	Ruth HQ Roof Replacement	2,170.00-
The Mill Yard	12/30/2019	Ruth HQ Roof Replacement	62.72
The Mill Yard	12/30/2019	Ruth HQ Dock Repair	420.27-
The Mill Yard	12/30/2019	Fieldbrook-Glendale Pump Station Building Roof Repair	14.52
The Mill Yard	12/30/2019	Tool replacement	20.60
The Mill Yard	12/30/2019	Ruth Spillway repair	125.24
The Mill Yard	12/30/2019	Ruth HQ Roof Replacement	223.65
The Mill Yard	12/30/2019	Ruth Spillway repair	5.25
The Mill Yard	12/30/2019	Ruth HQ Roof Replacement	85.24
The Mill Yard	12/30/2019	TRF filter covers maintenance	30.31
The Mill Yard	12/30/2019	Ruth HQ Roof Replacement	22.75
The Mill Yard	12/30/2019	Ruth Spillway repair	102.37-
The Mill Yard	12/30/2019	Ruth HQ Roof Replacement	135.68-
The Mill Yard	12/30/2019	Ruth HQ Roof Replacement	35.76
The Mill Yard	12/30/2019	Ruth HQ Roof Replacement	22.75
The Mill Yard	12/30/2019	Ruth HQ Roof Replacement	7.58
The Mill Yard	12/30/2019	maintenance supplies	28.19
The Mill Yard	12/30/2019	Emergency Leak Repair West End & Warren Creek Roads	123.47
The Mill Yard	12/30/2019	Repair Collector motor bases	76.99
The Mill Yard	12/30/2019	Emergency Generator transfer switch	47.45
The Mill Yard	12/30/2019	TRF Filter Building maintenance	67.07
The Mill Yard	12/30/2019	TRF Filter Building maintenance	143.24

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 12/1/2019-12/31/2019Page: 11  
Jan 02, 2020 08:45AM

Vendor Name	Date Paid	Description	Amount Paid
The Mill Yard	12/30/2019	<i>I/W Meter Building Emergency Generator Lighting maint</i>	7.58
The Mill Yard	12/30/2019	<i>Ruth HQ Dock Repair</i>	731.96
The Mill Yard	12/30/2019	<i>Ruth HQ Dock Repair</i>	166.62
The Mill Yard	12/30/2019	<i>Ruth HQ Dock Repair</i>	551.22
The Mill Yard	12/30/2019	<i>TRF Filter Building maintenance</i>	256.06
Total The Mill Yard:			27.90
<b>The Times-Standard</b>			
The Times-Standard	12/09/2019	<i>notice of public hearing - Ordinance 22</i>	534.98
The Times-Standard	12/09/2019	<i>Advertisement for bid - 12KV Upgrade Project</i>	535.09
Total The Times-Standard:			1,070.07
<b>Thomas Law Group</b>			
Thomas Law Group	12/26/2019	<i>Legal Fees - November</i>	1,125.00
Total Thomas Law Group:			1,125.00
<b>Thrifty Supply</b>			
Thrifty Supply	12/30/2019	<i>Unit 8 tool</i>	39.06
Total Thrifty Supply:			39.06
<b>Tim Farrell</b>			
Tim Farrell	12/05/2019	<i>Wellness Grant 2019</i>	36.00
Total Tim Farrell:			36.00
<b>Times Printing</b>			
Times Printing	12/26/2019	<i>Blue Book Dividers</i>	778.16
Total Times Printing:			778.16
<b>Trinity County General Services</b>			
Trinity County General Services	12/26/2019	<i>Pickett Peak site lease</i>	250.00
Total Trinity County General Services:			250.00
<b>Trinity County Solid Waste</b>			
Trinity County Solid Waste	12/11/2019	<i>Ruth HQ dump fees</i>	19.95
Trinity County Solid Waste	12/11/2019	<i>Ruth Hydro dump fees</i>	19.95
Total Trinity County Solid Waste:			39.90
<b>Trinity Diesel, Inc</b>			
Trinity Diesel, Inc	12/26/2019	<i>TRF Generator Service</i>	58.53
Total Trinity Diesel, Inc:			58.53
<b>U.S. Bank Corporate Payment System</b>			
U.S. Bank Corporate Payment System	12/20/2019	<i>Position Advertisement Press Democrat - Electrician</i>	524.01
U.S. Bank Corporate Payment System	12/20/2019	<i>Position Advertisement -North Coast Journal - Electrician</i>	255.00
U.S. Bank Corporate Payment System	12/20/2019	<i>Position Advertisement - Redding Searchlight - Electrician</i>	299.00
U.S. Bank Corporate Payment System	12/20/2019	<i>Employee Jacket</i>	66.14
U.S. Bank Corporate Payment System	12/20/2019	<i>Business Cards Essex Employees</i>	72.70
U.S. Bank Corporate Payment System	12/20/2019	<i>Business Cards Ruth HQ</i>	28.96

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 12/1/2019-12/31/2019

Page: 12

Jan 02, 2020 08:45AM

Vendor Name	Date Paid	Description	Amount Paid
U.S. Bank Corporate Payment System	12/20/2019	Business Cards - Ruth Hydro	28.96
U.S. Bank Corporate Payment System	12/20/2019	Adobe Acobat Pro	179.88
U.S. Bank Corporate Payment System	12/20/2019	Ruth HQ power maintenance	204.98
U.S. Bank Corporate Payment System	12/20/2019	Ruth HQ water system maintenance	642.94
U.S. Bank Corporate Payment System	12/20/2019	Pump Station 6 Electrical Building Heater	141.04
U.S. Bank Corporate Payment System	12/20/2019	Technical Training	100.00
U.S. Bank Corporate Payment System	12/20/2019	Backflow equipment	46.12
U.S. Bank Corporate Payment System	12/20/2019	TRF maintenance	71.09
U.S. Bank Corporate Payment System	12/20/2019	Essex office supplies	112.66
U.S. Bank Corporate Payment System	12/20/2019	Customer Service supplies - Humboldt Bay	3.10
U.S. Bank Corporate Payment System	12/20/2019	Customer Service supplies - Fieldbrook-Glendale CSD	8.83
U.S. Bank Corporate Payment System	12/20/2019	lab supplies	14.36
U.S. Bank Corporate Payment System	12/20/2019	Water Diversion: Monitoring & Reporting Training - 3 employe	75.00
U.S. Bank Corporate Payment System	12/20/2019	Water Diversion: Monitoring & Reporting	12.50
U.S. Bank Corporate Payment System	12/20/2019	Water Diversion: Monitoring & Reporting training	12.50
U.S. Bank Corporate Payment System	12/20/2019	Purchase Order Software - Monthly	95.60
U.S. Bank Corporate Payment System	12/20/2019	AirMedCare Network - Enrollment new Employee	65.00
U.S. Bank Corporate Payment System	12/20/2019	Position Advertisement - Sacramento Bee - Electrician	719.48
U.S. Bank Corporate Payment System	12/20/2019	Position Advertisement - AWWA - Electrician	349.00
U.S. Bank Corporate Payment System	12/20/2019	Position Advertisement - Craigs List - Electrician	80.00
U.S. Bank Corporate Payment System	12/20/2019	Upgrade Eureka office computer	548.46
U.S. Bank Corporate Payment System	12/20/2019	AWWA Conference - D. Davidsen	604.10
U.S. Bank Corporate Payment System	12/20/2019	AWWA Conference - D. Davidsen	16.70
U.S. Bank Corporate Payment System	12/20/2019	AWWA Conference - D. Davidsen	11.76
U.S. Bank Corporate Payment System	12/20/2019	Hazwoper Training - New Employee	313.50
U.S. Bank Corporate Payment System	12/20/2019	Essex office supplies	80.43
Total U.S. Bank Corporate Payment System:			5,783.80
<b>U.S. Postmaster</b>			
U.S. Postmaster	12/05/2019	Annual PO Box Rental	134.00
Total U.S. Postmaster:			134.00
<b>United Rentals, Inc</b>			
United Rentals, Inc	12/05/2019	Ruth HQ water system repairs	37.17
Total United Rentals, Inc:			37.17
<b>UPS</b>			
UPS	12/26/2019	Return lab testing kits to BioVir	24.39
UPS	12/26/2019	late fee	1.46
Total UPS:			25.85
<b>USA Blue Book</b>			
USA Blue Book	12/30/2019	TRF equipment repair	162.76
Total USA Blue Book:			162.76
<b>Valley Pacific Petroleum Servi, Inc</b>			
Valley Pacific Petroleum Servi, Inc	12/09/2019	2MW Generator Fuel	8,918.54
Total Valley Pacific Petroleum Servi, Inc:			8,918.54
<b>Verizon Wireless</b>			
Verizon Wireless	12/10/2019	General Manager	37.43

