

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

Board of Directors Meeting

September 2019



Collector 4 Valve Replacement

MINUTES



HUMBOLDT BAY MUNICIPAL WATER DISTRICT
828 7th Street, Eureka



Minutes for Meeting of Board of Directors

August 8, 2019

A. ROLL CALL

President Woo called the meeting to order at 9:00 am. Director Rupp conducted the roll call. Directors Hecathorn, Latt, Rupp and Woo were present. Director Fuller was absent. General Manager John Friedenbach, Superintendent Dale Davidsen, Business Manager Chris Harris and Board Secretary Sherrie Sobol were also present. Pat Kaspari and Nathan Stevens of GHD were present for a portion of the meeting.

B. FLAG SALUTE

President Woo led the flag.

C. ACCEPT AGENDA

On motion by Director Latt, seconded by Director Rupp, the Board voted 4-0 to accept the agenda.

D. MINUTES

On motion by Director Rupp, seconded by Director Hecathorn, the Board voted 4-0 to approve the Minutes of July 11, 2019 Regular Meeting and July 19, 2019 Special Joint Board Meeting.

E. PUBLIC COMMENT

No public comment was received.

F. CONSENT AGENDA

Director Rupp pulled Item 1. On motion by Director Rupp, seconded by Director Hecathorn, the Board voted to approve the Consent Agenda less Item 1.

Item 1. Mural Madness on the Samoa Peninsula

Director Rupp was going to comment on one of the murals, however, he realized the mural was not completed. Mr. Friedenbach showed several photos of murals on the concrete vaults. On motion by Director Rupp, seconded by Director Hecathorn, the Board voted 4-0 to approve Consent Item 1.

G. CORRESPONDENCE

DWR letter re: Validated Water Loss Audit Report for Data Year 2017

Mr. Friedenbach discussed the letter from DWR. The letter states they have reviewed the District's 2017 Validated Water Loss Audit Report and found it meets the reporting requirements. He congratulated Ms. Harris on job well done. She is now in the process of certifying water loss audits for the previous year.

Director

Hecathorn inquired if Ms. Harris was certifying water loss audits for some of the Municipal Customers as well like

last year. Ms. Harris stated she was.

District letter to Humboldt Board of Supervisors re: Water Infrastructure on Samoa Peninsula

Mr. Friedenbach shared the letter sent the Board of Supervisors and shared at their meeting on July 23rd since he was not able to attend. The letter clearly states that the previous industrial customers (pulp mills) constructed and maintained on site clarifiers to remove/reduce turbidity from industrial water prior to utilizing it. The letter also notes that our industrial system is operational however, it has received minimal maintenance during the past ten years and will need significant capital improvements to provide a reliable water supply 24/7/365. Mr. Friedenbach noted the last sentence which shows the District is willing to be a collaborative partner in seeking grant funding to address water infrastructure capital needs that will ultimately benefit our local economy.



Minutes for Meeting of Board of Directors

August 8, 2019

Mr. Scott Adair and Kenneth Spain from the Humboldt County Economic Development Department were present and discussed possible ways to help support and provide assistance to support the Samoa Peninsula industrial water line project. Mr. Adair noted that the Board of Supervisors directed him and his staff to work with the District and find solutions. Funding options they are currently looking at include a USDA grant and the State Ibank. They shared a list of ways the County can help the HBMWD on Samoa Peninsula industrial water line project. Mr. Adair stated he and Mr. Friedenbach worked collaboratively on the list. He will be sharing the list on September 10 with the Board of Supervisors. The Board asked several questions. At the end of the discussion, Director Latt reiterated the District is willing to cooperate and work with the county and could call a special meeting to make decisions if needed. Ms. Naess of Nordic Aquafarms thanked the Board and stated she appreciates the cooperation.

H. CONTINUING BUSINESS

Water Resource Planning

Local Sales

Mr. Friedenbach reported that staff met again with Nordic Aquafarms and has been providing them information for their due diligence process. They have been provided with an update to the West Yost study and have suggested possible alternative technology for turbidity reduction. Staff has asked for formal bids from vendors to use as a basis for grant applications and will be meeting again with Nordic Aquafarms tomorrow. Director Latt noted that both pulp mills had their own clarifiers that they paid for and public funds were not used. He does not support using ratepayer dollars for clarifiers. The Board discussed various clarifier options, including locations. Director Rupp confirmed the process is still in the exploratory phase. Mr. Friedenbach confirmed this and indicated that Nordic Aquafarms will make a decision next month. Director Rupp added the District has been clear from the beginning that the user pays the costs. It is the District's intent to help but not pay for the costs. He, like Director Latt will not vote for a program subsidized by ratepayers. Mr. Friedenbach stated he will also suggest to Nordic Aquafarms that they have some sort of water storage in the event of a line break.

The Board discussed the letter from GHD regarding No Conflict of Interest. GHD has been hired to assist Nordic Aquafarms with the environmental permitting of their proposed facility on the Samoa Peninsula. They have informed Nordic Aquaculture they will not provide any services to them related the transmission, treatment, storage, service fee etc. related to water delivery to their facility. Pat Kaspari serves as the District Engineer and will not be involved in the environmental permitting process at all. Director Rupp requested staff confirm there is no conflict by having District legal counsel review the matter.

Transport

There are no updates on the transport option.

Instream Flow

President Woo stated the Instream Flow team met and several of the State Water Resource Control Board questions were clarified. The process is moving forward.

Cannabis Grows affecting Mad River Watershed

Mr. Friedenbach shared the article in the Times-Standard regarding mistaken abatement notices. Humboldt County has made some adjustments in cannabis enforcement as a result.

Humboldt County Zoning

The Board discussed the article in the North Coast Journal "A Higher Priority" by Elaine Weinreb. The article was well written and several directors have received positive comments.



Minutes for Meeting of Board of Directors

August 8, 2019

PG&E Bankruptcy

Mr. Friedenbach stated the District’s original claim with PG&E is for \$77,135.03. PG&E is reclassifying \$19,805.43 as general unsecured which leaves a payable amount of \$57,329.60. He met with a bankruptcy attorney (for a free consultation) who agreed with the PG&E analysis. He shared with the Board that there is a bankruptcy clause in the ReMAT agreement if the Board is interested in pursuing it. After discussion, Board consensus was not to invoke the ReMAT bankruptcy clause since PG&E is still paying on the ReMAT agreement post bankruptcy filing date.

I. NEW BUSINESS

Hydroelectric Operator/Ruth Representative Trainee

Mr. Friedenbach stated the Hydro Operator/Ruth representative Brian Newell has been in that position for 24 years and employed with the District for 37 years. Mr. Newell has indicated that he plans to retire in the near future. Staff is requesting Board authorization for trainee for up to six months to work with Mr. Newell. Director Rupp stated Mr. Newell has been an exceptional employee and he was supportive of the training. Mr. Davidsen agreed and stated Mr. Newell will be hard to replace and he has a “truckload of knowledge”. On motion by Director Rupp, seconded by Director Hecathorn, the Board voted 4-0 to authorize a temporary Hydroelectric Operator/Ruth Area Representative Trainee position for up to six months.

J. REPORTS (from Staff)

1. Engineering

Surge Tower Replacement (\$239,900 District Match)

Mr. Stevens stated the project is now complete. The pay request has been received and there are just a few grant close out items to complete.

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

PG&E has stated there are no upgrades required which is great news. 60% design submittals will be completed next week. The project will go out for bid by the end of the year.

Collector Mainline Redundancy Hazard Mitigation Grants (\$763,000 District Match)

Nothing to report.

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

The project is moving along. Staff had a call with FEMA to begin the Phase I process that should take three to four months. Once that is complete, the funding for Phase I will be released.

Single Line Industrial Slough Crossing Hazard Mitigation Grant Application (\$679,750 District Match)

Nothing to report.

Matthews Dam Spillway Analysis Hazard Mitigation Grant Application (\$1,666,667 District Match)

Nothing to report.

Essex Emergency Chlorine Scrubber Hazard Mitigation Grant (\$335,000)

Nothing to report.

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

Nothing to report.



Minutes for Meeting of Board of Directors

August 8, 2019

2019 Emergency Disaster

Mr. Friedenbach stated the District just received a letter from CalOES stating the request for assistance has been approved by FEMA. Last month, the Board authorized the GM to procure emergency service procurement. Since the remaining emergency work can be completed by the FEMA deadline for emergency work or November 17, 2019, he will not need to utilize the authority. GRS will continue with the emergency work with GHD providing the emergency construction management.

Status report re: other engineering work in progress

Mr. Stevens reported that GHD submitted the Mad River Crossing Project to the ASCE San Francisco Section under the “Outstanding Small Project” and “Outstanding Water Project” categories. The award ceremony is on September 12th. This is the project that did win Project of the Year at the ASCE North Coast Section. The Board thanked him for the submittal.

2. Financial

Financial Report

Ms. Harris provided the July 2019 financial statement & vendor detail report. Director Hecathorn reviewed the bills and stated she did not have any questions. Ms. Harris noted that the City of Eureka shows a zero payment for the month. They are in between finance directors and experienced some technical difficulties with issuing payments. Payment was received the first week of August. Director Rupp inquired how the financial software transition was going and if the District was still running parallel software. Ms. Harris stated only Caselle is being used. It was a bit of a challenge since it is a new system. It is a time-saver in some areas and some are still new so naturally, it is slower in those areas as staff learns. Next year will be much quicker. On motion by Director Rupp, seconded by Director Hecathorn, the Board voted 4-0 to approve the July financial report and vendor statement in the amount of \$647,647.26.

PARS Trust review

Ms. Harris provided a review of the PARS Trust. In January 2018 when the Board approved establishing the PARS Trust, participation in the “moderate” investment portfolio was selected. She provided a graph showing the District’s fund performance since the initial funding of \$600,000 in April 2018. Over the past twelve months the trust has provided returns of 6.76%. The Board has several options going forward. Ms. Harris reviewed the various options and the Board discussed them. After much discussion and consideration, on motion by Director Rupp, seconded by Director Hecathorn, the Board voted 4-0 to stay the course and remain in the “Moderate” portfolio.

3. Operations

Mr. Davidsen provided the July Operational Report. Collector 1 was taken off line for electrical upgrades. The Collector 1 transformer and switchgear upgrade project is nearly complete. Eureka Humboldt Fire Extinguisher was onsite maintaining all the District fire extinguishers. Three staff attended basic electrical concepts training, the SB198 Safety Meeting was held on July 18, and the Respirator Safety and Fit testing was conducted on July 31st.

Surplus former Collector 1 transformer

On motion by Director Rupp, seconded by Director Hecathorn, the Board voted 4-0 to surplus the Collector 1 transformer.

K. MANAGEMENT

Mr. Friedenbach reported out on the CSDA chapter meeting. There were two speakers: one talked about State District boundary adjustments that will need to occur after the census and the other gave a



Minutes for Meeting of Board of Directors

August 8, 2019

presentation on asbestos. The guest speaker at the next meeting will be Director Rupp discussing the County Redevelopment Oversight Committee.

L. DIRECTOR REPORTS & DISCUSSION

ACWA – JPIA

Fall Conference 2019 attendance

On motion by Director Rupp, seconded by Director Latt, the Board voted 4-0 for the Board, GM and appropriate staff to attend to ACWA Conference and authorize the corresponding expense.

Wellness Grant 2019

Mr. Friedenbach stated the District once again applied for and received an ACWA-JPIA Wellness Grant. This year employees will be able to purchase exercise apparel and/or accessories and be reimbursed up to \$36 after submittal of receipt. Director Rupp congratulated the District and Mr. Friedenbach for the taking the initiative to participate.

ACWA Committee Considerations

Director Rupp stated he would like to participate in the Finance and Membership Committees again. On motion by Director Hecathorn, seconded by Director Rupp, the Board voted 4-0 to have Director Rupp considered for the Finance and Membership Committees.

Region 5 Event

Mr. Friedenbach noted the topic for the upcoming Region 5 event is Water Supply and Reliability. He suggested the District send out our transport letters reminding Region 5 water agencies of our available water supply in advance of their meeting. The Board concurred.

Organizations on which HBMWD Serves: RCEA, RREDC

RCEA

President Woo stated the RCEA meetings have been filling up since the topics have included biomass and Terra Gen. The definition of clean energy when defined will be interesting as it may not include biomass.

RREDC

Director Latt reported out on the RREDC meeting, Nordic Aquafarms provided a presentation and indicated they will not be using GMO fish. They also stated that the HBMWD water was not “clean”. This raised several eyebrows. During director reports portion of the RREDC meeting, Director Latt stated the District water is actually very clean. Nordic is using industrial water which is untreated water from a different system and they have very specific needs. The District water is actually clean and the TRF is not run year- round since the water is not very turbid most of the year.

ADJOURNMENT

The meeting adjourned at 1:40 pm.

Attest:

Sheri Woo, President

J. Bruce Rupp, Secretary/Treasurer



Minutes for Special Meeting of Board of Directors

August 27, 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, Business Manager Chris Harris and Board Secretary Sherrie Sobol were also present.

B. **FLAG SALUTE**

President Woo led the flag salute.

C. **ACCEPT AGENDA**

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

D. **PUBLIC COMMENT**

No public comment was received.

E. **NEW BUSINESS**

Ruth Hydro Protective Relay Upgrade Project

Mr. Friedenbach thanked the Board for meeting on short notice. He stated two bids were received for the project. Electrical Reliability Services was \$59,697.00 and Converse Construction, Inc. was \$142,609.00. The project budget is \$120,00.00. The project needs to be completed prior to the winter season consequently work needs to begin right away. Mr. Friedenbach shared that Converse Construction did complain that Electrical Reliability Services may have had an unfair advantage since they are affiliated with the firm that did the design specs. He reviewed this with District legal counsel who stated there is no conflict, both bidders had access to the same bid package. In fact, Converse Construction decided to bid later in the process and a special walk thru was conducted for them. Director Hecathorn inquired if there was any concern with the discrepancy in the bids. Mr. Friedenbach stated that staff was comfortable with the bids. On motion by Director Hecathorn, seconded by Director Latt, the Board voted 5-0 award the Ruth Hydro Protective Relay contract to the low bidder Electrical Reliability Services in the amount of \$59,697.00 and to authorize and direct staff to complete all necessary contract documents for the project.

Match Commitment Letter update

Mr. Friedenbach shared that FEMA has requested a new match commitment letter for the Mainline Redundancy Project Grant right away if the District was still interested. They indicated that our next regular Board meeting on September 19 was too long to wait. This is a good grant opportunity for the District and he had the District Engineer review costs and corresponding revised match commitment which now totals \$790,570. Director Rupp inquired if we had the funds now and how it would be paid for. Ms. Harris stated, yes, the District currently has the funds in reserves. The project is at least two years out and the District should have additional funding in place at that time. On motion by Director Fuller, seconded by Director Rupp, the Board voted 5-0 to update the FEMA Hazard Mitigation Grant Match Commitment Letter for the Collector Mainline Redundancy Project to \$790,570 per the District Engineer's updated cost estimate for the project.

ADJOURNMENT

The meeting adjourned at 9:14 am

Attest:

Sheri Woo, President

J. Bruce Rupp, Secretary/Treasurer



HUMBOLDT BAY MUNICIPAL WATER DISTRICT
828 7th Street, Eureka



Minutes for Special Meeting of Board of Directors
4:00 pm

September 10, 2019

A. **ROLL CALL**

President Woo called the meeting to order at 4:00 pm. Director Hecathorn conducted the roll call. Directors Hecathorn, Latt, and Woo were present. Director Fuller attended the meeting via telephone. Director Rupp was absent. General Manager John Friedenbach, Business Manager Chris Harris, Attorney Ryan Plotz, Attorney Anne Baptiste (via telephone) and Acting Board Secretary Dee Dee Simpson-Glenn were also present.

B. **FLAG SALUTE**

President Woo led the flag salute.

C. **ACCEPT AGENDA**

On motion by Director Latt, seconded by Director Hecathorn, the Board voted 4-0 to accept the agenda.

D. **PUBLIC COMMENT**

Prior to any public comments, Director Woo recused herself and left the meeting, due to a remote conflict of interest.

Rick Hanger, Manager of Fieldbrook-Glendale Community Services District relayed to the Board that Fieldbrook-Glendale Community Services District had provided a Will Serve letter on the Brosgart project as they have adequate capacity in regards to providing water and sewer services for the project.

E. **CLOSED SESSION**

Conference with Legal Counsel: Anticipated Litigation in accordance with Section 54956.9, subdivision (b), of the Brown Act.

The board resumed open session at 4:59 p.m. Director Latt reported that the Board approved a motion to file an appeal of the Planning Commission’s decision regarding the Brosgart development permits; seek clarification from DTSC regarding their comment letter on the project; and also to seek third party contributions for the cost of the appeal.

ADJOURNMENT

The meeting was adjourned at 5:01 pm.

Attest:

Neal Latt, Vice-President

Barbara Hecathorn, Assistant Secretary/Treasurer

CONSENT

McK CSD's Orsini stepping down

August 13, 2019

McKinleyville Community Services District

McKINLEYVILLE – Gregory Orsini, general manager of the McKinleyville Community Services District (MCSD) gave his notice of retirement at the Board of Directors Meeting held on Aug. 7, 2019. He has served the district for over 29 years.

Orsini has worked with MCSD since November of 1990, a special district that maintains the water, sewer, streetlights, parks and recreation and library facilities for the community of McKinleyville.



Greg Orsini

MCSD serves an approximate population of 16,500 persons with 7,300 water customers and 6,400 sewer customers.

Orsini's tenure with MCSD began with his hire as a utility worker 1 in 1990; his promotion to director of operations in 2002; his 2012 appointment as an interim general manager; and his appointment in 2013 as permanent general manager.

Orsini brought a unique perspective for the purposes, benefits and hands-on operation of a special services district.

His experience includes many capital projects where he functioned as the project manager, including water tank preservation and maintenance, wastewater treatment plant improvements and a water booster station project, all of which were completed on-time and on budget. In his capacity as general manager, he is directly responsible for multi-million dollar operating and capital budgets with a track record for fiscally sound management.

Recently completed projects include the McKinleyville Teen & Community Center, a 7,000 square foot facility for teen activities that includes a full commercial kitchen and a recently completed \$75 million upgrade to the Wastewater Management Facility.

Greg has been active in California Special Districts Association since 2013, serving on various committees and currently serves on the Executive Committee as the Board immediate past president, previously as president in 2018 and vice president in 2017 and the treasurer in 2015 and 2016.

In addition to Greg's service to his community as a member of the MCSD team he is also active in the Mad River Rotary of McKinleyville.

Over the next few months, the Board of Directors will be reviewing a succession plan and deciding the process of moving forward in the search for a new general manager. Orsini's retirement will be effective July 17, 2020, which will give time for a smooth transition.

David Hull, General Manager of the Humboldt Community Services District, Has Abruptly Retired



David Hull. Photo: Humboldt Community Services District.

On Monday, David Hull, who has served as the general manager of the Humboldt Community Services District since 2013, abruptly notified the district's board that he would be retiring — apparently effective immediately.

That's according to David Tyson, the chair of the district's board of directors and a personal friend of Hull, who spoke with the *Outpost* earlier this afternoon.

Tyson told the *Outpost* that Hull mentioned to him that he was considering the move on the previous Friday, and that he was motivated by personal reasons.

"He's had a 40-year career in public service, and I think he found that he wanted to spend more time with his family and at his property," Tyson said.