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 12/1/2019-12/31/2019Page: 13  
Jan 02, 2020 08:45AM

Vendor Name	Date Paid	Description	Amount Paid
Verizon Wireless	12/10/2019	Customer Service - Humboldt Bay	12.84
Verizon Wireless	12/10/2019	Customer Service - Fieldbrook-Glendale CSD	36.57
Verizon Wireless	12/10/2019	Operations 1	.16
Verizon Wireless	12/10/2019	Customer Service Ipad-Humboldt Bay	9.88
Verizon Wireless	12/10/2019	Customer Service - Fieldbrook-Glendale CSD	28.13
Verizon Wireless	12/10/2019	Unit 6 - Ruth Area	80.31
Verizon Wireless	12/10/2019	Unit 6 - Ruth Hydro	80.32
Total Verizon Wireless:			285.64
<b>William B. Newell</b>			
William B. Newell	12/20/2019	Expense Reimbursement - Ruth HQ maintenance supplies	8.13
William B. Newell	12/20/2019	Expense Reimbursement - Ruth Hydro Maintenance Supplies	28.19
William B. Newell	12/20/2019	Expense Reimbursement - Mail Hydro Oil Sample	16.59
Total William B. Newell:			52.91
<b>Wonder Bros. Auto Body</b>			
Wonder Bros. Auto Body	12/26/2019	Unit 8 repair	1,830.06
Total Wonder Bros. Auto Body:			1,830.06
Grand Totals:			247,633.84



Humboldt Bay Municipal Water District

--Monthly Overtime Report--  
Pay period dates: 12/1/2019 - 12/31/2019Page: 1  
Jan 02, 2020 04:18PM

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	\$73	.00	\$0
Total ADMIN:	1.00	\$73	.00	\$0
Operations Spec	12.00	\$765	.00	\$0
Elec & Ins Tech	9.75	\$524	.00	\$0
Maint Worker	2.25	\$59	.00	\$0
Oper & Mnt Tech	4.00	\$195	.00	\$0
Maintenance Mec	1.00	\$46	.00	\$0
Oper & Mnt Tech	8.00	\$419	.00	\$0
Total ESSEX:	37.00	\$2,009	.00	\$0
Grand Totals:	38.00	\$2,081	.00	\$0

# **OPERATIONS**

Memo to: HBMWD Board of Directors  
From: Dale Davidsen, Superintendent  
Date: December 31<sup>st</sup>, 2019  
Subject: Essex/Ruth December 2019 Operational Report

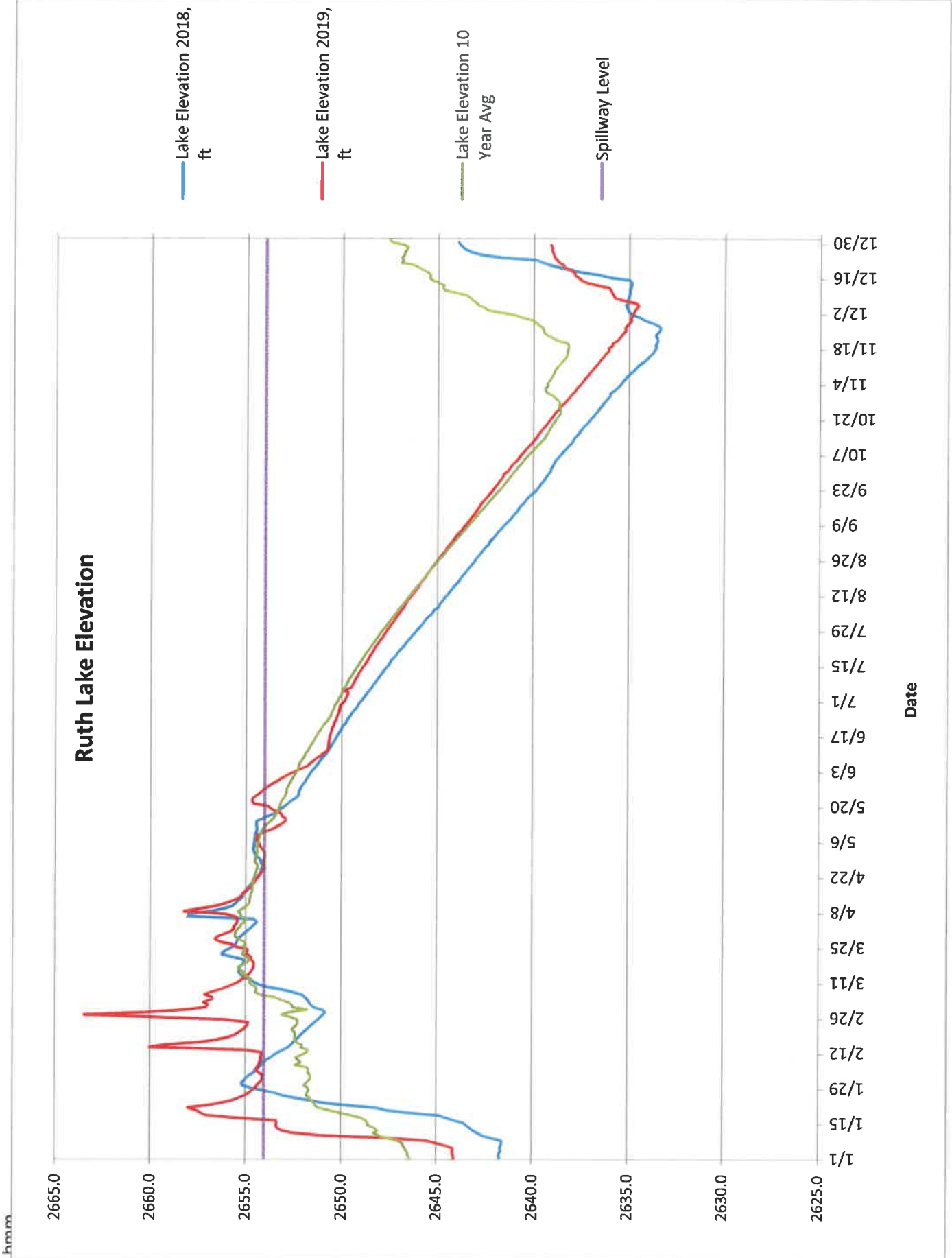
### **Upper Mad River, Ruth Lake, and Hydro Plant**