In recent weeks, Hull's work with the district had been the subject of a series of special meetings of the Board of Directors, which had been preparing a performance evaluation. The most recent of those meetings had been scheduled for Monday evening. ([See agenda here.](#)) Hull apparently officially retired just hours before it took place.

The district removed Hull from the ["staff" page of its website](#) earlier today.

Tyson told the *Outpost* that the district's board of directors will decide how to proceed — who to appoint as interim general manager, how to go about hiring a new permanent one — at its next regular meeting on Sept. 10.

The Humboldt Community Services District provides water and sewage services to around 7,600 customers in the Cutten, Ridgewood, Humboldt Hill and other unincorporated areas around the City of Eureka.

Prior to taking a job as the general manager of the CSD, Hull had been the chief executive officer of the Humboldt Bay Harbor, Recreation and Conservation District. In the fall of 2011, Hull's contract was terminated by the district for reasons that were never publicly explained. During his tenure with the harbor district and beyond, he has been a stolid booster of port and railroad development, and formed a private consulting firm — "David Hull and Associates" — to do side work for people and agencies seeking to build railroads to Humboldt Bay.

Spawning a Solution for McKinleyville's Wastewater

BY ELAINE WEINREB NORTH COAST JOURNAL AUGUST 22, 2019

[click to enlarge](#)



NORTH COAST JOURNAL GRAPHIC

A Google Maps aerial image of the Mad River and the McKinleyville Community Services District's current percolation ponds.

Finding a way to deal with the wastewater produced by a town full of people is a challenge, one that's forced the McKinleyville Community Services District (MCS D) to find some creative solutions. Officials are touting the emerging solution as a win-win, a cutting-edge project that will serve the district's needs at minimal cost to ratepayers while also helping the environment.

In the winter, when the Mad River is running high, cleaned and treated wastewater can be discharged directly into the river. But in the summer, when the river is low, the MCS D must find another way of dealing with the effluent. A lot of it gets used to irrigate fodder for dairy cattle on the big Fischer Ranch south of School Road but the ranch can't use up all the water. What's left over is

pumped into two percolation ponds, hidden away in the riparian forest right next to the river.

Theoretically, all the water in the percolation ponds is supposed to gradually sink into the ground and recharge the aquifer, getting purified by the soil as it descends. But there is a chance that some of the water may instead end up in the river.

Over the past 30 years, water quality regulations have grown stricter and some wastewater treatment systems that were considered perfectly adequate in the 1980s don't meet modern standards.

A few years ago, an environmental group sued the city of Healdsburg, which uses a similar system of percolation ponds adjacent to a river, for allegedly violating state water quality standards. MCSD took notice, talked to the North Coast Regional Water Quality Board and decided it needed a better system of dealing with its excess wastewater in the summer.

Meanwhile, the California Department of Fish and Wildlife (DFW) has been trying to deal with a different problem. Salmonids (a category of fish that includes but is not limited to salmon) evolved in meandering rivers with abundant backwater sloughs. In these sloughs, juvenile fish could find safe harbor and feast on the plentiful insects, gaining weight and strength for the perilous journey to the ocean. But when dams were built, straightening the river's channels and speeding up the water's flow, life got much harder for these little fellows.

There are few food sources in the main channel of the river, explained Bob Pagliuco, marine habitat resource specialist for the National Oceanic and Atmospheric Administration Restoration Center. Moreover, resisting the fast flow of water in the main channel is like being on a continuous treadmill. Too many calories get expended just to stay in one place, making it difficult for the juveniles to grow. The result — smaller, less healthy adults, with lower chances of survival and fewer offspring.

DFW was looking for riverfront property owners willing to re-create backwater ponds. McKinleyville resident Mary Burke, who was active in the environmental nonprofit CalTrout and is now on the MCSD Board of Directors, connected MCSD with DFW and a win-win solution emerged.

With the help of a grant from DFW, CalTrout is partnering with MCSD and started creating plans to re-route the district's excess wastewater to another location and re-connect the district's percolation ponds to the river. Away from the main current, the hope is that former ponds will soon be colonized by aquatic

plants and insects, forming great habitat for juvenile salmonids. It won't be necessary to stock the former ponds artificially; the fish will find them on their own.

"Build it and they will come," said MCSD General Manager Greg Orsini, who is overseeing the project.

Scientists see a lot of potential in the project.

"The department is very supportive of projects that bring about recovery and restoration of riparian habitat," said DFW senior environmental scientist supervisor Gordon Leppig. "California and the North Coast have lost approximately 90 percent of our riparian habitat and we are actively working to get some back. This project advances the goals in our Wildlife Action Plan and our Coho salmon recovery plan and will be beneficial to numerous riparian-dependent fish and wildlife species."

"This is a good project," Pagliuco said. "It's good for endangered species on the Mad River: the Coho, the steelhead, the chinook ... A study found that fish grow up to six times faster when they are reared in a low-velocity environment, which increases their chances of survival and their chances of returning to breed."

The wastewater that formerly filled the ponds will now water a new plantation of trees on the Fischer Ranch. Growing trees use more water than grasslands and also help the environment by sequestering carbon dioxide.

As an added bonus, the DFW has agreed to pay for some new public access to the bluffs overlooking the Mad River.

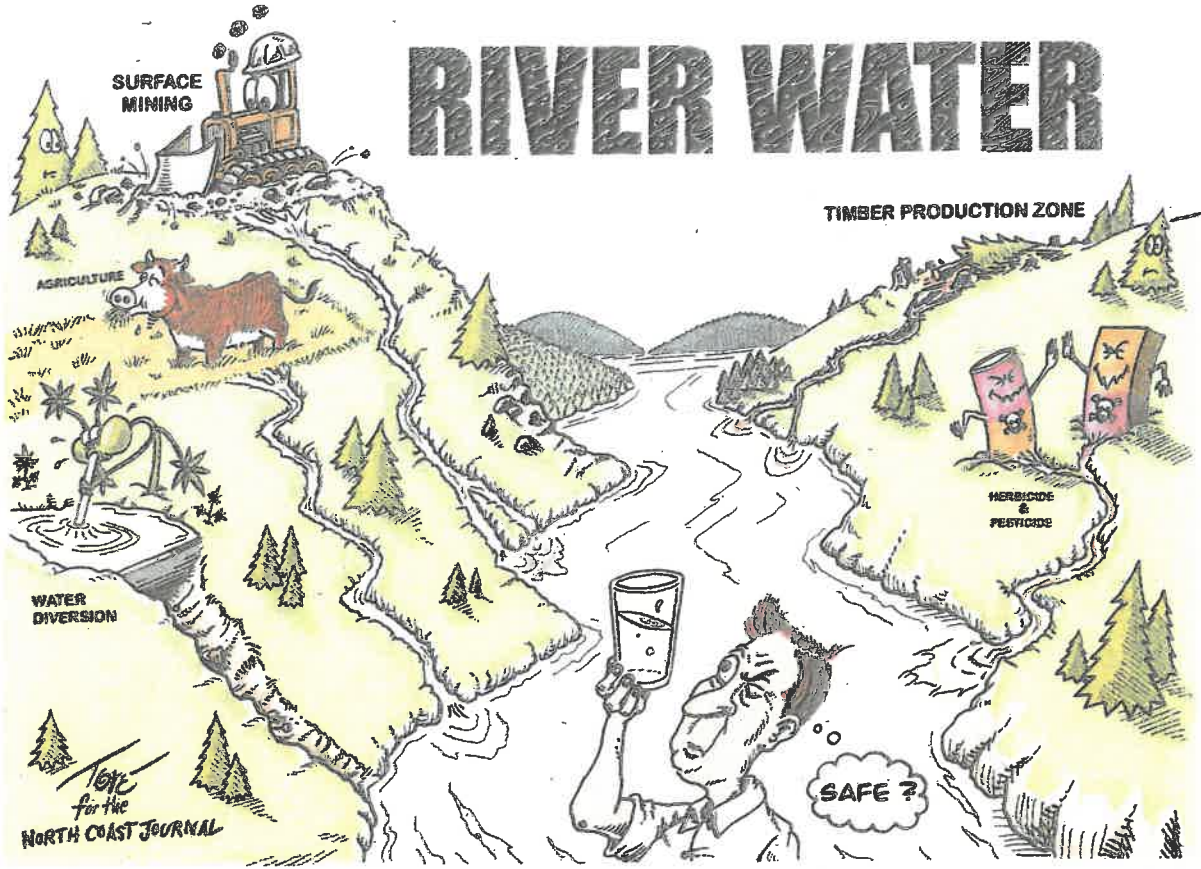
So far, the MCSD has only had to shell out \$8,500 of its ratepayers' money on the project, a small price to keep out of trouble with the regulatory authorities of the state and out of environmental groups' crosshairs.

The project is currently going through environmental review, cultural resource consultation and the permitting requirements of a half-dozen agencies. But if all goes well, the young salmonids will have a new home next summer.

Elaine Weinreb is a freelance journalist. She tries to re-pay the state of California for giving her a degree in environmental studies and planning (Sonoma State University) at a time when tuition was still affordable.

North Coast Journal
8/8/2019

RIVER WATER



Terry Torgerson

The New York Times

By Elaine Glusac Aug. 26, 2019 Updated 2:21 p.m. ET



A view of the ocean from the Lost Coast Trail in northern California. Depending on the tides, some sections of the trail are periodically impassable.

CreditCreditAlexandra Hootnick for The New York Times

On California's Lost Coast: Sea Lions, Surf and Squiggly Roads Just 225 north of San Francisco, on a remote and rugged shoreline, crowds are sparse and cellphones are useless (and you won't care).

On a deserted beach in Northern California, I mistook a sea lion for driftwood. The Lost Coast is deceiving that way. Wild things appear tame and tame things, like the paved road my family and I took to get here, wild.

In June, seeking immersion in nature, we visited the Lost Coast, the largely roadless shore between the indiscernibly tiny town of Rockport and the Victorian charmer Ferndale, about 100 miles apart by inland roads. Here in Humboldt County, California reaches its westernmost point near a junction of three seismically active tectonic plates. The King Range mountains plunge into the sea, deterring road-builders from continuing State Route 1 along the ocean. Breaking waves strew driftwood along beaches reached by hiking trails that require consulting a tide chart. It's cold and foggy, even in summer, and just rough enough to keep all but the most intrepid day-trippers away.



Pacific harbor seals rest on rocky outcroppings during low tide. Credit Alexandra Hootnick for The New York Times

“No one comes here without intending to come here,” said Verna Kaai, the manager of the [Tides Inn](#), a homey base in Shelter Cove, the oceanfront gateway to the Lost Coast, when I booked a room for three days amid a weeklong road trip. “We’re only about 20 miles from the highway,” she said of the squiggly access road that connects the town to the nearest thoroughfare, “but it will take you up to an hour to travel.”

That sounded like our speed. And while the coast wasn’t lost to the Native Americans, loggers and cannabis growers who have left their mark here, it appealed to us in another escapist sense: little connectivity. Ms. Kaai assured me I wouldn’t have cellular service, though the hotel had very slow Wi-Fi. In this screen-centric age, a few scenic and relatively unwired places remain in the United States, such as Organ Pipe Cactus National Monument in southern Arizona and parts of the Adirondack Mountains in New York. But this slice of California’s coast — only some 225 miles north of San Francisco — seems, well, lost in plain sight.



Hikers near the Mattole Trailhead, the northern end of the Lost Coast Trail. The Mattoles were among the Native Americans who lived in the area. Credit Alexandra Hootnick for The New York Times

A harrowing drive

Long before it went missing, the area was populated by Native American Sinkyone and Mattole people, and later, lumberjacks and harvesters of tanoak bark, used to tan leather. The Gold Rush in the mid-19th century brought more settlers, and logging intensified in the race to rebuild the city after the San Francisco earthquake in 1906. Churning seas tended to wash out piers, which killed most attempts to fish commercially in the 19th and 20th centuries. In 1970, after the timber industry had depleted much of the area, and depopulation drew pot growers, the 68,000-acre [King Range National Conservation Area](#), which protects 35 miles of coast and mountains up to 4,088 feet, became the country's first National Conservation Area.

Now, visitors come to the Lost Coast to hike, fish, beachcomb, bird-watch and scan the ocean for migrating whales in the offshore marine preserve (Ms. Kaai recommended visiting on a weekend, when Shelter Cove's few restaurants are open). Others come to backpack along the famous [Lost Coast Trail-North](#), a nearly 25-mile beach trek that generally takes three days, requires a permit (free, with a \$6 reservation fee) and is subject to tides that periodically make portions impassable.

Like the hiking here, driving to reach the Lost Coast requires a degree of fortitude. The builders of California's Highway 1, which skirts the Pacific from Orange County more than 600 miles north, gave up the shore plan at the King Range, a topographic accordion we glimpsed in hazy fog and spray before veering inland. It ends at Leggett, about 15 miles from the ocean, funneling drivers onto U.S. 101, which continues north through southern Humboldt County before rejoining the coast near Eureka.

From the U.S. 101 exit at Garberville, 23 miles from Leggett, the route to Shelter Cove turned westward and challenging. For the next 50 minutes of concentrated driving, my husband, Dave, worked hard to maintain 35 miles per hour winding up mountain ridges and through dense fir forests, and downshifting at the continuous switchbacks to avoid overheating the brakes. Past the town limit sign for Shelter Cove, population 809, I finally relinquished my clutch on the Jeep door handle at the ocean panorama of surf-bashed rock islands and mountain-backed beaches.





Hiking on Black Sands Beach can be laborious: The sand is often spongy, and each step involves sinking a few inches into the sand. Credit Alexandra Hootnick for The New York Times

Shelter Cove, at last

On the southern end of the Lost Coast Trail-North, Shelter Cove is scattered across a largely treeless peninsula that protects the town's namesake, a south-facing cove. A general store on the access road deals groceries and hardware in the absence of any commercial main street in town. Modest houses dot the shore, leaving plenty of gaps for places with names like Seal Rock and Abalone Point, and views to the sea from most vantage points, including a campground and a lightly used nine-hole golf course. The closest thing to a town square is the community center, which, when we visited, was holding a group garage sale near the landing strip that parallels the coast.

Between the runway and the sea, the location of the eight-room Tides Inn — a three-story cross between a motel and a McMansion that is perched above a cove and hugged by rocky arms — exceeded our expectations. Our suite was thoughtfully furnished with nautical décor in the bedroom, a kitchenette nook with a mini-refrigerator and microwave and a high-top dining table. But the views made you forget about anything indoors. From our third-floor balcony, we could hear sea lions barking each morning and watch sunsets late each evening.



Among locals, Cove Beach is one of the Lost Coast's most popular beaches.
Credit Alexandra Hootnick for The New York Times

While it remains a destination for lovers of isolation, Shelter Cove has added a few tourist-friendly essentials in the past year, including a brewpub and a Venezuelan restaurant, Mi Mochima. On our first night, we followed the music across a ball field and skirted the unfenced landing strip to find [Gyppo Ale Mill](#), a microbrewery, which takes its name from independent timber crews who came to Northern California to fell big trees (some logging remains, though environmental [activists](#) are fighting to preserve one of the region's remaining old-growth Douglas fir stands, known as Rainbow Ridge). On this Friday night, the local band Planet 4 played funky tributes to Dr. John, who had recently died, and children ran circles around a cornhole-playing field.

Like us, the Gyppo Ale Mill's co-owner Julie Peacock took one of the dramatic drives to the Lost Coast region and immediately fell in love with it. In 2001, she and her husband, Josh Monschke, whose family has roots in Humboldt County logging, left ski resort jobs in Utah to move to the area to farm marijuana, and he continues to run a nursery. They opened Gyppo last spring and call it "California's most remote brewery," because, said Ms. Peacock, "I haven't found one more remote."

We felt we'd earned an I.P.A. or two, after the harrowing drive in, but learned that's not an excuse used by residents.

“Locals think nothing of driving that road to town,” said Katie Wallace-Schmidt, the manager of Gyppo as she delivered falafel burgers and lamb sausage to our table. “In L.A., I could easily be on the highway for 50 minutes to go 10 miles. I’d much rather be here.”



Desert wildflowers grow in abundance along the Lost Coast Trail. Credit Alexandra Hootnick for The New York Times



Credit Alexandra Hootnick for The New York Times

A dose of wilderness therapy

Given the weather, which generally peaks in the 60s in summer, we didn't consider Shelter Cove a swim destination, though we found hardy bathers dipping into the shallows at Cove Beach on Saturday morning. By afternoon, a dozen SUVs and pickup trucks were parked on the popular beach, a rare safe place to swim along the Lost Coast, which is known for its rip currents and shore-breaking waves.

If not a traditional beach-lovers' shore, the Lost Coast is ideal for losing time climbing over craggy rocks and inspecting tide pools. Between hikes in the conservation area, we scrambled around the peninsula's rough edges, watching whistling oystercatchers, turkey vultures with their wings spread to dry in the sun, and sleepy harbor seals, some of them still pale in their juvenile coats (a notice posted in the Tides Inn window warned visitors from getting close to the pups, which are often alone and mistaken for orphaned while their parents, who may abandon their babies if in the presence of humans, are out fishing).

The Bureau of Land Management, which oversees the King Range preserve, allows 60 overnight backpackers per day to depart on the Lost Coast Trail-North between May 15 and Sept. 15 (30 people per day are permitted the rest of the year, when worsening weather notoriously alters and sometimes washes out parts of the trail). Day hikers do not need a permit. On our visit, the Shelter Cove trailhead parking lot was full, with more than two dozen cars, and a nearby street was lined with the overflow, indicating the numbers of hikers somewhere along the coast. Still, we felt we had the trail to ourselves Saturday morning, along with a black bear, possibly, based on the fresh scat we encountered.

From the Shelter Cove trailhead at Black Sands Beach, the going was slow on spongy black sand and tumbled sandstones that were hard to grip as our boots sank inches with each step. The slow pace that beach hiking enforced worked as wilderness therapy. We combed the high-tide line, finding patterned sea urchin shells, sun-bleached sea stars, driftwood sanded by waves and the occasional crab trap. Near the breaking surf, we nearly bumped into a juvenile sea lion we mistook for a log. We took breaks atop 20-foot high boulders that appeared to have tumbled from a mountain peak with an evident rock slide on its oceanfront face (the offshore Mendocino Triple Junction sets off frequent tremblers in an area where the three tectonic plates meet). Massive timbers made sturdy bridges to cross mountain streams that run down the slopes and cut through the sand on their way to the sea.



Garlic prawns at Mi Mochima restaurant in Shelter Cove. Credit Alexandra Hootnick for The New York Times



Mi Mochima opened recently, offering Venezuelan fare, including mini fish empanadas and a hearty stew known as pabellón criollo. Credit Alexandra Hootnick for The New York Times

Venezuelan fare, blind curves and a tiny lighthouse

That night we gorged at Mi Mochima, a sunny new Venezuelan spot with its own boomerang story. The married owners, Blu Graham and Maria Graham Diaz, met in Venezuela where he was a scuba-diving guide. In 2011, after moving back to the coast where he grew up, Mr. Graham opened the neighboring [Lost Coast Adventure Tours](#), which offers guided backpacking trips on the trail. The ocean-view A-frame restaurant, where Ms. Diaz is the chef, is designed to balance out their seasonal business, offering mini fish empanadas, garlic-sautéed prawns and a hearty shredded beef stew known as pabellón criollo. Our waitress, the couple's adult daughter, Indiana Graham, explained that the coastal town of Mochima, Venezuela, and Shelter Cove are only distant in a geographic sense.

“They both are all about the ocean,” she said.

Getting to the northern trailhead at the Mattole River the following day was the most extreme of our adventure drives. Our innkeepers recommended a paved route largely outside of the conservation area that still turned out to be a hair-raising, one-hour, 40-minute errand on narrow roads that occasionally pinched to one lane, often, it seemed,

just as we reached a blind curve ([Lost Coast Adventure Tours](#), also offers shuttle service to the trailhead in 11-passenger vans).

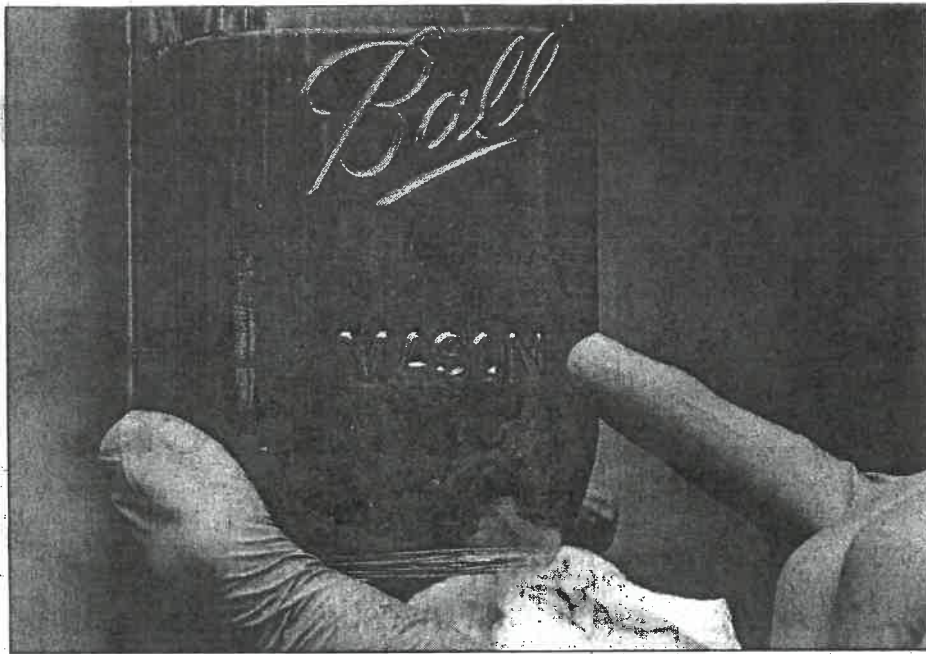
A series of determined roads ascended pine-dense hillsides, undulated over mountain passes of wildflower meadows and tunneled through trees, only to descend and make the climb all over again. The few towns indicated on the map were easy to miss, though the general store in Honeydew, a blink of a town where a few intriguing back roads intersect, was thronged with dirt bikers on a group drive. We passed through sleepy Petrolia, site of the first oil well drilled in California, and took the relatively flat Lighthouse Road that follows the tail end of the Mattole River to reach the Lost Coast Trail at its top end.

In contrast to the pine forests around the southern trailhead at Shelter Cove, grassy woodlands border the northern gateway. Desert wildflowers, including globe-shaped yellow sand verbena, daisylike purple fleabane and violet lupine, bloomed in the dunes. A deer grazed a hillside and sea lions on offshore rocks barked at our approach. At just over three miles in, a colony of elephant seals dozed below the squat, white Punta Gorda Lighthouse, a remote, long-decommissioned beacon anchoring a grassy hillside above the shore.



The Punta Gorda Lighthouse is a remote, decommissioned beacon on a grassy hillside above the shore. Credit Alexandra Hootnick for The New York Times

Leaving the Lost Coast northbound saves one of the best adventure drives for last when, past Petrolia, two-lane Mattole Road links to the coast again and follows an undeveloped stretch. Bushy wild radish plants crowded the road as it climbed inland and, 90 minutes later, abruptly disgorged us in Ferndale, a manicured Victorian-era Mayberry. There, a ukulele ensemble was jamming in a bank parking lot, a comparatively found spot — with cellular service restored — at the border of the lost wilds.



BAILEY WRIGHT — RECORD-JOURNAL VIA AP

Times
Standard
8/25/2019

The World Health Organization says the levels of microplastics in drinking water don't appear to be risky, but that more research is needed into their effects on the environment and health. A WHO report released Wednesday, Aug. 21, said the minuscule plastics are ubiquitous in the environment and have been found in both tap and bottled drinking water.

UN says not to worry about drinking microplastics in water

By Jamey Keaten and Maria Cheng
The Associated Press

GENEVA » The World Health Organization says the levels of microplastics in drinking water don't appear to be risky, but that research has been spotty and more is needed into their effects on the environment and health.

Microplastics are created when man-made materials break down into tiny particles smaller than about 5 millimeters (roughly one-fifth of an inch), although there is no strict scientific definition.

In a report published Wednesday, the U.N. health agency said the minuscule plastics are "ubiquitous in the environment" and have been found in drinking water, including both tap and bottled, most likely as the result of treatment and distribution systems.

"But just because we're ingesting them doesn't mean we have a risk to human health," said Bruce Gordon, WHO's coordinator of water, sanitation and hygiene. "The main conclu-

sion is, I think, if you are a consumer drinking bottled water or tap water, you shouldn't necessarily be concerned."

Gordon acknowledged, however, that the available data is "weak" and that more research is needed. He also urged broader efforts to reduce plastic pollution.

The report is WHO's first review to investigate the potential human health risks of microplastics. It said people have inadvertently consumed microplastics and other particles in the environment for decades without sign of harm.

Andrew Mayes, a senior lecturer in chemistry at Britain's University of East Anglia who didn't participate in the WHO report, agreed that microplastics in water don't appear to be a health worry for now.

"But I wouldn't want people to go away with the idea that microplastics are no longer important," because they might be harming the environment, he said. He said stronger measures to reduce plastic are needed.

"We know that these types of materials cause stress to small organisms," he said. "They could be doing a lot of damage in unseen ways."

"Even if we stop (adding) plastic to the environment right now, microplastics will increase as larger pieces divide into smaller and smaller pieces," Mayes said, adding scientists have little understanding of the long-term consequences.

WHO called for further analysis of microplastics in the environment and their potential health significance.

Gordon said that although WHO would continue to monitor levels of microplastics in water, the higher priority is proven risks in drinking water like bacteria that cause typhoid and cholera.

"These are things that cause immediate illness and can kill a million people," he said.

The San Diego Union-Tribune

Colder waters off West Coast mark end of “the blob”

By DEBORAH SULLIVAN BRENNAN
AUG. 27, 2019 2:11 PM

Record high Pacific Ocean temperatures recorded off the West Coast in recent years have receded to near normal, according to a report on the California Current.

That cool shift marks the end of “the blob,” the mass of warm water that dominated the West Coast, and of the El Niño event that followed. It’s unclear, however, what that means for fish and marine mammals, scientists with the National Oceanic and Atmospheric Administration stated in the 2019 ecosystem status report for the California Current Ecosystem.

“The big thing is that a lot of the physical conditions of the ocean here off of our coast are beginning to return to normal,” said Elliott Hazen, a research ecologist with NOAA’s Southwest Fisheries Science Center. “But it is not clear yet whether the ecosystem is as well.”

Starting around late 2013, waters off the West Coast rose two to four degrees above normal, as a high-pressure system in the Pacific shut down westerly winds that channel cool waters down the West Coast. That gave rise to the warm, stagnant waters of “the blob,” an oceanic anomaly that continued until about 2016. Ocean warming continued with an El Niño event in 2015-16, in which warm equatorial water heats up the ocean off California.

Throughout that period, populations of sardines and other small fish crashed, leading to record numbers of young sea lion strandings. It also brought tropical fish, including yellowfin and bluefin tuna, into California waters.

That wave of warm water culminated last August, when the sea surface temperature at the Scripps Pier in La Jolla hit a record 78.6 degrees, the highest reading in the pier’s 102-year history.

This year, the California Current has returned to more typical temperatures, though it’s still running about one-half to one degree higher than average, Hazen said. That has brought a partial restoration of the region’s marine life. Sardine fisheries have been closed for five years because of low stocks, while anchovy are recovering, said Dale Sweetnam, deputy director of the Fisheries Resources Division of NOAA.

“The thing we’re seeing right now, is that the sardine have not yet started to come back, but the anchovies have been doing very well,” said Toby Garfield, director of the Environmental Research Division at NOAA’s Southwest Fisheries Science Center in La Jolla. “In different areas, the pockets of anchovies are coming back.”

As anchovy populations pop back up in coastal waters, humpback whales and other marine mammals have followed suit, making rare appearances near the coast.

“We have been seeing humpback whales feeding offshore, foraging on anchovies near shore,” off the Central Coast, Hazen said.

The whales are even venturing near San Diego beaches, to the delight of observers. Although gray whales make regular migrations along Southern California, humpbacks are more unusual visitors.

“In fact, we had a juvenile humpback playing right off the lab yesterday, in La Jolla,” Sweetnam said last week. “He was breaching and playing with all the boats and kayakers. We haven’t seen humpbacks playing in La Jolla for a long time.

The close encounters with humpbacks have had their downside, too, as more of the whales have become entrapped in fishing gear. Whale entanglements in 2015 through 2018 were more than double the annual average for the years 2000 to 2013, the report found.

Sea lion pups are thriving anew, the report found. The pups experienced mass strandings during “unusual mortality events” between 2013 and 2015, when sea lion mothers struggled to find enough food to nurse their young. During that time, sick and malnourished pups washed ashore in Southern California, taxing the limits of marine mammal rescue organizations. By 2018, however, they appeared to be bouncing back, scientists said.

“Pup count, weight and growth are all increasing,” Hazen said, but added a word of caution. “The high pupping is good, but we still have to see if they grow (to adulthood.)”

Sea birds, too, were staging a comeback. Although there were major “wrecks,” or die-offs, of auklets and murrelets in 2014 through 2016, there were no widespread mortalities in 2017 and 2018, the report stated.

Scientists are still puzzling out what these changes mean in the long term, and whether phenomena such as humpback whale patterns are statistical blips or ongoing trends.

“Even though the warm water has largely receded by 2016, we’re still seeing humpback whales closer to shore,” Hazen said. “Is this just an aftershock of the blob, or is this what we’re going to be seeing for the next two, five, 10 years? We just don’t know yet.”

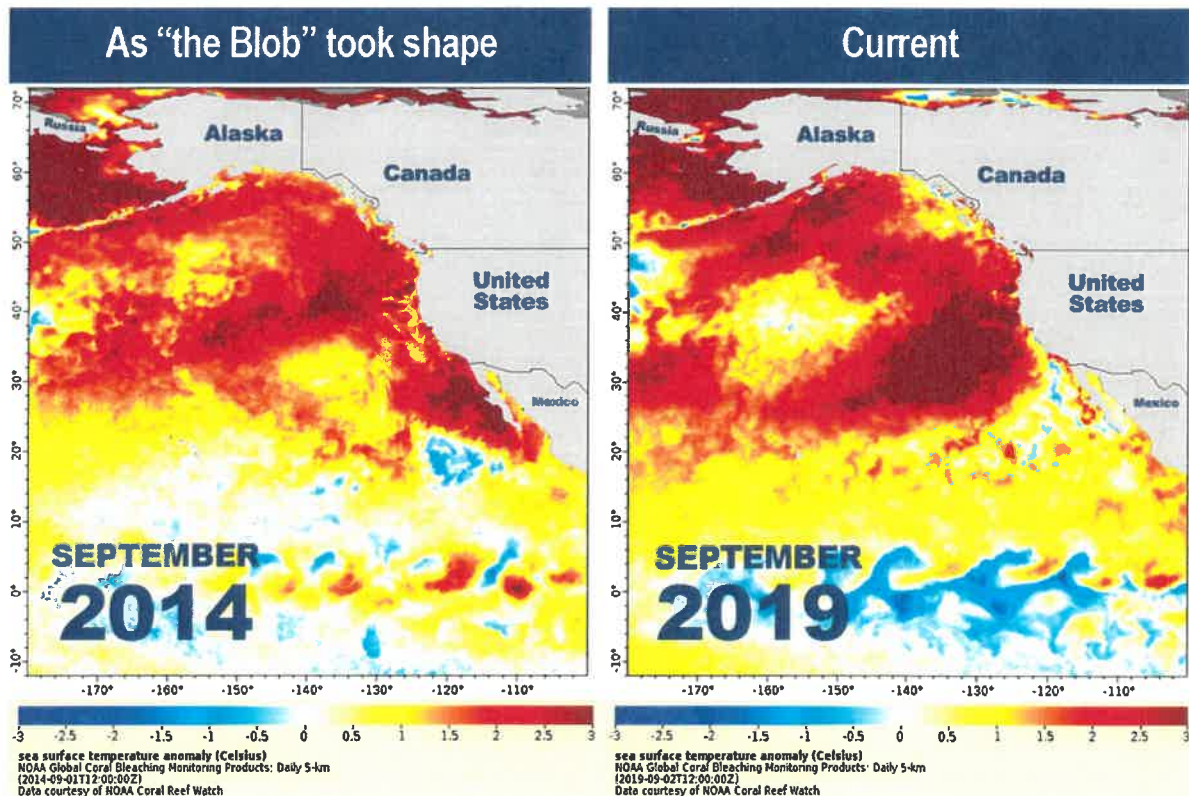


NEWS

New Marine Heatwave Emerges off West Coast, Resembles "the Blob"

September 05, 2019

Researchers are monitoring a new marine heatwave off the West Coast for effects on the marine ecosystem.



Sea surface temperature anomaly maps show temperatures above normal in orange and red.

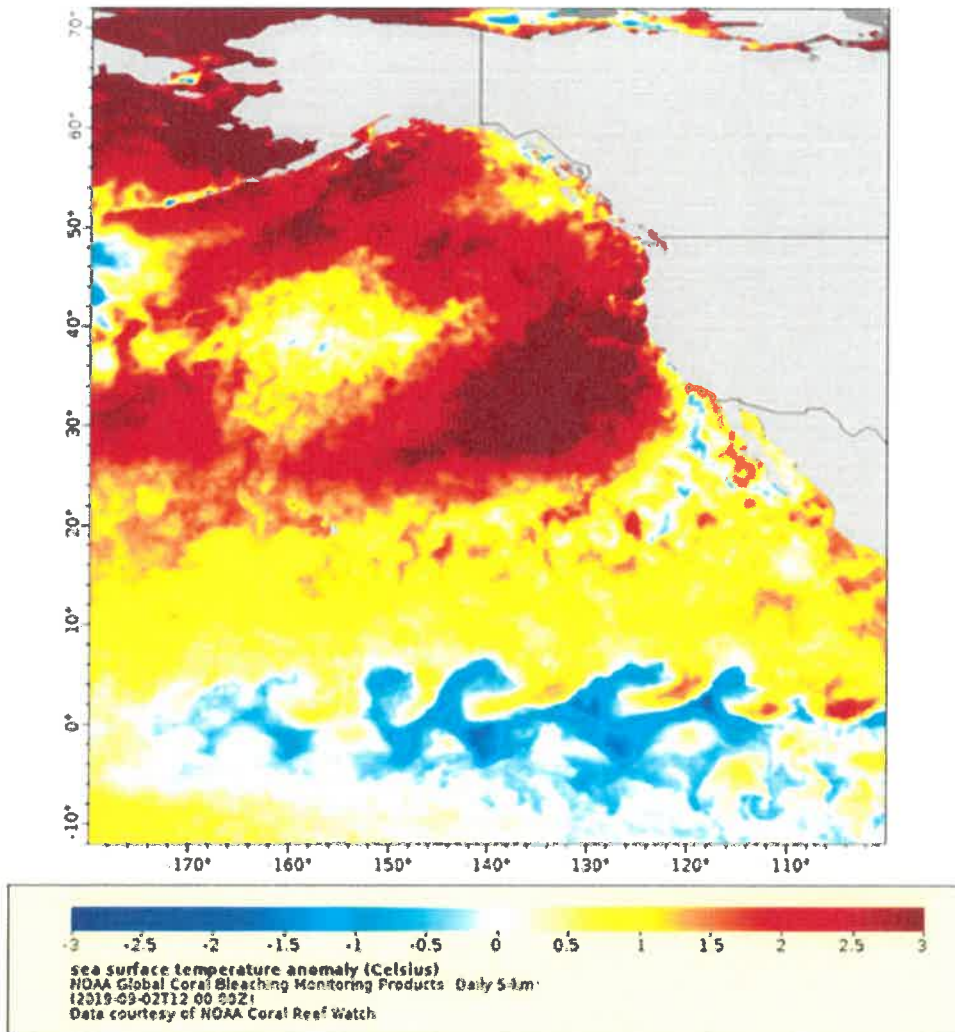
About five years ago "the Blob" of warm ocean water disrupted the West Coast marine ecosystem and depressed salmon returns. Now, a new expanse of unusually warm water has quickly grown in much the same way, in the same area, to almost the same size.

The warm expanse building off the West Coast stretches roughly from Alaska south to California. It ranks as the second largest marine heatwave in terms of area in the northern Pacific Ocean in the last 40 years, after "the Blob."

"It's on a trajectory to be as strong as the prior event," said Andrew Leising, a research scientist at NOAA Fisheries' Southwest Fisheries Science Center in La Jolla, California. He developed a [system for tracking and measuring heatwaves](#) in the Pacific Ocean using satellite data. "Already, on its own, it is one of the most significant events that we've seen."

Cold water welling up from ocean depths along the coast has so far held the warm expanse offshore, he said. However, the upwelling, driven by coastal winds, usually wanes in the fall. The heatwave could then

move onshore and affect coastal temperatures, he said. This already appears to have happened along the coast of Washington.



The new marine heatwave off the West Coast stands out in this map of sea surface temperature anomalies, with darker red denoting temperatures farther above average. The highest temperatures shown are more than 5 degrees Fahrenheit above average. Image from NOAA Coral Reef Watch, which corrects effectively for cloud cover.

NOAA Fisheries is focusing additional monitoring on the new heatwave, designated the Northeast Pacific Marine Heatwave of 2019. NOAA Fisheries' Southwest and Northwest Fisheries Science Centers will provide fisheries managers and others with information on how the unusually warm conditions could affect the marine ecosystem and fish stocks.

“We learned with ‘the Blob’ and similar events worldwide that what used to be unexpected is becoming more common,” said Cisco Werner, NOAA Fisheries Director of Scientific Programs and Chief Science Advisor. “We will continue to inform the public about how the heatwave is evolving, and what we might anticipate based on experience.”

The new heatwave resembles the early stages of “the Blob.” This previous marine heat wave peaked through 2014 and 2015 with temperatures close to seven degrees Fahrenheit above average.

Blob Could Dissipate Quickly

Like “the Blob,” the new heatwave emerged over the past few months. A ridge of high pressure dampened the winds that otherwise mix and cool the ocean’s surface. The heatwave remains relatively new and is primarily affecting the upper layers of the ocean, it could break up rapidly.

“It looks bad, but it could also go away pretty quickly if the unusually persistent weather patterns that caused it change,” said Nate Mantua, a research scientist at the Southwest Fisheries Science Center.

Current forecasts show the heat wave moderating but continuing for months.