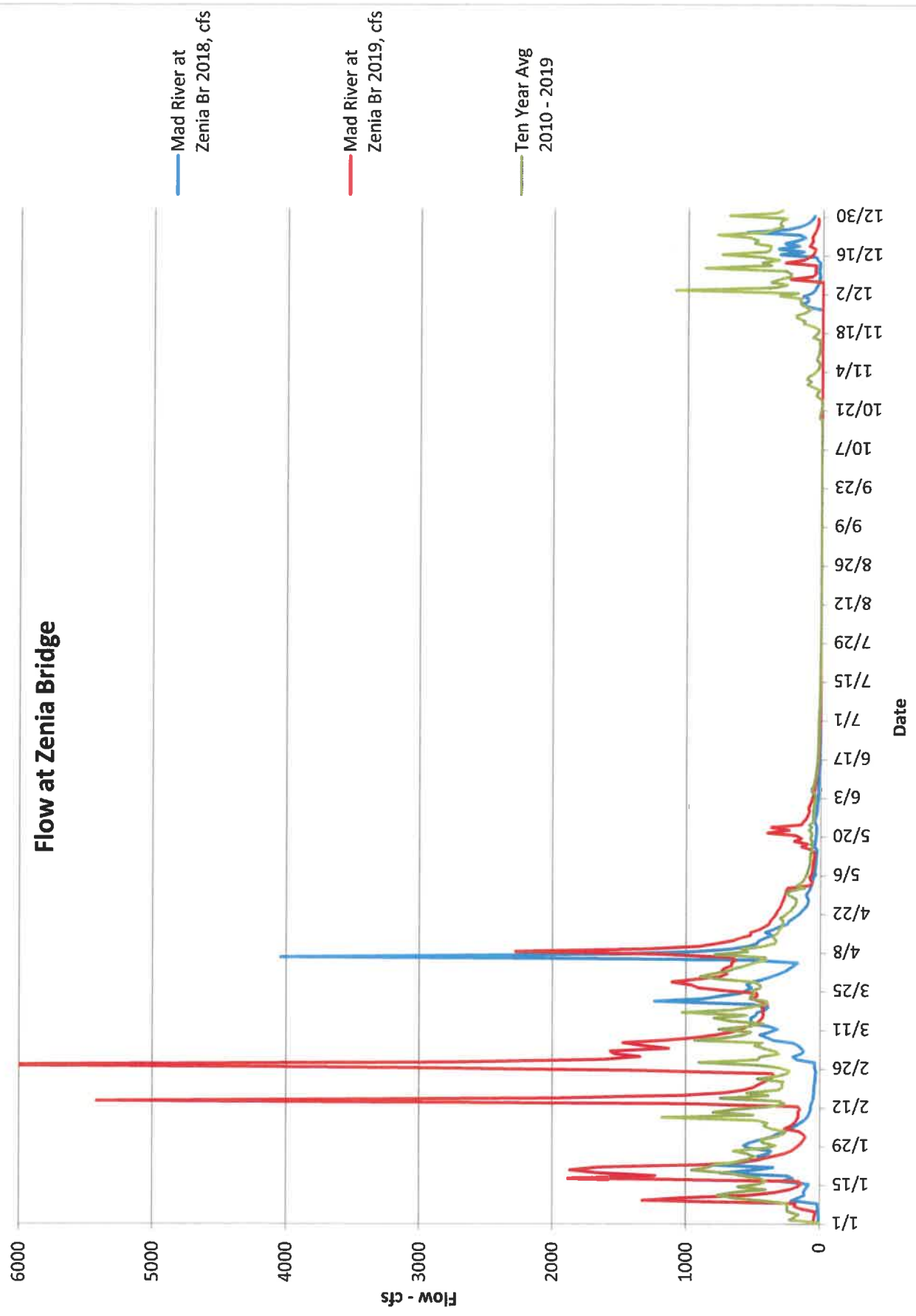
1. The flow at Mad River above Ruth Reservoir (Zenia Bridge) averaged 67cfs. The low flow of 0.5 cfs on December 7<sup>th</sup> and the high flow of 281cfs on December 14<sup>th</sup>.
2. The conditions at Ruth Lake for December were as follows:  
The lake level on December 30<sup>th</sup> was 2639.13 feet which is:
  - 4.24 feet higher than November 30<sup>th</sup>, 2019
  - 4.75 feet lower than December 30<sup>th</sup>, 2018
  - 6.66 feet lower than the ten year average
  - 14.87 feet below the spillway
3. There were 10.76 inches of recorded rainfall for December as of the 30<sup>th</sup> at Ruth Headquarters.
4. Ruth Hydro produced 151,200 KWh. The hydro plant ran all month with 1 outage resulting in a loss of 243 KWh.
5. The discharge from the lake averaged 46 cfs with a high of 50 cfs on December 12<sup>th</sup> and the 13<sup>th</sup>.

### **Lower Mad River, Winzler Control, and TRF**

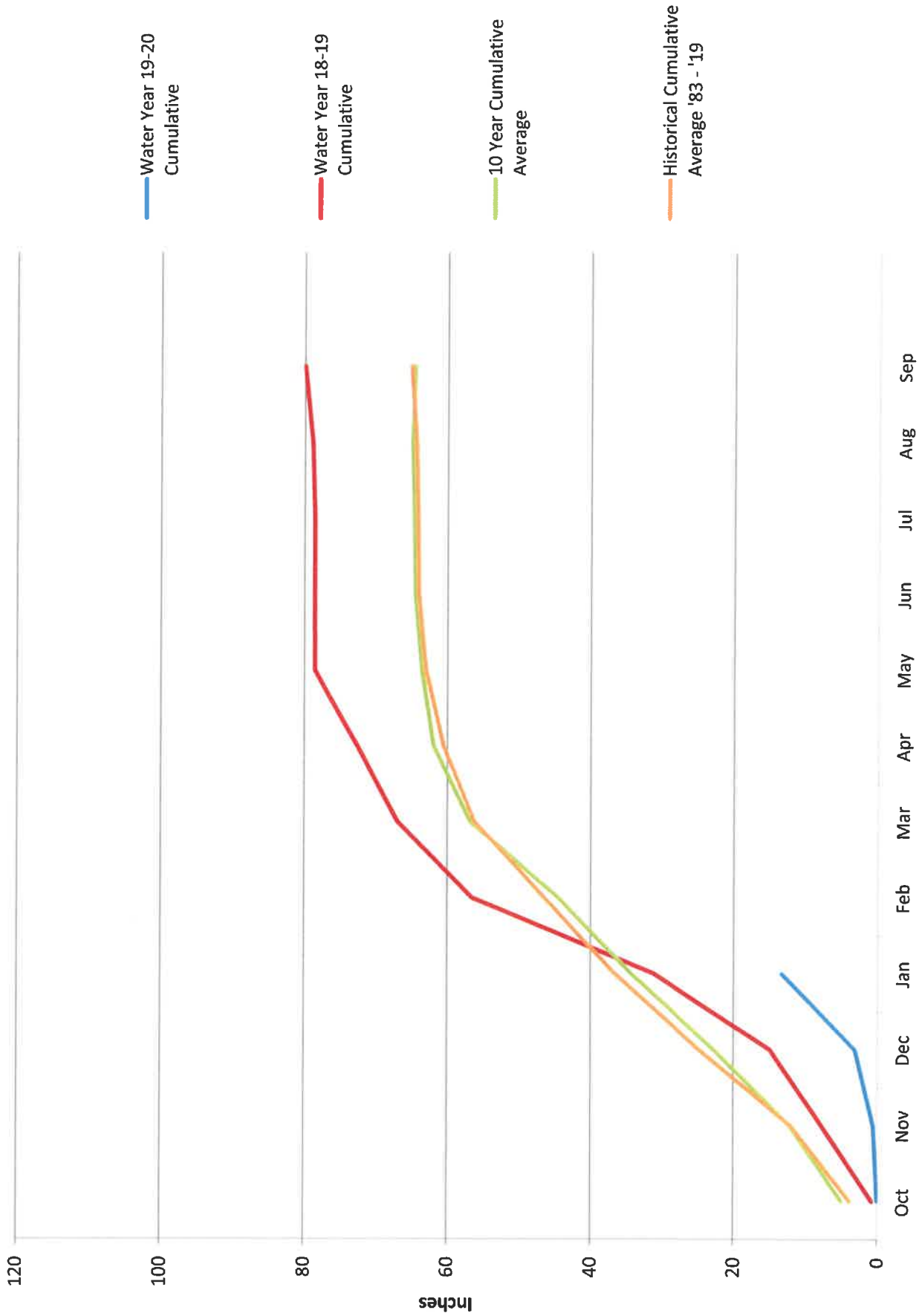
6. The river at Winzler Control Center for December as of the 30<sup>th</sup> had an average flow of 818.2 cfs. The river flow reached a high flow of 2910.0 cfs on December 14<sup>th</sup>.
7. The domestic water conditions were as follows:
  - The monthly turbidity average was 0.07 NTU, which meets Public Health Secondary Standards.
  - As of December 30<sup>th</sup>, we pumped 221.279 million gallons at an average of 7.309 MGD.
  - The maximum metered daily municipal customer use was 8.055 MGD on December 20<sup>th</sup>.
8. The Turbidity Reduction Facility ran 30 days in December.
9. The TRF conditions were as follows:
  - Average monthly filtered water turbidity was 0.07 NTU.
  - There were 52 backwashes on the TRF filters in December.