A key question is whether the new heatwave will last long enough to affect the marine ecosystem. Biologists say that its large size means it probably already has. For example, warmer conditions during “the Blob” left lesser-quality food available to young salmon entering the ocean. It also shifted predator distributions in ways that contributed to low returns of salmon.



Shifts in the marine food web during the evolution of the 2014-2015 marine heatwave called, "the Blob," forced sea lion mothers to forage further from their rookeries in the Channel Islands off Southern California. Hungry pups set out on their own, but many became stranded on area beaches.

Other impacts linked to the earlier heatwave include:

- The largest harmful algal bloom recorded on the West Coast, which shut down crabbing and clamming for months.
- Thousands of young California sea lions stranding on beaches.
- Multiple declared fishery disasters.

NOAA Fisheries scientists recently convened a special meeting to discuss the emerging heatwave and how to anticipate and track its effects. They are now reviewing impacts documented during the “the Blob” to compare them against the effects of the emerging heatwave.

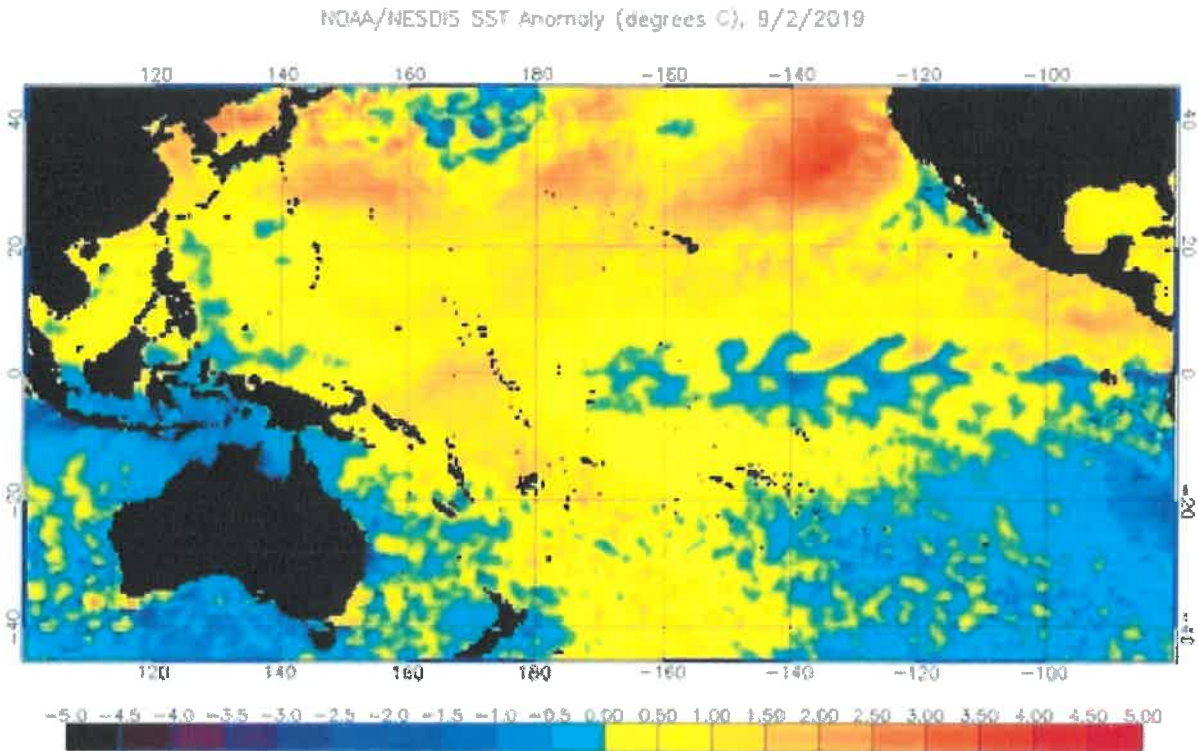
“Given the magnitude of what we saw last time, we want to know if this evolves on a similar path,” said Chris Harvey, a research scientist at the Northwest Fisheries Science Center.

Monitoring Framework in Place

NOAA Fisheries’ two West Coast laboratories collaborate on the [California Current Integrated Ecosystem Assessment](#). This is a joint effort to track and interpret environmental change off the West Coast. That provides a framework to monitor shifting conditions, Harvey said.

One challenge will be applying lessons learned from the last heat wave to anticipate and mitigate potential impacts of the new one. For example, the warm water of “the Blob” led humpback and other whales to feed closer to shore. Record numbers became entangled in lines from crab traps and other fishing gear.

In response, fishermen, managers, and others have formed working groups in California, Oregon, and Washington. They hope to find ways of reducing the risk of entanglements.



The marine heatwave that has formed off the West Coast of North America is currently close to the warmest area in the Pacific Ocean. Map shows sea surface temperature anomalies, with darker orange representing temperatures farther above average. Image from NOAA National Environmental Satellite, Data, and Information Service.

Real-time research on environmental changes will give managers the details they need to respond, said Kristen Koch, Director of the Southwest Fisheries Science Center. “This is a time when we all need to know how our marine ecosystem is changing, and what that means for those of us who live along the West Coast.”

The new northeast Pacific heatwave reflects current weather patterns. This includes a band of high pressure stretching north to the Bering Sea and Alaska, which have been unusually warm in recent years, said Nick Bond, a research meteorologist with the Joint Institute for the study of the Atmosphere and Ocean in Seattle, a collaboration between NOAA and the University of Washington.

“There are definitely concerning implications for the ecosystem,” said Bond, who is credited with naming “the Blob.” “It’s all a matter of how long it lasts and how deep it goes.”

Last updated by [Office of Communications](#) on September 05, 2019

BERKELEY LAB NEWS CENTER

Tiny Toxins: How Algal Blooms Affect Coastal Systems Through a Complex Web of Interactions

A Q&A with scientist Michelle Newcomer on looking for unexpected causes of harmful algal blooms

Feature Story [Julie Chao](#) (510) 486-6491 • August 28, 2019

Think summertime and the mind usually wanders to warm thoughts of sand, sunscreen, and fireworks. But increasingly summertime fun is being interrupted by algal blooms. From the Atlantic seaboard to the Gulf of Mexico, from the Great Lakes to the Pacific coast, harmful algal blooms are shutting down beaches, killing fish, birds, and other wildlife, and contaminating drinking water. The economic impacts of an algal bloom can be severe, especially if the algae become toxic.



Berkeley Lab scientist Michelle Newcomer (Credit: Thor Swift/Berkeley Lab)

[Michelle Newcomer](#) is a research scientist in Berkeley Lab's Earth & Environmental Sciences Area with expertise in hydrological and biogeochemical aspects of environmental issues, especially in watersheds and river environments. In her research she has investigated the links between microbial activity and larger scale effects, such as changes in the climate system.

One of her [recent projects](#) looked at how the 2017 Sonoma County wildfires in Northern California affected water availability and water quality.

Now she is turning her expertise to algal blooms, which can occur in both the sea and freshwater. Harmful and nuisance algal blooms are thought to have a number of contributing causal factors, including a build-up of nutrients (such as from fertilizer run-off), unusually high water temperatures, and extreme weather events such as floods and drought, according to the [National Oceanic and Atmospheric Administration](#), which tries to forecast blooms. But an understanding of the connectivity between these triggers is missing, as is an ability to predict the onset of the blooms.

Q. What do we know about the causes of harmful algal blooms, and how is your research approach different?

A. Many factors attributed to blooms are known, such as nutrients, however much research is needed to examine the causal linkages between environmental and terrestrial factors contributing to both nuisance and toxic blooms. While scientists know that specific nutrients are needed to support algae growth, there are also circumstances where you have nutrient-limited conditions, yet algae will still grow. So there are various complicating factors that still need a lot of research. How do we

unravel and differentiate between all the different factors that control algae in unique and nonlinear ways?

With algae, there's a lot of really interesting research being done around food webs in flowing waters. Terrestrial-aquatic systems include interactions between surface water and groundwater, nutrients, microbes, insects, fish, birds, and algae. When one component is disrupted, it impacts others because it's a complete web of interactions.

One researcher in the Great Lakes region, for example, discovered that road salt was linked to the reduction in mouth-size of a grazing insect important for consuming harmful algae, and this new limitation was identified as a primary causal factor of increased bloom occurrence. In California, drought conditions have been linked to freshwater cyanobacterial blooms – not because of warm, dry summers, but rather because of the absence of storms associated with atmospheric rivers during spring. These are very nonlinear systems where nutrient-bloom relationships often rely on third- and fourth- order causal factors across entire watersheds.



A Berkeley Lab team takes water samples on the Agua Hedionda Creek in Carlsbad, California. (Credit: Ved Bhoot)

Our new “big idea” is to examine this from a holistic perspective, considering the entire watershed, which governs the transport of nutrients and solutes, as well as dynamics across important biogeochemical interfaces that interact with waterways. Because rivers flow through these landscapes, the terrestrial environment is continuously interacting with the aquatic compartment of a watershed system. As rivers flow downstream, they export nutrients, solutes, metals, and algae communities from upstream to the ocean.

In my research I'm trying to link river nutrients and the river food web supported by landscapes to coastal and inland aquatic blooms.

We believe that watersheds – and coastal watersheds in particular – are very important units for delivery of water and nutrients to the ocean. We also recognize that weather and climate will have an impact on the algal bloom downstream because the magnitude and frequency of precipitation events will influence the hydrobiogeochemical partitioning of water and nutrients that drives the onset of algal blooms.

Q. So will a warmer climate mean more blooms?

A. We're not sure yet. The scientific literature often points to the expectation of a warmer and dryer future climate, meaning less rain delivery to these watersheds. That will reduce riverbed turnover, which is a critical factor in stabilizing healthy food-web and algal systems, with the potential that some hazardous algal bloom species may dominate blooms more often.

Our main hypothesis is directly linked to river flow: when a high flow event occurs that turns over those riverbed sediments and mixes everything up, it creates a new fresh system. It's an important mechanism for resetting those systems – it's like a fresh clean state. When “resets” happen less

often, those systems are more susceptible to disequilibrium, allowing one algal strain to dominate for a long time. So river turnover is important, as it can reset the system.

Conventional wisdom holds that nutrients are the main and only cause of blooms. Our work challenges that assumption and requires us to think about other factors that have a potentially more definitive role in tilting watersheds towards algal degradation. For example, we are testing a completely new concept that extreme events, such as atmospheric rivers, can greatly perturb watersheds and potentially play an important role in the onset of algal blooms.

Q. How are you conducting your research?



Michelle Newcomer takes water samples on the Agua Hedionda Creek in Carlsbad, California. (Credit: Ved Bhoot)

A. We're looking at things like the flow conditions of the watershed, so that includes looking at the river discharge, as well as the nutrients, solutes, and metals, such as phosphorous, nitrogen, silica, and iron, that's exiting watersheds. These can come from natural processes within the watershed, and oftentimes there's runoff and groundwater baseflow contributing to background concentrations. We are taking a novel, machine-learning approach to examining the watershed concentration-discharge conditions contributing to blooms.

We're also using the new PhycoProbe sensor to continuously measure different phytoplankton algal taxonomic groups within the water column, providing us a really nice time series of the different groups, including times when one group emerges and when another one decays. So we'll know when one becomes dominant and at which point in time.

There are thousands of different species of algae. Only a very small percentage of them are harmful, and an even smaller percentage produce toxins. Some have the ability to produce toxins, but they don't for reasons beyond the scope of our study.

Q. What is your end goal in this research?

A. Our goal is to develop capabilities to predict the onset of algal blooms from coupling our understanding about algae, watershed processes, and climate, and to identify precursor signals using simple datasets. We don't yet know what that signal could be, but we're analyzing for any kind of signal that would indicate a harmful algal bloom is about to happen.

Developing a model that accurately predicts the onset of algae blooms and is useful to stakeholders must be based on an adequate understanding of the complex, coupled processes that describe precursors of blooms. We can then use that model to develop science-based mitigation or remediation capabilities, where, for example, a species of harmless algae, one that is helpful to the ecosystem, may be deployed to dominate over a harmful one. We currently don't adequately understand the dynamics very well of how different species interact, but I do see that as a way forward.

###

Water costs are rising across the U.S. — here's why

By Rachel Layne AUGUST 27, 2019 / 3:10 PM / CBS NEWS MONEYWATCH

- Americans this year will pay an average of \$104 per month in water and wastewater bills, up more than 30% in less than a decade.
- Water and sewer bills, which are rising faster than inflation, increased for an eighth consecutive year in a study of the country's 50 largest metropolitan regions.
- Cities across the country are grappling with aging systems, fewer resources and extreme weather.

Each glass of water, shower or flush costs far more than it did just eight years ago — and your water bill is likely to go up again in 2019.

The average water and sewer bill in 50 cities jumped 3.6% this year, marking the eighth consecutive year of increases, according to a recent annual study from Bluefield Research. Since 2012, water bills have surged 31%, outpacing inflation.

This year, the typical household will pay \$104 per month for water and wastewater services, the Boston-based company said. That's a faster pace than increases in prices for most groceries or gasoline, based on recent data from the Bureau of Labor Statistics.

So why are Americans drowning in higher water and sewer bills?

For one, cities across the country are grappling with aging infrastructure that's costly to repair. Drinking water is delivered via 1 million miles of pipes across the U.S., much of them laid in the early- to mid-20th century with a lifespan of 75 to 100 years, according to a 2017 report from the the American Society of Civil Engineers. The group gave America's drinking water infrastructure a grade of D. Wastewater systems didn't fare much better, earning a grade of D+.

"We've been putting off that investment, we as a country, for decades now," Bluefield Research's Erin Bonney Casey told CBS MoneyWatch. "And so there's a backlog of projects that we need to do, and there isn't enough money to do all of those projects."

Failure to adequately manage water systems have led to emergencies in Flint, Michigan and now Newark, New Jersey. On Monday, New Jersey's Essex County said it will issue a \$120 million bond to replace the Newark's lead service pipes, which have caused increased lead levels in the city's drinking water.

On top of that, climate change is also playing a role because more frequent and stronger storms means higher treatment costs. In some parts of the country, drought has strained

water sources to critical levels, making it more expensive for cities and towns to find other sources of water or spend more on purification, for instance.

Increasingly unaffordable

While the increases vary between metro areas, rates on average have increased every year since Bluefield began tracking them in 2012. Water is already unaffordable for one of 10 U.S. households, a share that's forecast to triple to more than 30 percent of within five years, according to a 2017 study from Michigan State University.

"This is getting more and more expensive, and that always raises the question of affordability for low-income households," Casey noted.

Where rates are surging

Of the top 50 U.S. metropolitan areas analyzed by Bluefield, 35 raised rates from 2018 to 2019. The rest lowered or kept their rates unchanged.

Take El Paso, Texas, where residents saw the highest increase among the 50 metro areas. Water rates are up 4% for the 2019-2020 fiscal year, while wastewater rates are jumping 8%, according to a report in the El Paso Times.

El Paso's rates are rising as it pays for years-long repairs to its infrastructure, according to Bluefield. The city prefers to increase bills by a smaller percentage each year instead of slamming residents with a big one-time jump that they may struggle to manage, the El Paso Times reported, citing a city official.

When customers don't pay

Water and wastewater utilities must perform a "balancing act" when it comes to managing water, often a hidden resource from a consumer perspective until the bill shows up, Bluefield's Casey said.

For instance, when rates go up, sometimes people just don't pay at all. But the utility is still managing the same — or more — water volume through its systems and needs revenue to pay for the system. Such a scenario can make bills higher for everyone else.

"So by raising the rates, the question becomes are you really just pushing more people into defaulting on the bill?" Casey said.

There isn't a set billing formula or pattern from utility to utility, Bluefield noted. Bills — and increases — can depend on each city's system for delivery, treatment, need for repair and overhaul of infrastructure, the volume of water used as well as how a customer's bill is calculated, according to the Bluefield report.

"More often than not, public utility rates are mercurial and influenced significantly at a political and municipal management level," the report said.

Utilities still have to pay for the system even when there's inadequate revenue. That can drive some municipalities to explore a private takeover of their water systems, which can be a controversial move that stirs up fierce local opposition. Others turn to conservation programs. Regardless, the bills often just get higher.

El Paso is far from alone. In recent months, cities from San Diego to Cleveland to Durham, North Carolina and Lowell, Massachusetts each made the news because of higher water and sewer rates.

Income-based water bills

Many cities have programs for low-income residents that offer payment plans or assistance of some kind. But some are searching for "more innovative" methods of billing so low-income residents aren't slammed by shutoffs — or decide not to pay their bill at all, Casey noted.

Casey pointed to Philadelphia's program for low-income households as an example. Started two years ago, the program bases water bills on income level, not water use. The Tiered Assistance Program, or TAP, is available to residents with income of less than 150% of the federal poverty level, or about \$39,000 for a family of four.

Payments range from 2% to 4% of household income, according to a report in the Philadelphia Inquirer.

Portland, Oregon is another city that's developed a way to help renters with costs tied to rising water and sewer bills. Given the rising cost of water, it's likely these types of income-based programs will become more common throughout the U.S., Casey said.

First published on August 27, 2019 / 3:10 PM

STATE WATER BOARD APPROVES FUNDING FOR SAFE DRINKING WATER

BY STATE WATER RESOURCES CONTROL BOARD AUG 20, 2019 WATER NEWS

SACRAMENTO – The State Water Resources Control Board today authorized spending nearly a quarter billion dollars to help local water systems provide safe, reliable drinking water to communities throughout the state and begin closing the safe drinking water gap for more than one million Californians.

“Communities across the state have struggled for far too long without access to safe drinking water,” said State Water Resources Control Board Chair E. Joaquin Esquivel. “With today’s action, we can begin to close this gap and ensure that the essential human right to safe and affordable water is provided to all Californians.”

The Board authorized spending \$130 million this year and for the next 10 years from the Safe and Affordable Drinking Water Fund. Last month, Governor Gavin Newsom signed Senate Bill 200 (Monning), which created the fund to provide a reliable source of ongoing funding for safe drinking water needs using revenue from the state’s cap-and-trade program. The Board also voted to authorize spending \$80 million in one-time appropriations from Proposition 68, the statewide bond measure voters passed in 2018, and \$31.5 million in onetime, legislatively sanctioned General Fund dollars to provide emergency funding for projects serving disadvantaged communities.

More than 300 communities and thousands of domestic well users across the state lack safe drinking water because of contamination by arsenic, nitrates and other chemicals. Many other communities served by small drinking water systems are also vulnerable to water quality violations and lack the financial capacity to build, operate and maintain necessary treatment facilities.

Building a Comprehensive Program

The new funding will allow the State Water Board to comprehensively address the full array of issues that prevent water systems from providing safe and affordable drinking water. This includes operating and maintaining modernized treatment systems, building the technical and managerial capacity of local water systems, and consolidating smaller systems with nearby larger ones.

The funding also will allow small water systems to access additional resources for new treatment facilities and other needed infrastructure. Until now, many small systems could not access these

resources because they lacked the funding and technical and managerial expertise to operate this critical public health infrastructure.

During the first year of implementation, most of the funding will be used to award grants and contracts with assistance providers to address immediate drinking water and public health needs in the short term, while beginning to plan and implement long-term solutions in hundreds of communities around the state. Board staff outlined their plan for implementing the Safe and Affordable Drinking Water Program at today's Board meeting.

"This funding is the keystone to a comprehensive program the State Water Board has built over the last several years to help local water systems," said Chair Esquivel. "It will allow us to provide immediate safe drinking water supplies and help ensure the long-term sustainability of community water systems."

Draft Human Right to Water Data Tool Released

Also, at today's Board meeting, the Office of Environmental Health Hazard Assessment presented a new interactive, web-based map tool for assessing water quality, affordability and accessibility for each of the state's communities and water providers. The tool uses 13 indicators to provide a baseline assessment that will help the State Water Board track progress towards achieving the goals of safe and affordable drinking water that is accessible to all Californians.

The draft report and tool are works in progress, and additional data is needed to provide a comprehensive assessment. During a 60-day public comment period, OEHHA and the State Water Board will conduct webinars and workshops to solicit public input that will be used to finalize the report and tool by the end of the year.

Read the draft report, *Achieving the Human Right to Water in California, An Assessment of the State's Community Water Systems*.

[View the Draft Human Right to Water Data Tool.](#)

In 2012, California enacted Human Right to Water legislation (AB 685) recognizing that "every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." The State Water Board adopted a resolution identifying that right as a top priority and core value.

Since 2014, the board has:

Brought 250 systems that were failing to deliver safe drinking water back into compliance.

Taken actions that led to the consolidation of 100 failing – or likely to fail – water systems.

Helped more than 200 small disadvantaged communities secure funding for project planning and construction.

Provided over \$1.4 billion in low-interest loans and grants, benefitting approximately 7.2 million people in communities large and small, rich and poor, urban and rural.

The State Water Board maintains a list and map of these communities on its Human Right to Water portal.

For more information on this ongoing effort, a frequently asked questions document poses important questions and answers.

The Safe and Affordable Drinking Water Fund is part of California Climate Investments, a statewide initiative that puts billions of cap-and-trade dollars to work reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment — particularly in disadvantaged communities.



Frequently Asked Questions **on the Safe and Affordable Drinking Water Program**

Overview

What is the Safe & Affordable Drinking Water Program?

The Safe & Affordable Drinking Water Program (SADW) is a set of tools, funding sources, and regulatory authorities designed to ensure that one million Californians who currently lack safe drinking water receive safe & affordable drinking water as quickly as possible. The SADW program also aims to reach sustainable operations for all of the state's drinking water systems and is a critical element for achieving the goals of safe, accessible, and affordable water for all Californians.

Why is the Safe & Affordable Drinking Water Program necessary?

Although state funding is generally available for safe drinking water infrastructure, communities must first demonstrate that they have adequate technical, managerial, and financial capacity to operate and maintain the treatment systems in order to be eligible for funding. In addition, state and federal funds are not routinely available for operations and maintenance costs.

Typical operations and maintenance costs include, but are not limited to: personnel (management, administrative, and operations, etc.); financial services (bookkeeping, billing, accounting, audit and financial reporting), professional services (certified operator, engineer, attorney); water quality monitoring, permit fees, insurance, annual equipment and infrastructure repair and replacement, energy costs, chemical or other water quality treatment materials and any residual disposal cost, and wholesale water purchases.

Small water systems lack the economies of scale of larger water systems. Thus, many small disadvantaged communities are unable to deliver safe drinking water at affordable rates due to the cost of operations and maintenance. The lack of operations and maintenance funding prevents the State from providing funds for installation of the needed treatment, meaning that the communities continue to receive unsafe drinking water. The establishment of this Safe and Affordable Drinking Water Fund provides the critical mixing piece of this puzzle.





Fact Sheet

What kind of communities need help?

Small marginalized communities around the state have struggled to access safe drinking water for years. The SADW program addresses three hard truths about access to safe and affordable drinking water and the size and locations of the hardest hit water systems who struggle to deliver safe drinking water reliably:

1. **More than a half-million California residents lack access to water that is reliably safe for drinking** because of possible contaminants such as arsenic, nitrates and/or 123-TCP. Over time, exposure to any of these contaminants increases health risks to children and adults.
2. **More than 500 rural and small water systems with less than 100 connections** face the greatest risk of unsafe water. They are least likely to afford the necessary upgrades and or cost of regional consolidations. **In contrast**, more than 400 of the state's largest water systems (those with 3,000 or more customers) that serve **more than 90 percent of the state's 39.5 million residents have been able to deliver safe drinking water to their customers for decades.**
3. California's water utility network is fragmented and inefficient compared to other utilities. Today, there are more than 7,400 individual water systems, as compared to 75 energy utilities and 900 centralized wastewater treatment systems. **Consolidation increases efficiency and can reduce the cost of delivering safe drinking water to rural or isolated communities.** The Safe and Affordable Drinking Water Fund provides a steady stream of funding for studying and planning the necessary steps for consolidations if it makes the most financial sense to do so.

What types of solutions are available?

Near-term solutions include temporary connections to safe drinking water sources, point-of-use treatment systems, drilling wells into uncontaminated aquifers, and trucking water directly to communities.

The long-term goal is to ensure that all drinking water systems can sustainably and affordably provide safe drinking water to everyone they serve. Long-term solutions that will lead to safe and self-sufficient systems include funding system upgrades, consolidation and regionalization (i.e. linking smaller systems into larger ones), and technical and managerial capacity building.



Fact Sheet

How did the Governor assist this program?

Within the first week of taking office, Governor Gavin Newsom proposed the creation of a Safe and Affordable Drinking Water Fund -- to ensure all Californians have access to a fundamental necessity. On July 24, the Governor signed legislation (SB 200) which establishes the Safe and Affordable Drinking Water Fund to help local water systems provide safe drinking water.

Have any timelines or goals been identified?

Yes. The Safe and Affordable Drinking Water plan has the following goals:

- Identify high-risk systems and areas on private wells or served by small water systems in order to proactively support prevention and resiliency;
- Strongly promote consolidation and regional solutions that increase resiliency and economies of scale;
- Accelerate project development and implementation timelines;
- Develop and support comprehensive solution assistance services and local technical and managerial capacity building, to ensure long-term solutions and maximize community benefits;
- Ensure access to immediate, interim solutions where needed.

Building upon the progress the State Water Board has already made, additional Californians will receive safe drinking water and technical assistance in the first year as described below:

- **Goal: Temporary supplies of safe drinking water for up to 75 communities and schools**
- Prioritization
 - i. Based on immediate health concerns
 - ii. Augment Existing Funding Programs
 - iii. Interim Assistance Providers
- **Goal: Preliminary Planning Assistance for 100 communities; Accelerate or provide permanent solutions for 75 communities.**
- Prioritization
 - i. System Violations
 - ii. Long Term Sustainability
 - iii. Consolidation/Regionalization
 - iv. Remote or Isolated homes or state smalls



Fact Sheet

Why is the State Water Board the best agency to lead this program?

The State Water Board, through its Division of Drinking Water, has the primary authority to enforce federal and state drinking water statutes, and is responsible for the regulatory oversight of about 7,400 public water systems throughout the state. The State Water Board also has a Division of Financial Assistance (DFA) that awards state and federal grants and loans for drinking water infrastructure. The SADW program includes an additional \$130 million per year through 2030 to support safe drinking water needs.

What is the Division of Drinking Water?

The State Water Resources Control Board's Division of Drinking Water (DDW) regulates the state's 7,400 public water systems and oversees water recycling projects, permits water treatment devices, supports and promotes water system security, and works closely with the Division of Financial Assistance (DFA) on funding for water systems. DDW staff work from 24 field offices across the state. [Locations and contact information for DDW field offices is located here.](#)

DDW staff review drinking water quality data and perform triennial reviews of public water systems as part of the Division's regulatory oversight responsibilities. For the many small systems struggling to deliver reliable safe drinking water, DDW staff direct them towards technical and financial assistance program. The Safe and Affordable Drinking Water Fund will now provide struggling systems with operations & maintenance assistance and pathways towards sustainability. The Safe and Affordable Drinking Water Program will provide comprehensive and sustainable support to ensure provision of safe drinking water in communities that don't have it.

What is the role of the Division of Financial Assistance?

The Division of Financial Assistance (DFA) administers the implementation of the State Water Board's financial assistance programs, including loan and grant funding for construction of municipal sewage and water recycling facilities, drinking water projects and upgrades, remediation for underground storage tank releases, watershed protection projects, nonpoint source pollution control projects, etc.

Toward this end, the Division of Financial Assistance has a variety of funding resources that it will use to advance these safe and affordable drinking water goals.



Fact Sheet

Funding

Where does the money come from?

There are a number of funding sources that the State Water Boards can draw from, and sometimes they can get project-specific, when choosing the right program. In other words, some funding can only be used for specific purposes. In general terms, to get this program moving quickly, the State Water Board plans to focus on the available resources acted on by the Board on Aug. 20, which gave the Board's Division of Financial Assistance access to both bonds funds and revenue from the state's Greenhouse Gas Reduction Fund, and can quickly begin providing resources that can pay for immediate safe drinking water delivery, planning for communities eligible for either upgraded or first-time-ever, drinking water treatment, as well as necessary consolidations of nearby smaller systems by existing larger water systems with existing drinking water treatment systems.

One-time General Fund Appropriation (AB72)

Assembly Bill 72 (AB 72) amended the Budget act of 2018 to appropriate \$20 million from the General Fund for safe drinking water programs. \$10 million is allocated to "provide grants or contracts to address urgent drinking water needs in disadvantaged communities, local educational agencies in or serving disadvantaged communities, or nonprofits." Another \$10 million is designated "for grants or contracts for administrators to provide administrative, technical, operational, or managerial services to a designated water system to support compliance with current drinking water standards."

Eligible projects under the portion of the funds or urgent needs include, but are not limited to, interim alternate drinking water supplies, emergency improvements, service extension, consolidations, treatment and critical operation and maintenance activities that are cost prohibitive considering the population and median household income of the community served by the water system.

Drinking Water State Revolving Fund

The purpose of the Drinking Water State Revolving Fund (DWSRF) is to provide financial assistance for the planning/design and construction of drinking water infrastructure projects that are needed to achieve or maintain compliance with federal and state drinking water statutes and regulations. Funding for the DWSRF comes from federal grants, state sources, and loan repayment.

The DWSRF program provides low-interest loans and other financing mechanisms, such as grants, for the planning/design and construction of projects related, but not limited to: water



Fact Sheet

sources, water storage facilities, treatment systems, distribution systems, interconnections, consolidations, and waterline extensions. A public water system that serves a disadvantaged community with financial hardship may be eligible for principal forgiveness or zero percent interest financing, and an extended 30-year repayment term. Funds are meant for projects that provide long term solutions. More details are available online for the [DWSRF](#) and its associated [project list](#).

Bond Funding (Prop 68)

[Proposition 68](#) was passed by voters in June 2018. The State Water Board will administer \$220 million for Safe Drinking Water and \$74 million from Chapter 11.1 for grants for treatment and remediation activities that prevent or reduce the contamination of groundwater that serves as a source of drinking water. \$16 of the \$74 million is set aside for projects serving severely disadvantaged communities. Funding preference will be given to projects that advance the State's policy on the Human Right to Water. Funds may be used for non-capital expenditures including ongoing operations and maintenance. Workshops on proposed program guidelines were June 2019. Funding awards are expected by Spring 2020. More information is available at the [Prop 68 program website](#).

Safe and Affordable Drinking Water Fund

The Safe and Affordable Drinking Water (SADW) Fund was established through Senate Bill 200 (SB200) in 2019. The Fund will provide \$130 million per year that will be used to develop and implement sustainable solutions for small systems with violations of drinking water standards. The money may be spent on operations and maintenance costs, cost of consolidating with larger system, provision of replacement water, and funding for administrators to run the small systems.

How can communities apply for the new funding?

The Division of Financial Assistance is creating a simple pre-application for disadvantage community water and wastewater projects. Depending on the type of projects, the applicant will be directed to the appropriate funding program. Technical assistance will be available to help communities apply for funding.

When will money be made available?

The State Water Board [adopted a resolution on August 20, 2019](#) to authorize staff to issue grants and contracts using the SADW funding appropriated in the Fiscal Year 19-20 Budget. The Division of Financial Assistance will begin issuing funds for near-term solutions as soon as possible. Funding for system administrators will begin after the Board adopts the [Administrator Policy Handbook](#).



Fact Sheet

Prioritizing Need

How will the Division of Drinking Water priorities communities or projects?

Prioritization for permanent solutions will generally be based on the following criteria

Public Water Systems

Priority will be given to consolidation or regionalization projects that can show long-term resiliency and sustainability for communities or schools unable to meet safe drinking water act standards. The [guidance and prioritization policy](#) adopted as a part of the Drinking Water State Revolving Fund will be utilized as a basis for these projects. Construction projects will be required to develop plans to achieve long-term resiliency and sustainability within five years.

Communities on domestic wells or state smalls

In areas with high population density but without centralized infrastructure, priority will be given to consolidation or regionalization projects that consolidate disadvantaged neighborhoods without public water systems into larger public water systems, especially in areas with high risk of contamination or water shortage, are a top priority.

Remote or isolated homes or state smalls

Well rehabilitation or Point-of-Use and Point-of-Entry treatment options will likely be the best long-term solutions for households in remote or isolated areas (where consolidation is not feasible) with known or high risk of contamination or water shortage.

What happens if a community needs replacement water immediately?

The State Water Board has existing agreements with interim assistance providers and funding available for to provide temporary supplies of safe drinking water.

How will the Division of Drinking Water determine which smaller systems should be consolidated with nearby larger systems?

This first criterion for consolidation will be the needs of the smaller system, based on violation of drinking water standards and its managerial and fiscal condition. The next criterion is the distance to a larger system. The size and technical, managerial and fiscal capabilities of the larger system will also play into this analysis.

What tools does the Division of Drinking Water have to assist with consolidation efforts?

The Division of Drinking water in conjunction with the Division of Financial Assistance has a number of tools to assist with consolidation efforts. Administrators can be appointed and funded to run small failing systems and shepherd them on the path the sustainability. There is



Fact Sheet

direct technical assistance available as well as funding for technical assistance providers. In the case of small systems with drinking water violations, the Water Board can order consolidations, although voluntary cooperative approaches are preferred.

Does the Division of Drinking Water plan to “stress test” existing communities to see if they can afford their own drinking water treatment systems instead of consolidation?

The focus of the SADW Program is ensuring the long-term viability and sustainability of drinking water systems. One of the important aspects of this is assessing the long term financial, managerial and technical capabilities of each system. As such the Division of Drinking Water will look at all options that will lead to long term sustainability.

For More Information

Is there a place on the internet I can see what communities currently don't have safe drinking water?

The State Water Board maintains a list and map of these communities on its [Human Right to Water portal](#).

I understand the Division of Drinking Water has been working on this for some time. What are some of the accomplishments?

Since the Legislature transferred the Safe Drinking Water Program to the State Water Resources Control Board in 2014, the Board, working with the Legislature and stakeholders has made **significant progress** toward ensuring that all Californians have access to safe drinking water and achieving the goals of the [Human Right to Water Act \(AB 685, 2012\)](#).

Since 2014, the Board has:

- Brought 250 systems that were failing to deliver safe drinking water back into compliance.
- Taken actions that led to the consolidation of 100 failing - or likely to fail - water systems since 2017.
- Helped more than 200 small disadvantaged communities secure funding for project planning and construction through our Office of Sustainable Water Solutions.
- Provided more than \$1.4 billion in low-interest loans and grants, benefitting approximately 7.2 million people in communities large and small, rich and poor, urban and rural.

Despite these efforts, 1 million Californians in 300 or more communities are still without safe and affordable drinking water.



Fact Sheet

How much has been spent to date to assist disadvantage communities without access to safe drinking water?

Since 2010, the state has distributed over \$3 billion in bonds and federal funds for the repair, replacement, and improvement of aging infrastructure and installation of new treatment systems for over 600 projects to comply with the federal Safe Drinking Water Act. For more information please visit the State Water Board's [Division of Drinking Programs home page](#).

Where can I find more information on this, and stay updated?

For more information, or to track progress on this effort, please visit the [State Water Boards' Human Right Water website](#).

(This Fact sheet was last updated on Aug. 20, 2019)

California lawmakers establish Special Districts Week

Posted Aug 16, 2019 at 7:48 AM

Sacramento — On Thursday, the California State Legislature established Special Districts Week to encourage all Californians to be involved in their communities and be civically engaged with their local government.

Assembly Concurrent Resolution (ACR) 89, authored by Assemblymember Ken Cooley (D- Rancho Cordova), was approved with bi-partisan support. It proclaims the week of September 22 to September 28 to be Special Districts Week.

“As the former mayor of a city that relied on independent special districts for the delivery of essential services, such as fire protection, parks, and water, I am intimately familiar with the value of special districts to California,” stated Assemblymember Cooley. He added, “I encourage all Californians to familiarize themselves with their local service providers, vote in the upcoming election, attend a board meeting, and consider serving on a local board. Our communities depend upon the public service and oversight by residents of all backgrounds.”

ACR 89 was sponsored by The California Special Districts Association (CSDA), which is a statewide association representing over 1,000 special districts and affiliate organizations throughout the state. Special districts are local government entities created by a community’s residents, funded by those residents, and overseen by those residents, to provide specialized services and infrastructure.

CSDA represents all types of independent special districts, which provide millions of Californians with essential local services such as fire protection, water, resource conservation, and parks and recreation.

“Special districts are formed by residents to provide essential services that they want and need at the local level. They provide an opportunity to have local control while enhancing services that make communities thrive and survive,”

said CSDA's CEO Neil McCormick. He continued, "We appreciate the Legislature's support in raising awareness and increasing understanding about the special districts that serve our State's communities."



Home

Bill Information

California Law

Publications

Other Resources

My Subscriptions

My Favorites

ACR-89 Special Districts Week. (2019-2020)

SHARE THIS:



ENROLLED AUGUST 16, 2019

PASSED IN SENATE AUGUST 15, 2019

PASSED IN ASSEMBLY JUNE 20, 2019

CALIFORNIA LEGISLATURE— 2019–2020 REGULAR SESSION

**ASSEMBLY
RESOLUTION**

CONCURRENT

NO. 89

Introduced by Assembly Member Cooley

(Coauthors: Assembly Members Aguiar-Curry, Arambula, Bauer-Kahan, Berman, Bloom, Boerner Horvath, Bonta, Brough, Burke, Calderon, Carrillo, Cervantes, Chau, Chen, Chiu, Choi, Chu, Daly, Diep, Eggman, Flora, Fong, Frazier, Friedman, Gabriel, Gallagher, Cristina Garcia, Eduardo Garcia, Gipson, Gloria, Gonzalez, Gray, Holden, Irwin, Jones-Sawyer, Kalra, Kamlager-Dove, Kiley, Levine, Limón, Low, Maienschein, Mathis, Mayes, McCarty, Medina, Mullin, Muratsuchi, Nazarian, O'Donnell, Patterson, Petrie-Norris, Quirk, Quirk-Silva, Ramos, Rendon, Reyes, Luz Rivas, Robert Rivas, Rodriguez, Blanca Rubio, Salas, Santiago, Smith, Mark Stone, Ting, Voepel, Waldron, Weber, Wicks, and Wood)

May 06, 2019

Relative to Special Districts Week.

LEGISLATIVE COUNSEL'S DIGEST

ACR 89, Cooley. Special Districts Week.

This measure proclaims September 22, 2019, to September 28, 2019, to be Special Districts Week.