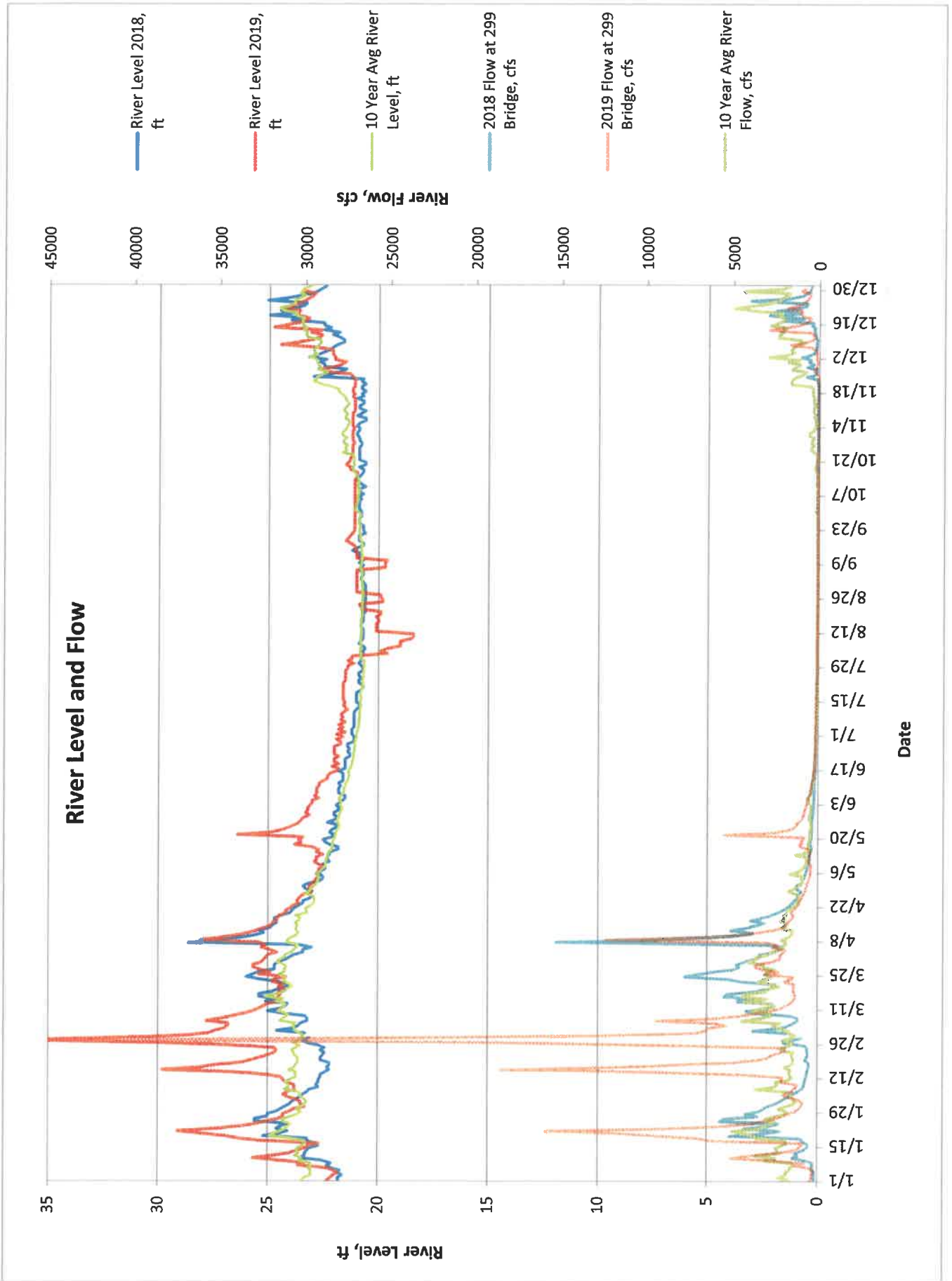
10. December 2<sup>nd</sup> -3<sup>rd</sup> – Six Rivers Communications was onsite replacing the radio cabinet at the TRF.
11. December 5<sup>th</sup> – Annual EAP call out drill per FERC requirements
12. December 10<sup>th</sup> & 11<sup>th</sup> – 90 day DOT required inspections on commercial fleet vehicles and trailers
13. December 11<sup>th</sup> – Safety meeting – SCBA (Self Contained Breathing Apparatus)
14. December 12<sup>th</sup> – JPIA sexual harassment webinar for employees
15. December 17<sup>th</sup> – Interviews for Electrical position.
16. December 18<sup>th</sup> - JPIA sexual harassment webinar for Supervisors
17. Current and Ongoing Projects
  - Working with RCEA and Lincus on the WISE energy efficiency project.
  - Routine annual equipment maintenance and services.





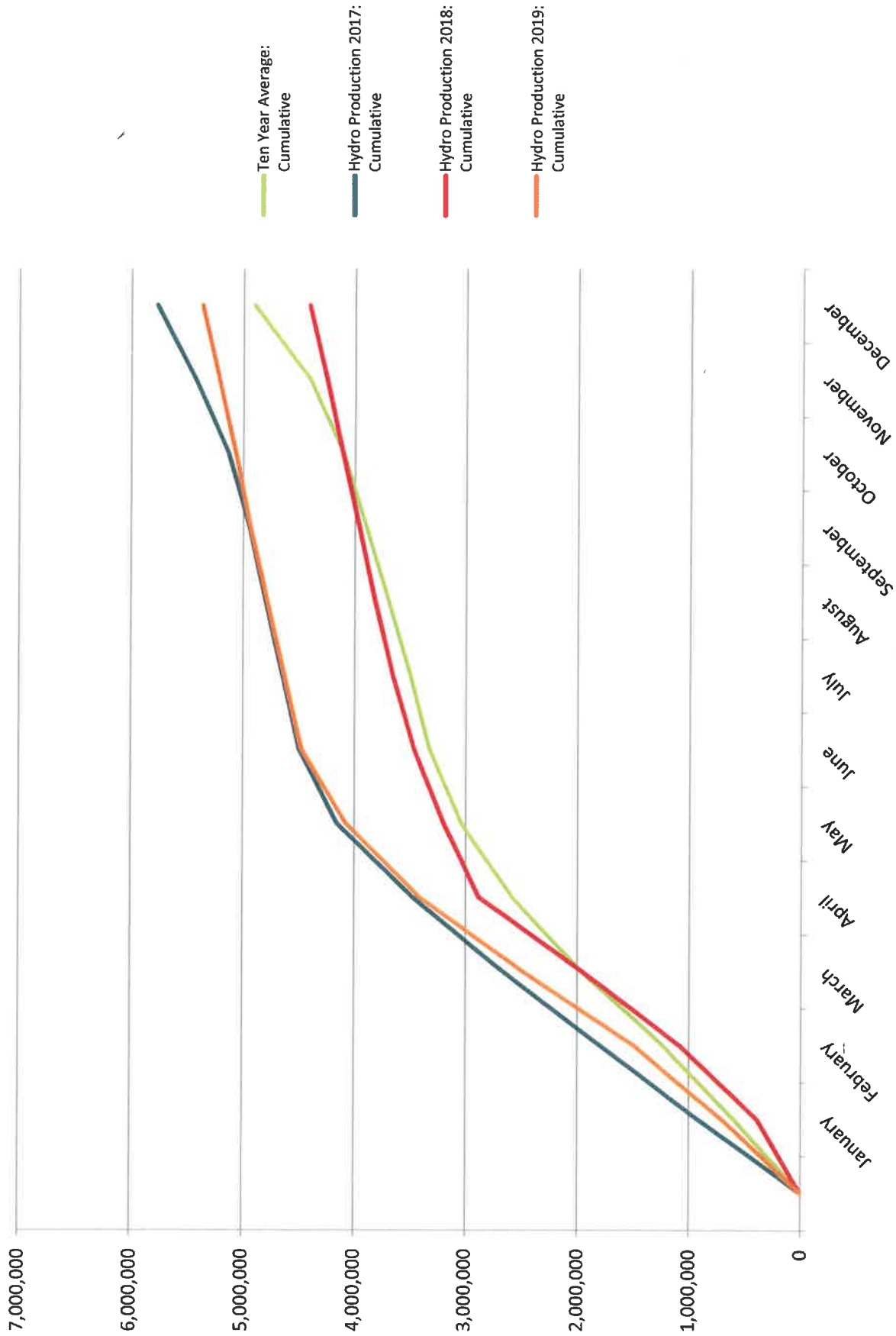
**Ruth Rainfall - Water Year 2018-2019**