Fiscal Committee: no

WHEREAS, Special districts are local governmental entities created by a community's residents, funded by those residents, and overseen by those residents, to provide specialized services and infrastructure; and

WHEREAS, Today, just over 2,000 independent special districts provide millions of Californians with essential services, including services related to water, sanitation and water recycling, fire protection, electricity, parks and recreation, health care, open space, ports and harbors, flood protection, mosquito abatement, cemeteries, resource conservation, airports, transit, road maintenance, veterans' facilities, and more; and

WHEREAS, Special districts first arose when San Joaquin Valley farmers needed a way to access their local water supply; and

WHEREAS, Under the Wright Act of 1887, the Turlock Irrigation District became California's first special district and made it possible for local farmers to intensify and diversify agriculture in California's Central Valley; and

WHEREAS, In the 20th century, special districts increased dramatically in both number and scope, and during the periods of prosperity and population growth that followed both world wars when the demand for all types of public services increased, and special districts met that need; and

WHEREAS, The statutory authorization for mosquito abatement districts was enacted in 1915 to combat the salt marsh mosquitoes around the San Francisco Bay and higher than average malaria cases in rural counties; and

WHEREAS, Fire protection districts can trace their origins to a 1923 state law, and in 1931 the Legislature authorized recreation districts, the forerunners of today's recreation and park districts; and

WHEREAS, Hospital districts arose in 1945 because of a statewide shortage of hospital beds. In 1994, the Legislature then expanded their breadth and renamed them health care districts in recognition of the diverse, modern needs of California's communities and the importance of proactive, affordable health care beyond the walls of a hospital building; and

WHEREAS, Although originally created to provide individual services, in 1961 the Legislature authorized special districts to address multiple needs, when it provided for multipurpose, community services districts; and

WHEREAS, Special districts vary in size and scope and serve diverse communities throughout California, from small rural neighborhoods, such as the Pine Cove Water District in the San Jacinto Mountains of Riverside County, to large urban regions, such as the East Bay Municipal Utility District spanning much of the Counties of Alameda and Contra Costa; and

WHEREAS, Local residents own special districts and govern them through locally elected or appointed boards. A series of sunshine laws ensure special districts remain transparent and accountable to the communities they serve, as these laws require open and public meetings, public access to records, regular audits, online posting of finances and compensation, and more; and

WHEREAS, To prevent overlapping services and ensure that local agencies are operating effectively and efficiently to meet communities' needs, special districts are formed, reviewed, consolidated, or dissolved through a methodical local process that includes the oversight of a local agency formation commission and the consent of local voters; and

WHEREAS, Fifty years ago, in 1969, several independent special districts formed a statewide association called the California Special Districts Association, commonly referred to as the CSDA, to promote good governance and improved essential local services through professional development, advocacy, and other services for all types of independent special districts; and

WHEREAS, The Legislature seeks to promote democratic institutions, community-based services, local control, and self-determination; and

WHEREAS, The Legislature seeks to promote and educate the public about their local public service providers, including awareness and understanding of special districts; now, therefore, be it

Resolved by the Assembly of the State of California, the Senate thereof concurring, That the Legislature hereby proclaims the week of September 22, 2019, to September 28, 2019, inclusive, to be Special Districts Week and encourages all Californians to be involved in their communities and be civically engaged with their local government, and be it further

Resolved, That the Chief Clerk of the Assembly transmit copies of this resolution to the author for appropriate distribution.

Alarm over lack of dioxin testing at Glendale mill site

Daniel Mintz
MAD RIVER UNION

GLENDALE — The county Planning Commission's review of a Glendale cannabis manufacturing project has exposed a lack of testing for dioxins on former mill and lumber storage sites, which could have implications for drinking water.

Considering the stakes, one commissioner described the lack of testing as "ridiculous."

The uncertain contamination status of the project site eclipsed concerns about volatile manufacturing and an assumed link between cannabis and crime as the commission reviewed the project at its September 5 meeting.

Four special permits were approved for three new buildings on a Glendale Drive parcel just east of the Route 299 Exit 4 onramp and off ramp. The buildings will house enclosed butane cannabis manufacturing, non-volatile manufacturing, processing and distribution facilities.

There were concerns about those uses from neighboring residents. But a more entrenched issue soon became apparent.

The project site was the lumber storage area of the former McNamara and Peepe Lumber Mill, whose main operations were conducted on an adjacent parcel. The use of wood preservatives led to soil contamination and in the mid-1990s, the state ordered remedial actions, including capping at the main operations site.

As of 2003, both sites were deemed to be free of contaminants. But in late 2018, the state Department of Toxic Substances Control (DTSC) declared that contaminants in the soil beneath the capped area had seeped into groundwater whose levels had risen.

Ryan Plotz, the attorney for the Humboldt Bay Municipal Water District, warned of potential effects on drinking water. "The district is seriously concerned that the project's construction and operation will result in contaminated soils and groundwater flowing into the nearby Hall Creek, which flows into the Mad River and ultimately into the district's downstream intake wells," he said.

Plotz said groundwater levels of toxic pentachlorophenol (PCP)

GLENDALE ♦ A6

Glendale | 'Why aren't we out there testing?'

♦ FROM A1

have "skyrocketed" since the sites were deemed uncontaminated in 2003.

Both the county and the project's applicant, Michael Brosgart, relied on the most recent documentation on contamination status — a letter from the DTSC which states that there is no PCP contamination of the project site's soil or groundwater.

Plotz said the letter is based on the outdated site investigations from 2003. "As a general matter, it is wholly inappropriate to rely on 16-year-old soil data," he told commissioners.

Jen Kalt, the director of Humboldt Baykeeper, highlighted a void of testing that took commissioners by surprise.

"What's really important is that no dioxin sampling has been done on the soil of this property at all," she said. "And these sites need to be tested for dioxins, not just pentachlorophenol — just as you would test old buildings for lead and asbestos, every lumber mill site in this county needs to be tested for dioxins."

Kalt added that PCP has a short half-life — much shorter than that of dioxins — and its absence doesn't indicate dioxins aren't present.

She said in 2003, Eureka's Simpson Plywood Mill tested clear of PCP contamination. "Baykeeper's experts sampled for dioxins and found tens of thousands of times the levels of dioxins that are considered to be safe by the U.S. EPA," she continued.

Kalt added that stormwater runoff from the cannabis project site will "run right into Hall Creek and into the Mad River — if that soil is contaminated with dioxins, that's going to carry right into our drinking water supply."

After the public comment session, Planning Director John Ford asked for a short break to research responses to what had been said. When the meeting resumed, County Planner Cliff Johnson said the 2003 evaluation is what's being relied upon and "the issue here" is PCP contamination of groundwater, which is slight at the sampling well

He added that the project's installation of water and sewer lines won't be deep enough to disturb groundwater and the county "is positive that there is no soil contamination on the site."

With the dioxin issue neglected, Commissioner Brian Mitchell asked whether "dioxins were ruled out as a possibility in this soil."

After a pause, County Planner Caitlin Castellano said, "We are assuming that it was not used onsite, if they did not test for it."

"It was in the penta — dioxin is part of pentachlorophenol," said Kalt from the audience.

"If dioxin is part of PCP, that was tested and was not shown as occurring on the site," said Johnson.

Saying he is "admittedly informed by Baykeeper but I do think they have a point here," Commissioner Noah Levy said dioxin needs to be tested for separately.

Commissioner Melanie McCavour said she's researched the situation, which concerns her as a biologist. The project's construction phase won't impact groundwater, she continued, so that aspect is "immaterial" and she questioned why it was even being discussed.

The "real issue," she said, is runoff from the site. "This is our drinking water supply — why aren't we out there testing to see what's going into our drinking water supply, why are we laying this on cannabis operations? It's ridiculous — it really is, we should be testing this on our own."

She added that testing former mill sites "should be part of what we do with public money."

Although he alluded to cost issues, Levy said his preference is to condition the project's approval on further testing. He added that it's probably not fair to put the responsibility on the applicant, as other projects and development proposals in the area are forthcoming.

Former lumber sites are common in the county and testing them is cost-prohibitive. "If you want to

number one," said Ford, the county's planning director.

Brosgart was asked if a condition of further testing for dioxins is feasible for him to carry out. Blindsided, he said it's hard to know.

"It's a little late in the game for this," said Commissioner Alan Bonfiglio, adding that Brosgart has done everything that has been asked of him up to this point and "it's not fair, in the eleventh hour, to throw that on him."

Levy agreed, but "regretfully" voted against approval of the project. His was the only dissent vote as the other four commissioners voted to approve the permits. Commission Chair Bob Morris and Commissioner Peggy O'Neill were absent.

Satori Lounge

Also at the meeting, commissioners approved a conditional use permit for a cannabis café and lounge affiliated with the Satori Wellness Center at 1551 Nursery Way near the intersection of Heartwood Avenue.

The lounge for cannabis smoking, vaporizing and ingestion will be part of the three-unit complex that also includes Satori's dispensary and distribution facility.

At first Satori will sell readymade food and non-alcoholic beverages but if demand is apparent, a full service kitchen offering cannabis-infused items will be added.

Hours of operation will be 10 a.m. to 9 p.m. Monday through Saturday and 11 a.m. to 7 p.m. on Sundays.

Mitchell pulled the permit approval from the meeting's consent agenda to discuss the potential impacts of allowing onsite cannabis use near neighborhoods.

County planning staff said the approval is similar to those for bars or alcohol-serving restaurants and the behavior of patrons is outside of the commission's land use per view. But a Satori representative said there will be a security presence.

Mitchell lives near Satori but not close enough to require recusal from the discussion. Due to the proximity,

Fish farm nearing decision point

Daniel Mintz
MAD RIVER UNION
SAMOA PENINSULA - A
Norway-based aquaculture company will soon decide whether to pursue a project on Humboldt Bay's former pulp mill site and its interest has highlighted the economic potential of the Samoa Peninsula.

At its Aug. 3 meeting, Humboldt County's Board of Supervisors was updated on the project and its infrastructure-related challenges. The company, Nordic Aquafarms, entered a lease with the Harbor District, which owns the project site, but now has doubts due to the need to upgrade freshwater delivery infrastructure and the more expensive proposition of removing turbidity.

Economic Development Director Scott Adair came to the meeting with good news - a federal funding source will pay 80 percent of the \$3 million cost of improving the delivery infrastructure.

And Nordic's interest in the former mill site has been noticed beyond Humboldt County. Some businesses are now "interested in the (Samoa) Peninsula because of the attention that our community is receiving over the Nordic Aquafarms

Fish farm | Norwegian investment

❖ FROM A1

project," Adair said. "The opportunities are especially interesting to me and exciting because many of the businesses that have reached out to us and are looking to invest in the peninsula and start projects are companies whose services or products are aligned with solutions for climate change," he continued.

He said the week before the meeting, three representatives of a company "interested in investment on the peninsula" visited the county. Their company is highly specialized, Adair continued, focusing on revitalizing plankton beds and rejuvenating ocean barrens.

Other businesses may have the county is keen on promoting new industry.

But a letter of support for the project wasn't approved without discussion and some debate. The letter is important to Nordic's board of investors, which will decide on whether or not to go forward with the project on Sept. 15.

The letter is brief and mainly states that the Board of Supervisors "is pleased to support Nordic Aquafarms' project for the construction of a new (Recirculating Aquaculture System) facility on the Samoa Peninsula."

Supervisor Steve Madrone said the letter's wording should be changed to indicate that the board "conditionally" supports the project because supervisors need to maintain an objective attitude.

"How do we support some-

same concern about water turbidity that Nordic does and that's the most costly aspect of water infrastructure improvement. If a new facility is built to clarify the water, the cost could reach \$50 million.

Water infrastructure isn't the only utility concern on the Samoa Peninsula. Roads, bridges and broadband telecommunications infrastructure also need improvement or development and supervisors discussed forming a multi-jurisdictional Joint Powers Authority to handle it.

The Nordic project represents an initial \$400 million investment and the creation of 100 primary and ancillary jobs. The site's zoning includes aquaculture and tuning that's not actually before us other than a conceptual idea?" he asked.

During a public comment session, Lynette Mullen, Nordic Aquafarms' community liaison, asked supervisors to be careful about wording and define what "conditional" support means.

"If you just throw 'conditional' in that letter without explaining it, that could be a big red flag for the investors in Norway," she said.

The water clarification is the "bigger issue" regarding infrastructure. "Because frankly, we were selling Humboldt County as having all this clean, fresh, wonderful water but it isn't usable and they didn't include that in their budget," Mullen continued.

Supervisor Mike Wilson had concerns similar to Madrone's

and suggested edits to the letter. Supervisors delved into re-wording it but Supervisor Virginia Bass, whose district includes Samoa, warned against mentioning conditional support, as did county staff.

Saying, "I don't want to go down a rabbit hole here," Supervisor Estelle Fennell recommended keeping changes as minimal as possible.

Supervisors approved a slightly changed version of the letter that specifies that the project is "proposed" at this point and will go through a thorough review process.

Supervisors also directed staff to explore options for a Joint Powers Authority or other agency to administer Samoa Peninsula infrastructure improvements.

Mad River Union
Sept. 11, 2019

CORRESPONDENCE

DEPARTMENT OF WATER RESOURCESHYDROLOGY AND FLOOD OPERATIONS OFFICE
3310 EL CAMINO AVENUE, SUITE 200, P.O. BOX 219000
SACRAMENTO, CA 95821-9000

H.B.M.W.D. AUG 12 2019

August 6, 2019

SUBJECT: 2019 PRESEASON FLOOD COORDINATION MEETINGS

The Department of Water Resources (DWR) invites you to attend one of this year's Preseason Flood Coordination Meetings. These meetings are directed to water managers, emergency responders, and managers that deal with flood emergency preparedness and response.

You are receiving this letter because you either attended one of last year's Preseason Flood Coordination Meetings, or are included on the DWR Directory of Flood Officials contact list.

DWR, along with our local, State, and federal partners will provide information on current and future weather, local flood concerns and ER support, flood fight resources, and other related topics to better prepare our organizations for the upcoming flood season. A flyer is enclosed with the locations and times of the meetings being held this year.

We encourage you to attend and participate in this multi-agency flood emergency preparedness effort.

If you have any questions or need further information, please contact Wendy Francis at (916) 574-0640 or wendy.francis@water.ca.gov. You may also call the Flood Operations Center at (916) 574-2619.

We look forward to working with you on flood emergency preparedness and response.

Sincerely,

A handwritten signature in cursive script, appearing to read "Elizabeth Bryson", followed by a horizontal line.

Elizabeth Bryson, Chief
Flood Operations Branch
Department of Water Resources

Enclosure

Division of Flood Management

2019 California Preseason Flood Coordination Meetings



Department of Water Resources



Agenda Topics

Winter Weather Outlook

DWR Flood Operations Updates

Regional Updates

Multi-Agency Coordination

Flood Fighting Methods and Materials

Local Flood Concerns and ER Support

Cost Recovery

Headwaters to Floodplains

You are invited to join flood emergency response partners to discuss flood preparedness in your region. Hosted by County Offices of Emergency Services in partnership with the State-Federal Flood Operations Center, these meetings provide regional and local updates on annual flood preparedness activities.

YOLO

Wednesday, September 11
9:00 am – 12:00 pm
West Sacramento City Hall
1110 W. Capitol Avenue
West Sacramento

NAPA

Thursday, September 19
9:00 am – 12:00 pm
Napa Valley College, Bldg 1700
Community Room 1731
2277 Napa Vallejo Hwy
Napa

MONTEREY

Wednesday, September 25
9:00 am – 12:00 pm
Seaside Community Center
220 Coe Avenue
Seaside

HUMBOLDT

Tuesday, September 17
9:00 am – 12:00 pm
County Agriculture Building
5630 W. Broadway
Eureka

MERCED

Tuesday, September 24
9:00 am – 12:00 pm
Merced Co Emergency Ops
3500 N. Apron Avenue
Atwater

FRESNO

Thursday, September 26
9:00 am – 12:00 pm
(Location to be provided later)

Continued on next page



SECTION G2, PAGE NO. 1

August 16, 2019

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

H.B.M.W.D. AUG 29 2019

Subject: Subapplication Non-Submittal
Hazard Mitigation Grant Program
FEMA-4382-DR-CA, Summer 2018 California Wildfires and High Winds
Cal OES PJ0618, HBMWD R.W. Matthews Dam Spillway Retrofit Project
Subapplicant: Humboldt Bay Municipal Water District
FIPS: 023-91000

Dear Mr. Friedenbach:

The California Office of Emergency Services (Cal OES) has received and reviewed your subapplication requesting funds from the Hazard Mitigation Grant Program (HMGP). Cal OES did not submit your subapplication to the Federal Emergency Management Agency (FEMA) for funding consideration under DR-4382.

Cal OES may consider your subapplication for submission to FEMA under a later federal disaster declaration. In such case, you will be informed of the new DR number and OES control number with which to identify your project.

If you have any questions, please contact Concepcion Chavez, Hazard Mitigation Grants Specialist, at (916) 845-8854 or concepcion.chavez@caloes.ca.gov.

Sincerely,

WHITNEY BRAZIEL
Hazard Mitigation Grant Program Manager





August 16, 2019

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

H.B.M.W.D. AUG 29 2019

Subject: Subapplication Non-Submittal
Hazard Mitigation Grant Program
FEMA-4382-DR-CA, Summer 2018 California Wildfires and High Winds
Cal OES PJ0619, HBMWD Mad River Slough Single Line Crossing
Retrofit Project
Subapplicant: Humboldt Bay Municipal Water District
FIPS: 023-91000

Dear Mr. Friedenbach:

The California Office of Emergency Services (Cal OES) has received and reviewed your subapplication requesting funds from the Hazard Mitigation Grant Program (HMGP). Cal OES did not submit your subapplication to the Federal Emergency Management Agency (FEMA) for funding consideration under DR-4382.

Cal OES may consider your subapplication for submission to FEMA under a later federal disaster declaration. In such case, you will be informed of the new DR number and OES control number with which to identify your project.

If you have any questions, please contact Concepcion Chavez, Hazard Mitigation Grants Specialist, at (916) 845-8854 or concepcion.chavez@caloes.ca.gov.

Sincerely,

WHITNEY BRAZIEL
Hazard Mitigation Grant Program Manager





August 16, 2019

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

H.B.M.W.D. AUG 29 2019

Subject: Subapplication Non-Submittal
Hazard Mitigation Grant Program
FEMA-4382-DR-CA, Summer 2018 California Wildfires and High Winds
Cal OES PJ0115, HBMWD Essex Chlorine Scrubber Installation Project
Subapplicant: Humboldt Bay Municipal Water District
FIPS: 023-91000

Dear Mr. Friedenbach:

The California Office of Emergency Services (Cal OES) has received and reviewed your subapplication requesting funds from the Hazard Mitigation Grant Program (HMGP). Cal OES did not submit your subapplication to the Federal Emergency Management Agency (FEMA) for funding consideration under DR-4382.

Cal OES may consider your subapplication for submission to FEMA under a later federal disaster declaration. In such case, you will be informed of the new DR number and OES control number with which to identify your project.

If you have any questions, please contact Concepcion Chavez, Hazard Mitigation Grants Specialist, at (916) 845-8854 or concepcion.chavez@caloes.ca.gov.

Sincerely,

WHITNEY BRAZIEL
Hazard Mitigation Grant Program Manager





August 1, 2019.

H.B.M.W.D. AUG - 8 2019

Mr. John Friedenbach, General Manager
Humboldt Bay Municipal Water District
Post Office Box 95
Eureka, California 95502

Subject: **Emergency Action Plan - Review**
Robert W. Matthews Dam, No. 1013.000, Trinity County

Dear Mr. Friedenbach:

The California Governor's Office of Emergency Services, Dam Safety Planning Division, acknowledges receipt of your organization's Emergency Action Plan for the subject dam, listed above. Pursuant to Water Code Section 6161, subdivision (b)(1), we have determined the Emergency Action Plan does not meet the requirements of Government Code Section 8589.5.

During the review of your Emergency Action Plan, we have identified items to be missing, insufficient, and/or incorrect (please refer to Table 1. Required Changes in the EAP Review Report). Additionally, please refer to the Federal Emergency Management Agency's *Federal Guidelines for Dam Safety: Emergency Action Planning for Dams* for the required elements needed in an Emergency Action Plan. This guidance will help you create a comprehensive plan that fulfills legislative requirements and will be extremely beneficial during a dam incident.

Once corrected, please resubmit the Emergency Action Plan. The division shall review and approve the plan, should it meet the requirements of Government Code Section 8589.5. If you have any questions or need additional information, please contact Phillip J. Labra at (916) 845-8420 or phillip.labra@caloes.ca.gov, with a copy to eap@caloes.ca.gov.

Sincerely,

JOSÉ LARA
Chief, Dam Safety Planning Division

Enclosure

cc: Sharon Tapia, Chief, Division of Safety of Dams, Department of Water Resources



3650 SCHRIEVER AVENUE, MATHER, CA 95655
(916) 845-8506 TELEPHONE (916) 845-8511 FAX
www.CalOES.ca.gov

Mad River Union
8/28/2019

A&M trail news

Thank you for your participation in the Arcata Annie & Mary Trail Connectivity Project. A Draft Project Report and maps of alternative trail alignments have been released and are available for public review on the project website, cityofarcata.org/831/Annie-Mary-Trail-Connectivity-Project or at the following locations: hard copy full report and appendices available at the City of Arcata Recreation Office (736 F St.) and hard copy report available at the Arcata Library (500 Seventh St.) and the Arcata Marsh Interpretive Center (569 South G St.).

On Wednesday, Sept. 4, the Arcata City Council will discuss the draft project report for the Arcata Annie & Mary Trail Connectivity Project and consider potential alignments for the Annie & Mary Trail for non-motorized travel through north Arcata to the Mad River. The

City Council meeting will start at 6 p.m., but the Annie & Mary Trail agenda item may be a bit later. Community members are welcome to attend to hear about the project and the community input received so far, provide comment, and learn about next steps.

The current phase of the project for public outreach and planning is funded by a Caltrans Sustainable Communities grant. Ideas generated during public outreach opportunities throughout 2019 have been utilized to develop and refine alternative alignments for the trail.

The Annie and Mary Trail Project will eventually create a new trail that will connect Sunset Avenue/Larson Park to Valley West, the Aldergrove Industrial Park, and the Mad River at the Humboldt Bay Municipal Water District's Park 1. The project is also intended to improve the Sunset Avenue and Giuntoli Lane overpasses, create connections to the trail from neighborhoods, and improve access to parks and businesses.

For more information regarding this project, visit the project website at cityofarcata.org/831/Annie-Mary-Trail-Connectivity-Project or call (707) 825-2128.

Best, Project Team for the Arcata Annie & Mary Trail Connectivity Project

Emily Sink-horn

Director, Natural Resources Services Division, Redwood Community Action Agency, 904 G St., Eureka, CA 95501

(707) 269-2061

naturalresourceservices.org

Arcata selects route for city's stretch of Annie and Mary Trail

Choice limits interaction with vehicle traffic



A rendering shows the Annie and Mary Trail near the Arcata Skate Park. The Arcata City Council on Wednesday voted unanimously to approve a route for the 3.3 mile stretch of the trail passing through the city that aligns with a rail corridor and avoids road crossings. (City of Arcata — Contributed)

By [SONIA WARAICH](#) | swaraich@times-standard.com |

September 5, 2019 at 7:28 pm

Future users of the Annie and Mary Trail won't have to worry much about running into car traffic.

The Arcata City Council on Wednesday unanimously 4-0 approved a route for a 3.3-mile section of the Annie and Mary Trail through the city that aligns with a rail corridor and avoids crossing roads with motorized traffic. Arcata Mayor Brett Watson was absent.

"I think Alternative 1 for me makes a lot of sense because of the fewer crossing," said Councilman Paul Pitino. "Just right away, fewer crossings. And it's simpler."

The route selected crosses three roadways and nine non-residential driveways while the other two options crossed seven and eight roads along with roughly 50 driveway crossings, both residential and nonresidential, apiece.

Netra Khatri, Arcata's assistant city engineer, said aligning the trail with the rail corridor will involve less conflict than the other options and be cheaper because there's already gravel in place.

"There's a lot going for the rail corridor with not having all the interaction with driveways," said Arcata Vice-Mayor Michael Winkler. "... And also just the cost and not having to acquire additional property."

During community outreach conducted over the past year, Natalie Arroyo, senior planner with Natural Resources Services, said community members also expressed they wanted the trail to be separated from motor traffic and preferred the route along the rail corridor.

Michael Proulx, of the Humboldt Trails Council, said using the rail corridor was preferred by the nonprofit because it's safer since it avoids traffic and would allow for railbanking.

Railbanking was established in 1983 as an amendment to the National Trails System Act and allows railroad lines to be used as trails until rail service resumes. The intention is to preserve right-of-ways that would otherwise be lost.

"The more you deviate from the rail right-of-way and use alternate routes, the less intact that railbanking right-of-way will remain," Proulx said.

Failing to preserve that right-of-way would potentially open it up to surrounding property owners to propose different uses, he said. Preserving those rights-of-way is especially important for the larger Great Redwood Trail, which would connect Humboldt County to the San Francisco Bay Area, he said.

North Coast state Sen. Mike McGuire said acquiring the rail right-of-ways was a crucial first step to making the trail a reality at a town hall on the trail in May.

The Annie and Mary Trail will start at Sunset Avenue, continuing the Humboldt Bay Trail, and end at Humboldt Bay Municipal Water District Park 1. The larger project is intended to connect Arcata and Blue Lake with a trail running along the Mad River and the rail corridor that once belong to the Arcata and Mad River Rail Road Company.

Portions of the trail in Blue Lake are already underway. Mike Foget, Blue Lake city engineer, said construction should begin next spring.

"It's really piece by piece that the vision is coming together," Arroyo said.

However, Arroyo said some community members, particularly women, expressed concern about dense vegetation that might block visibility of the trail from the road, and vice versa, as well as areas that weren't as heavily trafficked.

"If those conditions persisted, people said they might not use the trail because they might not feel safe," Arroyo said.

Because of safety concerns, community members expressed the desire for pedestrian-scale lighting and wanted trail maintenance to be a priority, Arroyo said. Additional safety concerns could be addressed through student safety patrols and the Volunteer Trail Stewards program, through which volunteers act as the eyes and ears of the trail and report what they observe, from maintenance issues to safety concerns.

Khatri said right now survey work for the project is being done and additional concerns, such as drainage, safety and lighting, will be addressed further down the road.

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



TRAIL SEGMENT The view south of the U.S. Highway 101 undercrossing. L.K. Wood Boulevard is to the left, and West End Road to the right. CITY OF ARCATA IMAGE

Council signs off on Annie & Mary trail design

ARCATA/BLUE LAKE – Following decades of consideration, Arcata’s City Council unanimously approved an initial design last week for the long-planned Annie and Mary Trail project, a bike and pedestrian path which will wind its way through the city and out to Blue Lake.



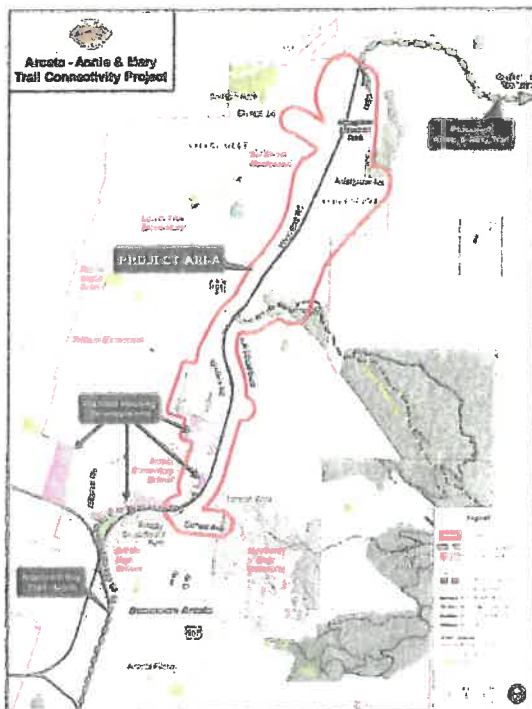
STRIDING This trail user from the image above appears to be having a grand time. CITY OF ARCATA IMAGE

The trailway design which will connect existing trails and create new ones, will keep bicyclists away from motorized vehicles, aligning with railways on the defunct Arcata and Mad River Railroad, which was rendered bereft of service the 1990s.

Community input on the course of a series of meetings leaned toward the railway alternative over other options which would have included a preponderance of driveway crossings increasing interaction with cars and trucks.

Community input on the course of a series of meetings leaned toward the railway alternative over other options which would have included a preponderance of driveway crossings increasing interaction with cars and trucks.

TRAIL ❖ A8



A&M ROUTE
The Annie and Mary Trail route through Arcata.
CITY OF ARCATA MAP

Trail | Safety

FROM A1

In addition to being a safer alternative, the railway option also reduces costs to the city, as those rights-of-way are paved in gravel, according to Netra Khatri, assistant city engineer.

After previously ending northward at the city limits near the Giuntoli Lane overpass, city planners worked with the county and Humboldt County Municipal Water District to extend the trail out to the Mad River at Park One.

“There wasn’t much of a place for people to end up,” said Natalie Arroyo, senior planner with Natural Resources Services. “It was a really great collaborative opportunity to continue it to more of a recreational destination and opportunity for getting outside and enjoying everything Park One has to offer.”

She also said community en-

gagement brought forth concerns about safety, particularly around Giuntoli Lane and Sunset Avenue, as well as ADA accessibility. Women specifically expressed fear about sections of the trail that were not lit as well. The issue was not so much the extension to Park One, which most felt would be used recreationally during daylight hours, but the sections within the city which some said would be used for commuter traffic.

Residents suggested enhanced lighting, with a concern for excessive light pollution. “We will address the drainage, lighting, and safety issue as we progress with the final design,” said Khatri.

Next steps for the Annie and Mary Trail project will include:

- Draft of preliminary engineering plans by December
- Final project report in February
- Potential Caltrans Active Transportation Program application in spring or summer 2020



NORTH COAST RESOURCE PARTNERSHIP



SAVE THE DATE!

October 18
Loleta, CA

HOSTED BY THE BEAR RIVER TRIBE – TISH NON VILLAGE COMMUNITY CENTER

Please join the North Coast Resource Partnership on October 18, 10 am - 4 pm at the Bear River Band of Rohnerville Rancheria, Tish Non Village Community Center in Loleta

This meeting will focus on forest health and resiliency, and will include North Coast Resource Partnership (NCRP) Tribal and county representatives, Tribal, county, state and federal elected officials and agency leaders. The NCRP was awarded a \$4 million block grant from the California Natural Resources Agency and the California Department of Conservation to develop a regional priority plan and projects for the North Coast region, focused on forest and community vitality and long term resiliency to wildfire. In addition to regular NCRP business, this meeting will be an opportunity to discuss strategy and provide input into the regional planning effort, and to hear the perspectives of Tribal, county, state, and federal elected officials and leaders on forest health and

resiliency issues.

Please see the [NCRP website](#) for more information and to sign up for regular meeting updates. To plan for meeting materials and refreshment, please let us know if you will be attending the event. To RSVP or for more information, please contact Katherine Gledhill at kgledhill@westcoastwatershed.com. We look forward to seeing you there!

Copyright © 2019 North Coast Resource Partnership, All rights reserved.

Want to change how you receive these emails?

You can [update your preferences](#) or [unsubscribe from this list](#).

CONTINUING BUSINESS

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

To: Board of Directors

From: John Friedenbach

Date: September 12, 2019

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**

Staff participated with the County's Economic Development Department in a presentation to the Humboldt County Board of Supervisors (BOS) regarding potential grant funding or financing options for the necessary Industrial System capital upgrades required by the District. See attached documents from the BOS September 3rd meeting.

The US Economic Development Agency has suggested a possible grant funding opportunity for the rehabilitation of Station 6. That project is estimated to cost \$3M. The grant opportunity would be a 80% funding with a 20% match. Staff will seek funding opportunities for the 20% match of \$600,000.

Regarding the Clarifier facility, staff met with Security National at the former Simpson pulp mill site's clarifier. Staff will share some photos of the facility at the board meeting. Nordic has suggested possible alternative technology for turbidity reduction. District staff is coordinating with Nordic on exploring available technologies.

No update from Enviva.

b) Transport

Staff received an email inquiry from Brown & Caldwell regarding this option. They are participating in a workshop with Bay Area agencies involved in a program to assess various opportunities for transfers/exchanges. Staff will monitor the progress of this discussion and inform the Board if it materializes into a viable project.

c) Instream Flow Dedication

Progress continues with the tasks contained in our WCB instream flow grant. One of the questions raised by the Water Board at our recent meeting is: Will the instream flow dedication by the District be permanent or temporary? This will be discussed during the Board meeting.

Planning and Building Department

3. Status Report on Sea Level Rise Planning Activities by the Planning and Building Department and the Department of Public Works

Recommendation: That the Board of Supervisors:

1. Receive the report.

A motion was made by Supervisor Fennell, seconded by Supervisor Bass, to form an ad hoc committee of Supervisor Fennell and Supervisor Wilson and direct staff to come back with a presentation on the potential formation of a body or an agency and a strategy for moving forward. The motion carried by the following vote:

Aye: 5 - Rex Bohn, Estelle Fennell, Virginia Bass, Mike Wilson, and Steve Madrone

I. PUBLIC HEARINGS**J. DISCUSSION ITEMS****K. MATTERS SET FOR TIME CERTAIN****County Administrative Office**

1. 9:15 a.m. - Update to Nordic Aquafarms Presentation and Infrastructure Development on the Samoa Peninsula

Recommendation: That the Board of Supervisors:

1. Receive the staff report regarding plans, liabilities, obligations, and partnership/financing options for infrastructure development on the Samoa Peninsula;
2. Direct to staff to explore the creation of a Joint Powers Authority with public agencies with a vested interest in infrastructure development on the Samoa Peninsula and report back to your Board; and
3. Direct the Board Chair to sign the Letter of Support for Nordic Aquafarms.

A motion was made by Supervisor Bass, seconded by Supervisor Fennell, that the recommendations be approved with the proposed modifications to the letter of support as discussed. The motion carried by the following vote:

Aye: 5 - Rex Bohn, Estelle Fennell, Virginia Bass, Mike Wilson, and Steve Madrone



COUNTY OF HUMBOLDT

For the meeting of: 9/3/2019

File #: 19-1246

To: Board of Supervisors

From: County Administrative Office

Agenda Section: Time Certain Matter

SUBJECT:

9:15 a.m. - Update to Nordic Aquafarms Presentation and Infrastructure Development on the Samoa Peninsula

RECOMMENDATION(S):

That the Board of Supervisors:

1. Receive the staff report regarding plans, liabilities, obligations, and partnership/financing options for infrastructure development on the Samoa Peninsula;
2. Direct to staff to explore the creation of a Joint Powers Authority with public agencies with a vested interest in infrastructure development on the Samoa Peninsula and report back to your Board; and
3. Direct the Board Chair to sign the Letter of Support for Nordic Aquafarms.

SOURCE OF FUNDING:

General Fund and Economic Development.

DISCUSSION:

BACKGROUND

The County of Humboldt's Economic Development team have been engaged in conversations and activity concerning numerous potential coastal dependent and aquaculture-based development opportunities for the Samoa Peninsula.

One such opportunity is the Nordic Aquafarms project which would entail the construction of a new world class recirculating aquaculture system (RAS) and land-based fish farming facility. The investment for this project is anticipated to be \$400 million and would result in the creation of 85 primary, and 25 secondary, full-time benefited jobs.

File #: 19-1246

On July 23rd, 2019 Nordic Aquafarms made a presentation to your Board outlining specific infrastructure challenges that exist and which may financially prohibit their project. Said infrastructure challenges also could hamper other future development on the Samoa Peninsula.

Prior to Nordic's July presentation, Economic Development staff had also identified a substantial lack or limitation of infrastructure on the Samoa Peninsula and brought these findings to your Board on May 21st, 2019. This report by staff resulted in the creation of the Responsible Engagement for the Development of Infrastructure (REDI) Task Force aimed at seeking financing and funding solutions for infrastructure.

Because of prior action taken by your Board (i.e. establishment the REDI task force) and due to the nature of the project concerns outlined in Nordic Aquafarms July 23rd presentation, your Board directed staff to return with funding and financing solutions regarding the infrastructure development on the Samoa Peninsula.

HISTORY OF INFRASTRUCTURE ON THE SAMOA PENNINSULA

The Samoa Peninsula has historically been a hub for commercial and industrial activity. Industrial operations on the peninsula date back into the late 1800's when the Vance Lumber Company purchased property from Samoa Land and Improvement Company which resulted in the construction of a large sawmill in 1892.

Georgia-Pacific Corporation purchased the Samoa sawmill complex in 1956 and began operation of a plywood mill in 1958. A more modern mill facility was constructed in 1964 and pulp mill operations commenced. The Samoa mill complex was later transferred to Louisiana-Pacific Corporation during a Federal Trade Commission action initiated in 1972.

After a series of ownership and operational changes, Evergreen Pulp closed the mill in October of 2008 after a global collapse of the banking industry that left Evergreen insolvent. New ownership purchased the Samoa mill assets in February of 2009 with plans to convert the mill to an integrated pulp and tissue plant that would convert forest residuals into consumer-ready, eco-friendly products. The projected cost of the plant conversion was \$400 million; however, the new owners were unable to secure the necessary financing for the conversion. As a result, the Samoa pulp mill permanently closed in September of 2010.

COUNTY OF HUMBOLDT'S PLANS FOR INFRASTRUCTURE ON THE SAMOA PENNINSULA

With the timber industry presence on the Samoa Peninsula greatly reduced, there are significant opportunities for re-use of existing industrial sites in this area. The Humboldt Bay Area Plan is currently being updated with an eye to facilitate redevelopment of these properties. A central component of this update is the place of the Coastal Dependent Zoning on the properties. An

File #: 19-1246

economic analysis has been prepared and is being used to inform ongoing discussions with property owners to determine the preferred scenarios for economic development. The information we have is there is demand for Coastal Dependent Uses on the peninsula as evidenced by Nordic's interest and other discussions with prospective aqua-culture uses.

The bigger planning issue associated with this discussion is ensuring that there are sufficient utilities to accommodate the uses which could be allowed on the coastal dependent industrial sites. The Nordic discussion has raised an issue that is much larger than the possible Nordic project. Aquaculture requires a large source of freshwater in addition to sea water. If the county wants to see these properties redevelop with Coastal Dependent Uses, the utility infrastructure must be in place to support those users.