### Ruth Hydro Production: kW per Month



**MANAGEMENT**



## ➤ GOVERNANCE AND ACCOUNTABILITY

*CSDA's long range policy priority on governance and accountability is to enhance special districts' ability to govern as independent, local government bodies in an open and accessible manner. Encourage best practices that avoid burdensome, costly, redundant, or one-size-fits all approaches. Protect meaningful public participation in local agency formations, dissolutions, and reorganizations, and ensure local services meet the unique needs, priorities, and preference of each community*

### Governor Vetoes Email Retention Legislation

After hearing from so many special districts and other public agencies, Governor Gavin Newsom vetoed Assembly Bill 1184 (Gloria), which would have required all public agencies to store all transmitted emails related to agency business for at least two years without State reimbursement by claiming it was in furtherance of the California Public Records Act (CPRA).

CSDA led the opposition coalition efforts to stop the bill, encouraging special districts, cities, counties, and school districts to submit letters of opposition and requests for veto to the Governor. With the help of our member districts CSDA succeeded in stopping this costly legislation that would not have provided the public with any greater transparency.

As we stated in our letters, the Governor's veto message reads:

*This bill would require state and local public agencies to retain every public record transmitted by e-mail for at least two years. This bill does not strike the appropriate balance between the benefits of greater transparency through the public's access to public records, and the burdens of a dramatic increase in records-retention requirements, including associated personnel and data-management costs to taxpayer.*

A special thank you to all of the CSDA members who responded to the call to Take Action, this may not have been vetoed without your action.

If your special district did not participate in this Call-to-Action and does not have a Legislative Advocacy Policy in place, please download and consider adopting our free sample policy at [csda.net/take-action](http://csda.net/take-action) (find it by scrolling down on the right-hand column of the page).



CALIFORNIA SPECIAL DISTRICTS ASSOCIATION PRIORITIES

# TAKE ACTION BRIEF

## ➤ INFRASTRUCTURE, INNOVATION, AND INVESTMENT

*CSDA's long range policy principal regarding infrastructure, innovation, and investment is to encourage prudent planning for investment and maintenance of innovative long-term infrastructure. CSDA supports the development of fiscal tools and incentives to assist special districts in their efforts to meet California's changing demands, ensuring the efficient and effective delivery of core local services.*

### Concerns Grow Over Public Safety Power Shutoffs

On November 18, the California Senate Committee on Energy, Utilities, and Communications held an oversight hearing on lessons learned from the Public Safety Power Shutoff (PSPS) events that have plagued the State and created fiscal, operational, and quality of life issues in affected regions.

The agenda included chief executives from Investor-Owned Utilities San Diego Gas & Electric, Southern California Edison, and Pacific Gas and Electric; State oversight officers from the Governor's Office, Office of Emergency Services, Government Operations Agency, GO-Biz, and the California Public Utilities Commission; and panelists representing impacts on California communities, including: employee representatives, independent living centers, healthcare, business owners, food banks, schools, counties, cities, and special districts.

The committee questioned the energy executives at length and shared the frustrations of their constituents, making it clear the status quo is an unacceptable baseline. Testimony after testimony, before the committee spoke to the adverse impacts of PSPS events on the public, the associated financial loss, and the increased operational and safety risks created by the preventative measure.

David Pedersen, General Manager of Las Virgenes Municipal Water District testified to the committee regarding his District's experiences the devastating Woolsey Fire that burned two-thirds of their service area, their agencies operational challenges experienced in PSPS events, and the consequences of the service interruption threatened by them. In his remarks, he made it very clear to the committee that independent special districts are not eligible for current financial assistance and need to be included in funding moving forward so that they can continue to provide reliable critical services to Californians in times of need.

CSDA Legislative Representative Alyssa Silhi testified under public comment at the close of the hearing, which is anticipated to be just one of many more to come. Among other emergency preparedness and climate resiliency efforts, CSDA is advocating for special districts to receive their fair share of State funding, along with cities, counties, and tribal governments, to mitigate the millions of dollars in costs incurred due to the power shutoffs.

### Help Special Districts Receive Future PSPS Funding by Completing CSDA's Brief Survey

If your district has been, or could be, affected by PSPS events, please complete [this survey](#). CSDA will be working to ensure that any future PSPS funding allocation specifically includes an apportionment for special districts, and the information collected from this survey will support that effort.

Take the brief [Public Safety Power Shutoff Survey](#) or contact CSDA Legislative Representative Alyssa Silhi at [alyssas@csla.net](mailto:alyssas@csla.net) to request the survey link to be emailed to you.

H.B.M.W.D. NOV. 22 2019



## FAQs: Website requirements for special districts, SB 929

### What does SB 929 require?

SB 929 was written with the intention of improving transparency and public access to basic information about special districts' activities. SB 929 requires all independent special districts to maintain a website, unless the district passes a resolution claiming a hardship for specific reasons, including evidence of that hardship, in a public meeting each year.

### When does SB 929 go into effect?

January 1, 2020.

### What exactly must be posted to the website?

There are five posting requirements: contact information for the district; the most recent agenda (posted 72 hours in advance of each upcoming meeting); the State Controller's reports for the district's Financial Transaction Report and Board and Staff Compensation Report (or a link to each of the State Controller's websites); and the district's Enterprise System Catalog (as required by SB 272).

### What sort of contact information is required?

The bill doesn't state, it just says that contact information is required. Our assumption is that this means physical and mailing address, phone number, and main district email address.

### What are the specific agenda posting requirements?

Districts have always been required to post agendas at least 72 hours in advance, per the Brown Act, and if the district has a website, they must be posted there as well. AB 2257 went into effect January 2019, and that added a few requirements: first, there must be a link on the home page that goes directly to the current agenda; and second, the agenda itself must be searchable, indexable, and platform-independent (this means that you should be saving or exporting your agenda to PDF from Word, then posting that as your official agenda).

### What constitutes a valid hardship?

Special districts may exempt themselves from the website requirements if the district's board of directors adopts a resolution with detailed findings on why a hardship prevents it from establishing or maintaining a website. Examples of a valid hardship include: limited access to broadband or other type of Internet; significantly limited financial resources; and/or insufficient staff resources. The resolution is valid for one year and must be adopted annually if a hardship still exists.

### Where can I learn more?

The California Special Districts Association (CSDA.net) sponsors webinars on this topic often. They have created a Website Compliance Checklist for easy use (see attached). You can also contact LAFCo staff if you need assistance with preparing a hardship exemption resolution (template available upon request). Please contact [colette@humboldtlafo.org](mailto:colette@humboldtlafo.org) or (707) 445-7508 for more information.

# California Website Compliance Checklist

Use this checklist to keep your district's website compliant with State and Federal requirements.

## Public Records Act

SB 929:

**Our district has created and maintains a website**

Passed in 2018, all independent special districts must have a website that includes contact information (and all other requirements) by Jan. 2020

SB 272:

**Our Enterprise System Catalog is posted on our website**

All local agencies must publish a catalog listing all software that meets specific requirements—free tool at [getstreamline.com/sb272](http://getstreamline.com/sb272)

AB 2853 (optional):

**We post public records to our website**

This bill allows you to refer PRA requests to your site, if the content is displayed there, potentially saving time, money, and trees

## The Brown Act

AB 392:

**Agendas are posted to our website at least 72 hours in advance of regular meetings, 24 hours in advance of special meetings**

This 2011 update to the Act, originally created in 1953, added the online posting requirement

AB 2257:

**A link to the most recent agenda is on our home page, and agendas are searchable, machine-readable and platform independent**

Required by Jan. 2019—text-based PDFs meet this requirement, Microsoft Word docs do not

## State Controller Reports

Financial Transaction Report:

**A link to the Controller's "By the Numbers" website is posted on our website**

Report ~~must~~ be submitted within seven months after the close of the fiscal year—you can add the report to your site annually, but posting a link is easier

Compensation Report:

**A link to the Controller's PublicPay website is posted in a conspicuous location on our website**

Report must be submitted by April 30 of each year—you can also add the report to your site annually, but posting a link is easier

## Healthcare District Websites

AB 2019: *NA*

**If we're a healthcare district, we maintain a website that includes all items above, plus additional requirements**

Including budget, board members, Municipal Service Review, grant policy and recipients, and audits

## Open Data

AB 169:

**Anything posted on our website that we call "open data" meets the requirements of AB 169**

Defined as "retrievable, downloadable, indexable, and electronically searchable; platform independent and machine readable"... among other things

## Section 508 ADA Compliance

CA gov code 7405:

**State governmental entities shall comply with the accessibility requirements of Section 508**

Requirements were updated in 2018—if you aren't sure, you can perform a basic test for accessibility at [achecker.ca](http://achecker.ca)

*as of 1/2/2020*



California Special Districts Association  
Districts Stronger Together

[csda.net](http://csda.net)



[getstreamline.com](http://getstreamline.com)

### Check Accessibility By:

Web Page URL **HTML File Upload** - **Paste HTML Markup**

Address: <http://www.hbmwd.com>

Check It

[Options](#)

### Accessibility Review

**Accessibility Review (Guidelines: WCAG 2.0 (Level AA))**

Known Problems(0)

Likely Problems (0)

Potential Problems (308)

HTML Validation

CSS Validation

 **Congratulations! No known problems.**

Export Format: PDF Report to Export: All



All



PDF

Report to Export: All

Get File

Translate to **English** | German | Italiano



Web Service API

**RREDC/RCEA**

---





## **BOARD OF DIRECTORS MEETING AGENDA**

**Humboldt Bay Municipal Water District Office**  
**828 7<sup>th</sup> Street, Eureka, CA 95501**

**December 19, 2019**  
**Thursday, 3:30 p.m.**

In compliance with the Americans with Disabilities Act, if you need assistance to participate in this meeting, please contact the Clerk of the Board at the phone number, email or physical address listed above at least 72 hours in advance.

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 in the agenda binder located in the RCEA lobby during normal business hours, and at <https://redwoodenergy.org/about/board-of-directors/>.

PLEASE NOTE: Speakers wishing to distribute materials to the Board at the meeting are asked to provide 12 copies to the Clerk of the Board.

### **OPEN SESSION** Call to Order

#### **1. REPORTS FROM MEMBER ENTITIES**

#### **2. ORAL COMMUNICATIONS**

This time is provided for people to address the Board or submit written communications on matters not on the agenda. At the conclusion of all oral communications, the Board may respond to statements. Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

#### **3. CONSENT CALENDAR**

All matters on the Consent Calendar are considered to be routine by the Board and are enacted in one motion. There is no separate discussion of any of these items. If discussion is required, that item is removed from the Consent Calendar and considered separately. At the end of the reading of the Consent Calendar, Board members or members of the public can request that an item be removed for separate discussion.

**3.1 Approve Minutes of November 21, 2019, Board Meeting.**

**3.2 Approve Disbursements Report.**

**3.3 Accept Financial Reports.**

**3.4 Reappoint Jerome Carman, Colin Fiske, Larry Goldberg, Pam Halstead, Tom Hofweber and Dennis Leonardi to the Community Advisory Committee for Terms Expiring April 12, 2022.**

**3.5 Approve Changes to Feed-In Tariff Power Purchase Agreement as Amended to Address Local Developer Incentive and Energy Curtailment Calculation Concerns.**

**3.6 Consent to Assignment of the Existing Biomass Power Purchase Agreement from DG Fairhaven Power, LLC to DG Fairhaven, LLC, and Authorize the Executive Director to Execute All Necessary Documents.**

#### **4. REMOVED FROM CONSENT CALENDAR ITEMS**

Items removed from the Consent Calendar will be heard under this section.

## 5. OLD BUSINESS

- 5.1 Approve Updated RePower Humboldt/Comprehensive Action Plan for Energy Planning Document Draft

Adopt the 2019 RePower Humboldt Comprehensive Action Plan for Energy.

## 6. NEW BUSINESS

- 6.1 Renewable Energy Power Purchase Agreement with Humboldt Wind, LLC

Approve a 15-year power purchase agreement with Humboldt Wind, LLC for 90 MW of capacity of its Humboldt Wind project, and authorize RCEA's executive director to execute all applicable documents.

- 6.2 Fiscal Year 2019-2020 1<sup>st</sup> Quarter Budget Summary (Information only)

## 7. CLOSED SESSION

- 7.1. Closed Session to meet with legal counsel per Government Code Section 54956.9(d)(4), in re PG&E, Bankruptcy Court, 19-30088, Northern District of California.
- 7.2. Public Employee Performance Evaluation, pursuant to Government Code Section 54957(b)(1): Executive Director.

## 8. RECONVENE TO OPEN SESSION

## 9. CLOSED SESSION REPORT

### 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.

## 10. OLD CCE BUSINESS - None

## 11. NEW CCE BUSINESS

- 11.1. Carbon Free/Renewable Power Purchase Target Review/2020 Power Procurement

Authorize staff to expend up to \$1.5 million for procurement of carbon-free power for calendar year 2020, at a unit price not to exceed 160% of 2020 carbon-free power procured to date, redirecting any portion of these funds not committed by May 1, 2020 to an incentive program for energy storage at critical public facilities.

**11.2. CCE Program Update (Information only)**

- California Public Utilities Commission Decision Requiring Electric System Reliability Procurement for 2021-2023
- Postponement of annual review and update of RCEA's Energy Risk Management Policy

**END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS**

**12. STAFF REPORTS** – None.

**13. FUTURE AGENDA ITEMS**

Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

**14. ADJOURNMENT**

---

**NEXT REGULAR MEETING**

Thursday, January 23, 2020, 3:30 p.m.  
Humboldt Bay Municipal Water District Office  
828 7<sup>th</sup> Street, Eureka, CA 95501

This page  
intentionally  
left blank.



Redwood Coast Energy Authority  
 633 3<sup>rd</sup> Street, Eureka, CA 95501  
 Phone: (707) 269-1700 Toll-Free (800) 931-7232 Fax: (707) 269-1777  
 E-mail: [info@redwoodenergy.org](mailto:info@redwoodenergy.org) Web: [www.redwoodenergy.org](http://www.redwoodenergy.org)

## **DRAFT BOARD OF DIRECTORS MEETING MINUTES**

**Humboldt Bay Municipal Water District Office**  
**828 7<sup>th</sup> Street, Eureka, CA 95501**

**November 21, 2019**  
**Thursday, 3:30 p.m.**

Chair Michael Winkler called a regular meeting of the Board of Directors of the Redwood Coast Energy Authority to order on the above date at 3:33 p.m. Notice of this meeting was posted on November 16, 2019. PRESENT: Vice Chair Austin Allison, Summer Daugherty, Dwight Miller, Robin Smith, Frank Wilson, Chair Michael Winkler, Sheri Woo. ABSENT: Estelle Fennell, Dean Glaser. STAFF PRESENT: Power Resources Director Richard Engel, RCEA Climate and Forests Consultant Michael Furniss, Executive Director Matthew Marshall, Clerk of the Board Lori Taketa.

### **REPORTS FROM MEMBER ENTITIES**

The City of Trinidad voted to create an Energy and Resilience Subcommittee to study climate change resilience and align the city's policies with RCEA goals.

The City of Blue Lake is also considering resiliency measures after the recent power outages.

The City of Eureka is making efforts to update its building code to encourage electric heat pump use over gas furnaces.

The City of Ferndale established a Tree Commission to encourage carbon sink development.

The City of Arcata endorsed the Mayor of San Jose's letter supporting restructuring PG&E as a public benefits corporation.

### **ORAL COMMUNICATIONS**

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

### **CONSENT CALENDAR**

- 3.1 Approve Minutes of October 24, 2019, Board Meeting.**
- 3.2 Approve Disbursements Report.**
- 3.3 Accept Financial Reports.**

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

**M/S: Allison, Daugherty: Approve consent calendar items.**

**The motion passed on a unanimous voice vote. Ayes: Allison, Daugherty, Miller, Smith, Wilson, Winkler, Woo. Absent: Fennell, Glaser.**

## OLD BUSINESS

### 5.1 Electric Vehicle Charging Network Upgrades

Executive Director Marshall presented a staff report on accepting funding from the CALeVIP program to upgrade existing electric vehicle charging stations to new ChargePoint units, improving reliability, screen interfaces, and the stations' ability to collect payments. The state incentive program rebates are anticipated to cover upgrade costs and staff recommends a 20% contingency fund from Community Choice Energy funds.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

**M/S: Allison, Daugherty: Authorize staff to solicit bids and secure construction at all listed sites as appropriate, for a total aggregate budget not to exceed \$144,000, and to seek reimbursement through the CALeVIP program.**

**The motion passed on a unanimous voice vote. Ayes: Allison, Daugherty, Miller, Smith, Wilson, Winkler, Woo. Absent: Fennell, Glaser.**

### 5.2 Airport Microgrid Project Site Preparation Coordination and Reimbursement

Executive Director Marshall presented a staff report on the County Public Works Department's offer to use its less costly contracting process for work previously approved by the Board as part of Phase I of the airport microgrid project. The work would include site clearing, brush work, tree removal, and fence building around the construction site. RCEA would reimburse the County for this work.

**M/S: Allison, Daugherty: 1) Authorize reimbursement to County for: a) brush removal and site work in preparation for fence installation; and/or b) fence installation; and/or c) tree removal; and 2) Authorize RCEA Executive Director to sign an Access and Reimbursement Agreement with County.**

**The motion passed on a unanimous voice vote. Ayes: Allison, Daugherty, Miller, Smith, Wilson, Winkler, Woo. Absent: Fennell, Glaser.**

### 5.3 Humboldt County Islanding During Public Safety Power Shutoffs – Information only

Executive Director Marshall reported on developments since the Board established an ad hoc Public Safety Power Shutoff Subcommittee at its last meeting. Staff had not yet met with any PG&E technical staff. PG&E is aware that Humboldt County is an area with low fire risk that potentially should be exempt from deenergizing. A CPUC grid safety and infrastructure engineer volunteered to provide information on potential costs of islanding.

The Directors discussed the subcommittee's role of applying pressure to PG&E to keep focus on Humboldt County, the need to know why the Humboldt Bay Power Plant (HBPP) had not been used to support the County during the shutoff events, and whether PG&E should be asked to black start HBPP before the next public safety power shutoff.

#### 5.4 Review Updated RePower Humboldt/Comprehensive Action Plan for Energy Planning Document Draft

Executive Director Matthew Marshall presented a staff report on the latest draft of the Comprehensive Action Plan for Energy, which has been retitled "RePower Humboldt." The draft includes a quantitative analysis of existing operational projects and planned projects, and projected countywide energy generation in different scenarios. This analysis will be done in greater detail for the integrated resource plan to be submitted to the California Public Utilities Commission in April.

Mr. Marshall reported that because most strategic plan public comments concerned biomass generation, RCEA hired Climate and Forests Consultant Michael Furniss to facilitate discussion of the topic at a public Forests, Climate and Energy workshop. Three presentations were made at this Board meeting summarizing discussion from that workshop.

UC Cooperative Extension Forest Advisor Yana Valachovic made a presentation on biomass energy's role in Humboldt County from a forestry perspective, addressing how thinning small diameter trees that will not survive and which are unusable for lumber increases forest health, prevents wildfires, and that this local resource is being used to fulfil a state energy requirement for baseload power. Ms. Valachovic described the lack of funding nationally for wood product innovation research and that a private/public partnership was needed for development of alternate wood waste uses.

Dr. Wendy Ring made a presentation on health impacts of biomass plant particulate emissions and described how ultra-fine particulates enter the bloodstream, cause inflammation and contribute to heart attacks, arrhythmias and strokes. She described how roughly 1/3 of Humboldt County's population is vulnerable to these health conditions due to air quality conditions and how local agencies can only enforce emissions regulations which have not changed in 30 years. Dr. Ring stated that health impacts are not mentioned in RCEA documents and recommended that no numeric biomass commitments be made so that healthier, alternate uses for mill waste can be utilized by 2030.

RCEA Climate and Forests Consultant Michael Furniss presented a report summarizing forest and energy workshop discussions, research and consultation findings. He described biomass energy as a climate change bridge solution worldwide and that most currently available mill waste disposal alternatives create more greenhouse gas emissions than do biomass energy production methods. He described Humboldt County's productive redwood forests as some of the best carbon sequestration resources in the world and suggested that focus on the question of carbon neutrality be shifted to how to avoid using carbon extracted from inside the earth which increases atmospheric carbon. Mr. Furniss described the volumes of mill waste generated locally, the need for a life cycle analysis of this material which the Schatz Energy Research Center's study is not covering, the need for exposure modeling funding, and the potential emissions and forest restoration impacts should RCEA no longer purchase local biomass power. Mr. Furniss described biochar production as a promising alternate mill waste use warranting further study.

The directors discussed:

- The need to focus on modifiable risk factors and how it is difficult to reduce wood stove use to decrease particulate emissions.

- How biomass power prices should be reduced so other renewable energy sources are not displaced from RCEA's power mix.
- How RCEA can incentivize better emissions controls in biomass power plants.
- The need to reduce the use of gas for baseload energy needs, and how wind and solar cannot be relied on for this purpose.
- How local air quality has been negatively affected by regional wildfires.
- How local biomass plants currently do not use forest residue, and the possibility of incentivizing biomass plants to accept this fuel.
- How the Humboldt Bay natural gas power plant is constantly running and may run more modules if biomass plants were taken offline.
- How upstream natural gas impacts such as extraction methods and delivery system leakage need to be considered.
- How RCEA is paying a comparable price for biomass power as for other renewable energy sources this month due to shifting resource adequacy values, or the capacity to provide power at low-solar times of day.
- How Terra Gen power would cost less than biomass power but would not provide the resource adequacy that RCEA is required to purchase.
- That Humboldt Sawmill Company employs 400-450 people during peak season.
- That a combination of renewable energy sources needs to be utilized in order to avoid fossil fuel's climate, pollution and war impacts and to provide fossil fuel power's dispatchability.

Chair Winkler invited public comment.

A member of the public stated that Scandinavian countries use biomass more efficiently and inquired whether local biomass plants could incorporate more advanced technology such as torrefaction if they had institutional support.

Gary Rynearson of Green Diamond Resource Company stated that his company implements a sustainable yield plan resulting in net carbon sequestration, provides needed regional power, and that biomass power is a logical use for material from the ½ million acres per year of California forest lands that require wildfire prevention treatment.

Michael Richardson of Humboldt Sawmill Company stated that their biomass plant operates well below permit requirements, provides resource adequacy and does not currently take forest residues but may do so in the future. Mr. Richardson added that HSC has invested several million dollars in the plant, mostly on emission controls, intends to operate for the long term and would like biomass to continue to be part of RCEA's power portfolio.

Kurt McCray of Cal Fire stated his agency's need for help in addressing wildfire impacts through forest health and fuel reduction projects, how it is unsafe to leave forest byproduct onsite, and his interest in stable carbon storage and in using biomass to manage byproduct.

Member of the public Ellen Golla stated that burning gas releases less CO2 than burning wood, that carbon emissions must be reduced, that the best biomass plants still emit more PM2.5 pollutants than do coal plants, and that her work helping people with breathing difficulties leads her to request wood stove, not gas combustion, replacement efforts.



Arcata resident Walt Paniak commented on the DG Fairhaven and HRC biomass plants' use of natural gas and diesel, and how this adds to that energy source's relatively high price compared with other energy sources.

Westhaven resident Martha Walden stated that she thought biomass was a temporary energy source while trying to achieve 100% renewable, clean energy by 2025, but that the CAPE document does not state an intention to replace or limit biomass use. She requested that the CAPE document express an ambition to move beyond biomass.

Jon Shultz, District Conservationist with the USDA Natural Resources Conservation Service stated his interest in forest waste to electricity conversion, the Farm Service Agency's discontinuation of a program that made it economical to thin overgrown forest regions and not burn wood waste on site, and how fly ash is successfully being used on a large Rohnerville ranch to lime soil, which increases forb growth and helps ranch operations.

Wendy Ring referred to the Marin Carbon Project, a large-scale compost to range land project which provides carbon credits to participating farmers and ranchers, the need for more net carbon sequestration in forests and how these approaches can build new industries and increase jobs.

A member of the public stated that it is technically possible to power her house with her electrical vehicle but that this state does not allow this and requested that staff be directed to do a pilot vehicle-to-home project in Humboldt County.

Pete Jackson of Green Diamond Resource Company stated that his company manages 250 acres in Blue Lake for timber and that between 2011-14 took 40,000 tons of wood chips that would previously have been burned onsite to Humboldt Redwood Company because of the Farm Service Agency's Biomass Crop Assistance Program. He stated that his company continues this practice because of the need to recycle wood chips at the bottom of the pile. He stated that Green Diamond is exploring alternate uses of this material but that so far none can adequately address the problem.

Member of the public Cindy Marino requested that biomass plants stop cutting down O2 generating trees.

Chair Winkler closed public comment.

The directors discussed:

- Possible use of Community Choice Energy funds for a wood stove replacement program, exposure modeling, or a gasification study.
- Possible matching funds from the Air Quality Management District for these projects.
- The importance of fuel reduction in local forests.
- The need for large scale solar energy with battery backup.
- The need for biomass as a bridge power source.
- The need to balance contract duration terms with the biomass plants' ability to invest in improvements.
- The need to be able to island Humboldt County in case of regional power shutoffs.
- The need for RCEA to encourage new technologies that will benefit young people in the future.

- The need to develop seasonal methods of energy storage and to do long term comparisons of energy storage technology.

Director Miller summarized CAPE/RePower revision suggestions as follows:

- 1) Create a pool of research funds, leveraging funds from other California CCEs that utilize biomass power, to fund a large-scale biochar pilot project.
- 2) Do not commit to long-term biomass contracts and state in RePower the ambition to move beyond burning biomass.
- 3) List public health as a priority in the RePower Humboldt document and consider exposure modeling data.
- 4) Create a biomass technical advisory committee to generate a quarterly report that includes financial implications and feasibility of biomass electricity use and the feasibility of small, in-forest biomass plants with stringent emissions control to generate and store electricity.
- 5) Develop electric vehicle to home and vehicle to grid as a source of evening baseload power to enable Humboldt County to island.

## **NEW BUSINESS**

### **6.1 Letter to California Public Utilities Commission Regarding PG&E Ownership**

Chair Winkler described the benefits of supporting PG&E's restructuring as a public benefit corporation.

Chair Winkler invited public comment.

Four members of the public expressed support of PG&E becoming a publicly-owned utility.

Chair Winkler closed public comment.

The Directors discussed that other structures in addition to public ownership may benefit ratepayers, such as breaking up the large utility, that the County had drafted a letter allowing for other forms of ownership, and that RCEA may consider endorsing both letters.

**M/S: Wilson, Miller: Approve RCEA's signing of the Mayor of San Jose's letter calling on the California Public Utilities Commission to make PG&E a customer-owned utility, and the County of Humboldt's letter that lists public ownership as one possible ownership structure.**

**The motion passed on a unanimous voice vote. Ayes: Allison, Daugherty, Miller, Smith, Wilson, Winkler, Woo. Absent: Fennell, Glaser.**

### **6.2 PG&E Energy Watch 2020 Contract Work Authorization**

Executive Director Marshall described the proposed six-month extension to the current Energy Watch contract as being a bridge to July 2020 when the agency plans to launch a Community Choice Energy Program-funded energy efficiency program.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

**M/S: Allison, Woo: Approve Draft PG&E Energy Watch Contract Work Authorization and authorize the Executive Director to execute the final agreement and any associated documents contingent on final review and approval of any revisions by RCEA legal counsel.**

**The motion passed on a unanimous voice vote. Ayes: Allison, Daugherty, Miller, Smith, Wilson, Winkler, Woo. Absent: Fennell, Glaser.**

## **COMMUNITY CHOICE ENERGY (CCE) BUSINESS**

Chair Winkler confirmed that a quorum was present to conduct CCE business.

### **OLD CCE BUSINESS**

#### **7.1 Renewable Long-Term Power Purchase Agreement Negotiation**

Power Resources Director Richard Engel presented a staff report on the agency's long-term renewable energy power purchase agreements and updated the Board on the on-hold status of negotiations with Candela Renewables LLC for 50 MW of solar electricity. Staff Director Engel described the proposed replacement 15-year agreement with EDP Renewables for 50 MW of solar electricity from a Kern County project that appears more likely to meet the delivery date of 2022. The proposed power purchase price was described as competitive with Candela Renewables' pricing. The developer, EDP Renewables North America, LLC, is one of RCEA's partners for the offshore wind project and has a long history of renewable energy development in the U.S.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

**M/S: Miller, Allison: Authorize staff to negotiate a power purchase agreement with EDP Renewables North America LLC for 50 MW of solar, to present to the Board for final approval.**

**The motion passed on a unanimous voice vote. Ayes: Allison, Daugherty, Miller, Smith, Wilson, Winkler. Absent: Fennell, Glaser. Non-voting: Woo.**

### **NEW CCE BUSINESS**

#### **7.2 Customer Rate Update – Information only**

Staff Director Engel presented a staff report on PG&E's multiple generation rate changes this year and RCEA's CCE program rates, which the Board directed to keep at 1% below PG&E's rates. The latest generation rate change in October was a ½% increase which impacts residential customers slightly more than commercial customers. PG&E began an opt-in period for industrial commercial customers to switch to time of use rates, which will be mandatory for all industrial customers in a year.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

## **END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS**

### **CLOSED SESSION :**

**7.3** Public Employee Performance Evaluation, pursuant to Government Code Section 54957(b)(1): Executive Director.

The Directors did not adjourn to closed session, agreed to follow the same performance evaluation process that was used last year and directed Chair Winkler to work with Counsel to begin implementing that process.

Chair Winkler adjourned the meeting at 6:41 p.m.



Redwood Region Economic Development Commission  
Prosperity Center 520 E Street, Eureka, California 95501  
Phone 707.445.9651 Fax 707.445.9652 www.rredc.com

**REDWOOD REGION ECONOMIC DEVELOPMENT COMMISSION**  
**Regular meeting of the Board of Directors**  
At the Prosperity Center 520 E Street, Eureka  
**December 23, 2019 at 6:30 pm**  
**AGENDA**

**This meeting has been cancelled  
due to lack of quorum.**

*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.*

**RREDC  
Member  
Agencies**

*Cities* Arcata · Blue Lake · Eureka · Ferndale · Fortuna · Rio Dell · Trinidad  
*Community Services Districts* Humboldt · Manila · McKinleyville · Orick · Orleans · Redway · Willow Creek  
Humboldt Bay Harbor, Recreation and Conservation District · Humboldt Bay Municipal Water District  
County of Humboldt · Hoopa Valley Tribe · Redwoods Community College District