There is another need here which needs to be addressed and makes this discussion crucial. Firefighting water for the peninsula comes from the industrial water line. There is currently sufficient water storage on the peninsula for existing development, but as growth occurs, it will be critical to ensure that firefighting water is provided.

It is important to acknowledge that those areas lacking in infrastructure on the Samoa Peninsula also fall into a congressionally established Opportunity Zone. Opportunity Zones are a new tool for community development. Established in the Tax Cuts and Jobs Act of 2017, Opportunity Zones provide tax incentives for investment in designated census tracts.

IMPACT OF PULP MILL CLOSURE ON WATER INFRASTRUCTURE

The Humboldt Bay Municipal Water District (HBMWD) was formed in November 1956 pursuant to the Municipal Water District Act of 1911, Water Code section 71000, et seq. One of the express intents and purposes of its formation was to induce Louisiana-Pacific Corporation and Crown-Simpson Corporation to locate their pulp mills within the District's boundaries.

At the time of the 1956 election, the voters of Humboldt County understood that the assurance of a water supply to the pulp mills was a means of inducing appellants to locate their mills in Humboldt County. (*Louisiana-Pacific Corp. v. Humboldt Bay Mun. Water Dist.* (1982) 137 Cal.App.3d 152, 154.)

During the years that the mill remained open and in operation, the HBMWD used the revenues paid by industrial users on the Samoa Peninsula to pay for maintenance and operational costs related to the supply and delivery of industrial water. However, with the closure of the mills, the HBMWD lacked sufficient revenues and resources to maintain the industrial line which fell into a state of deferred maintenance and disrepair.

The industrial water line is different from the domestic water supply line. The industrial water line comes from a diversion in the Mad River (surface water rather than from wells in the gravel bar) making the water turbid particularly during the high flows of the winter season. In order to address this the two pulp mills on the peninsula each had their own clarifiers to remove turbidity.

File #: 19-1246

At present, the industrial supply line does receive limited use, however the line leaks and due to lack of consistent water flow the line contains sediment. Moreover, many of the line's components (such as the valves, gates, screens, pumps, motors, electrical systems, etc.) have not received proper repair and maintenance in roughly a decade.

According to a study completed by an HBMWD consultant, the immediate cost to remedy deferred maintenance on the water intake is approximately \$3 million dollars. Additional water infrastructure upgrades and improvements for clarification of industrial water and for the reduction of turbidity (As, for example, is required for the Nordic Aquafarms project,) will range in cost from \$15 to \$50 million depending on scope and phasing of said project. A complete analysis on the condition of the actual line has not been completed

COUNTY OF HUMBOLDT'S LIABILITIES AND OBLIGATIONS FOR WATER INFRASTRUCTURE ON THE SAMOA PENINSULA

The County is not responsible to monitor the district and the debts and/or obligations of HBMWD will not default to the County. The issue is HBMWD has expressed concern about their immediate ability to provide water service to this industrial site and by extension to the entire Samoa Peninsula unless expensive maintenance is undertaken on the existing industrial water line facilities.

The statutory scheme under which the water district was formed (and currently exists) does provide ample methods for the water district to raise funds (including via bonds and taxation) to support the development of infrastructure.

HBMWD remains accountable for the industrial water supply infrastructure maintenance and repairs, but HBMWD has engaged the County for support, collaboration, and assistance.

On August 8th, 2019 Economic Development staff attended a HBMWD Board meeting to discuss ways that the County can help the HBMWD. These were presented by HBMWD staff to the HBMWD board on August 8th, 2019 and were identified as;

- Letters of support for grant and financing applications.
- Consider being a co-applicant for financing.
- MOU between HBMWD and County for project cooperation.
- Assistance in reaching out to state/federal counterparts
- Assistance in reaching out to state elected officials.
- Assistance with identifying appropriate site for clarifier facility.
- Assistance with identifying potential funding solutions.
- Assistance with connecting HBMWD with GoBIZ.
- Investigate possible financing options by the County. I.E. COP's or other.

IMPACTS OF THE CONTINUATION OF DEFERRED MAINTENANCE AND REPAIR ON INDUSTRIAL WATER INFRASTRUCTURE

File #: 19-1246

The HBMWD water rights are up for review by the State Water Resources Control Board in 2029. Because the closed pulp mills made up for the majority of demand for industrial water supply, the HBMWD's water use has been reduced by approximately 80 percent. Unless a new beneficial user of water is found, the districts water rights may be in jeopardy. Given the effects of climate change, and the demand for water elsewhere in the state, the loss of water rights for Humboldt County may be an irreversible event. Furthermore, a continuation of deferred maintenance and repair on the Samoa Peninsula industrial water line puts Humboldt County and its residents at a disadvantage for attracting and securing new and ongoing business opportunities on the peninsula.

PARTNERSHIP OPTIONS

1. Your Board may want to consider the County's position with regards to water and other infrastructure development on the Samoa Peninsula and determine whether or not the County should engage as a partner with external agencies-for the financing and development of said infrastructure. Partnership options for the development of infrastructure on the Samoa Peninsula include:
 - No partnership or extraordinary levels of assistance to HBMWD or other external agencies beyond that for which the County is obligated.
 - A continuation of non-committal and "soft" level assistance. This is the current level of assistance that is being provided to the HBMWD and external agencies.
 - Exploration of those items identified by the HBMWD staff in its August 8th, 2019 to its Board concerning ways that the County can help the HBMWD.
 - Direct partnership with external agencies and project stakeholders through potential MOU's, contracts, co-applications, or the formation of a JPA aimed at infrastructure development on the Samoa Peninsula.

Of the aforementioned partnership options, staff has identified, through its due diligence, that the establishment of a Joint Powers Authority (JPA) aimed at infrastructure development on the peninsula may offer all stakeholders involved the greatest level of flexibility and opportunity for securing financing and funding for infrastructure improvements. Staff has reviewed this option with staff from the HBMWD and the Humboldt Bay Harbor, Recreation and Conservation District and there does seem to be general interest amongst the parties for exploring this option.

Exploration of a JPA will also include the financial feasibility of such a JPA, as well as financing options for the development of infrastructure on the Samoa Peninsula. There are many financing options for funding infrastructure. Since receiving prior direction from your Board, Economic Development staff have been engaged in discussions with the EDA, USDA, California iBank, and other financing agencies to discuss a variety of funding options available to the County (and external agencies) for the development of infrastructure, including but not limited to;

File #: 19-1246

- Industrial Development Bonds (IDBs)
- Exempt Facility Bonds
- Public Agency Revenue Bonds (PARBs)
- California iBank Loan
- USDA Rural economic development grants and loans
- EDA Grants and loans

Staff Recommendation

Direct staff to explore the creation of a Joint Powers Authority with public agencies with a vested interest at infrastructure development on the Samoa Peninsula and report back to your Board.

BUSINESS DEVELOPMENT AND ONGOING PROJECT OPPORTUNITIES ON THE SAMOA PENINSULA

While the discussion regarding infrastructure development on the Samoa Peninsula continues, the Economic Development team (as well as other County agencies and staff) continue to have discussions with numerous developers regarding potential business and employment opportunities for the Samoa Peninsula. The outcome of these discussions will have a direct impact on developers' interest and ability to pursue projects in Humboldt County.

By way of real example; the Nordic Aquafarms operations team must present its final site conclusions and findings to its Board of investors on September 15th, 2019. Depending on the perceived ability of the County of Humboldt and external agencies to work together to resolve infrastructure challenges, Nordic Aquafarms' investors may elect to forgo Humboldt County as a viable site for its project and investigate other sites along the west coast for its RAS facility.

Staff Recommendation

That your Board direct the Board Chair to sign the Letter of Support for Nordic Aquafarms.

FINANCIAL IMPACT:

Depending on your Board's actions today, and the direction given to staff, the financial impact to the County may vary. These impacts can be presented in greater detail and provided to your Board for further review as part of future staff reporting on any action taken today on staff's recommendation.

STRATEGIC FRAMEWORK:

This action supports your Board's Strategic Framework by supporting business, workforce development and creation of private-sector jobs .

OTHER AGENCY INVOLVEMENT:

County of Humboldt Treasurer - Tax Collector, County of Humboldt Planning and Building, Humboldt Bay Municipal Water District (HBMWD)

ALTERNATIVES TO STAFF RECOMMENDATIONS:

File #: 19-1246

Board discretion

ATTACHMENTS:

1. Nordic Project Fact Sheet - NAF One-Pager
2. 2019 July HBMWD letter to BOS
3. HBMWD Industrial pipeline map
4. Humboldt County Opportunity Zone Map - HUMCO OZ MAP
5. Letter of Support for Nordic Aquafarms

PREVIOUS ACTION/REFERRAL:

Board Order No.:

Meeting of: May 21st, 2019, July 23rd, 2019

File No.: 19-642, 19-1048



HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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

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

FAX 707-443-5731 707-822-8245

EMAIL OFFICE@HBMWD.COM

Website: www.hbmwd.com

BOARD OF DIRECTORS
SHERI WOO, PRESIDENT
NEAL LATT, VICE-PRESIDENT
J. BRUCE RUPP, SECRETARY-TREASURER
BARBARA HECATHORN, DIRECTOR
MICHELLE FULLER, DIRECTOR

GENERAL MANAGER
JOHN FRIEDENBACH

July 23, 2019

Board of Supervisors
825 5th Street
Eureka, CA 95501

RE: Water Infrastructure on Samoa Peninsula

Dear Supervisors,

As you may be aware the Humboldt Bay Municipal Water District was formed in the 1950's to attract industry and supply water (untreated surface water) from the Mad River to two pulp mills which were located on the Samoa Peninsula. Our District entered into contracts with the two pulp mills to provide up to 65 MGD (million gallons per day) of untreated water from the Mad River. Both pulp mills constructed and maintained on-site clarifiers to remove/reduce the turbidity from the industrial water prior to utilizing it in their pulp making process. As you also know, the first pulp mill ceased operation in the mid 1990's and the second in 2009.

Since that time, our District, through its public engagement process which we call our Water Resource Planning effort, has been seeking alternate beneficial uses of our excess water. The three focus areas as determined by that public process are: 1) Local Sales; 2) Instream Flow; and 3) Transport. Our Board has allocated 20 MGD to Local Sales; 20 MGD to Instream Flow; and 35 MGD to Transport.

In regards to your discussion today regarding water infrastructure on the Samoa Peninsula, as mentioned above, our industrial system remains operational but has received minimal maintenance during the past 10 years. Consequently, it will need significant capital improvements to once again provide a reliable industrial water supply 24/7/365. In addition, the issue of rehabilitating the existing clarifiers on the peninsula or siting and constructing a new clarifier needs to be addressed. Our District is willing to collaborate with the County, the Humboldt Bay Harbor District, Nordic or others to seek State or Federal grant funding to address these water infrastructure capital needs which will ultimately benefit our local economy.

We are available to discuss this further with you and your staff.

Regards,


John Friedenbach
General Manager

Humboldt County Opportunity Zone (OZ) Map


[Ask the Wizard](#)
[Contact Us](#)
[Settings](#)



[Home](#)
[News](#)
[State Strategy](#)
[State Agencies](#)
[FAQs](#)
[Search](#)

The State Integrated Opportunity Zone Map depicts Opportunity Zones (OZs) within California and State investments in these zones in key priority areas, including Caltrans transportation projects, Air Resources Board low carbon projects and High Speed rail investments within OZ boundaries.

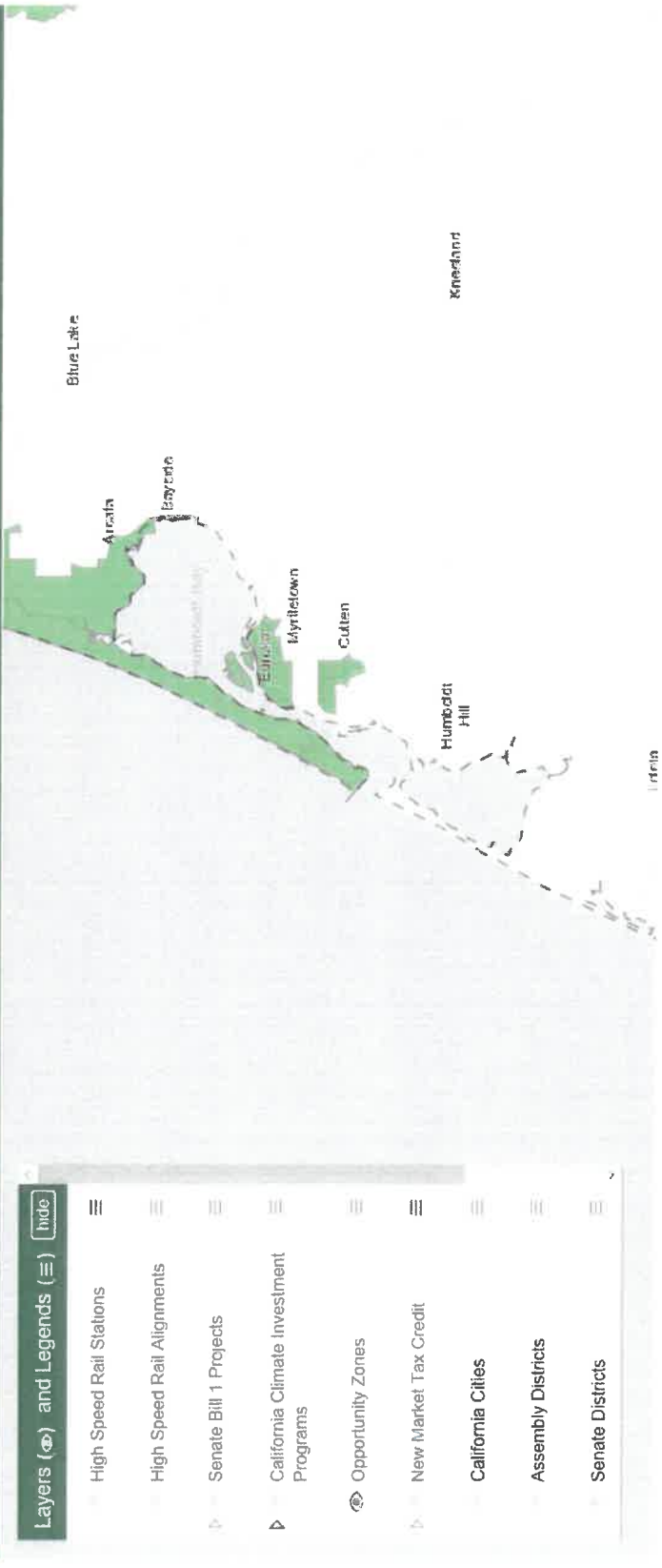
Sign up to receive updates when the site adds additional co-investment opportunities.

State Integrated Opportunity Zones Interactive Map

Enter Address

Layers (☒) and Legends (☰) hide

- High Speed Rail Stations
- High Speed Rail Alignments
- Senate Bill 1 Projects
- California Climate Investment Programs
- Opportunity Zones
- New Market Tax Credit
- California Cities
- Assembly Districts
- Senate Districts



From Letters to the Editor in Mad River Union August 14, 2019 Edition**A fishy Aquafarm**

The July 31 **article** about Nordic Aquafarms asking for financial help from the Humboldt Bay Municipal Water District (HBMWD), the County of Humboldt, California and the Feds to build their proposed fish farm in Samoa started smelling fishy to me the more I read it.

Earlier this year, Nordic said they had thoroughly researched the entire West Coast and found that Humboldt Bay's Samoa site "... meets all of our criteria for building a safe, clean, and sustainable fish farm."

Since fish need water to live in, I would think their research would have already included the quality of the fresh water that they were going to buy from HBMWD for their fish farm.

Wrong. Nordic's president Erik Heim said last week that, "the freshwater source [from the Mad River] does have its challenges in terms of turbidity and bacterial spikes during parts of the year – and it's not suitable for aquaculture."

He went on to say that the feasibility of the project will require money from all sources, by the way funded with our tax dollars, to fix the problems they seem to have just recently identified. Bogus. It would have taken one hour of Nordic's time to get the last 50 years of turbidity and bacterial levels from HBMWD if they really wanted to know all this when the project was first proposed.

Heim also asserted that Nordic didn't know there were earthquakes or tsunamis in the area and they also want our tax dollars to mitigate for those potential problems. And, somehow Nordic didn't know that the Samoa site had any environmental problems, so, of course they also want more money for toxic cleanup. Everything smelled like roses earlier this year when Nordic Aquafarms proposed investing \$400,000,000 to get this project going, now it smells like really stinky fish. What I've read about Nordic Aquafarms' other fish farms in Scandinavia and Maine suggests that they are not the environmental stewards they make themselves out to be. This was a corporate scam from the beginning and the sensible thing is to say "NO!"

**Rocky Drill
Arcata**

Mad River Union
Aug. 28, 2019

Nordic Aquascam

After observing the operations of Nordic Aquafarms here in Belfast, Maine, the content of Rocky Drill's August July 14 letter to the editor comes as no surprise.

Ever since Nordic went public with its Belfast plans a year and a half ago, the company has been changing its tune.

First Nordic said its Belfast project wouldn't pollute – at all – and now the company admits its Belfast project would spew 7.7 million gallons of effluent discharge and 1,600 pounds of nitrogen per day into the already environmentally challenged Belfast Bay.

At first Nordic said its effluent discharge pipe would extend 1.5 miles out to sea. Then it was a mile. And now it's one kilometer (.62 miles).

But these figures have never been accurate because they reflect the length of the entire pipe, which would be .3 miles on land. And Nordic's website still cites the one-mile figure fully one year after the company shortened it to one kilometer.

Nordic has misled Belfast in other ways. In a public information meeting last year, Nordic CEO Erik Heim said farm salmon is the most efficient way to produce protein.

This is simply false. It is much more efficient to grow soy and eat it than it is to grow soy, feed it to farm salmon and then eat the salmon.

Nordic even misled the Maine legislature. After saying repeatedly that fish can escape from land-based fish farms, Nordic told the legislature's Joint Standing Committee on Agriculture, Forestry and Conservation that fish couldn't escape from a land-based fish farm. In fact, there have already been cases in which thousands of fish have made such escapes.

This is important because farm fish can carry diseases to which wild fish are not accustomed and have no defense, because farm fish can breed with wild fish and produce offspring incapable of handling open-water challenges, and because farm fish can compete with wild fish for spawning grounds and can destroy the eggs of wild fish.

And the list goes on. Rocky Drill is right: Nordic's plans in California have been a scam from the beginning, just as they have been in Maine, and the only sensible thing to do is to reject Nordic's projects in both places.

Lawrence Reichard
Belfast, Maine



HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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

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

FAX 707-443-5731 707-822-8245

EMAIL OFFICE@HBMWD.COM

Website: www.hbmwd.com

BOARD OF DIRECTORS

SHERI WOO, PRESIDENT

NEAL LATT, VICE-PRESIDENT

J. BRUCE RUPP, SECRETARY-TREASURER

BARBARA HECATHORN, DIRECTOR

MICHELLE FULLER, DIRECTOR

GENERAL MANAGER

JOHN FRIEDENBACH

August 29, 2019

Robert Shaver
General Manager
Alameda County Water District
43885 S. Grimmer Blvd.
Fremont, CA 94538

Alex Coates
General Manager
East Bay MUD
PO Box 24055
Oakland, CA 94623

Jerry Brown
General Manager
Contra Costa Water District
1331 Concord Avenue
Concord, CA 94520

Norma Camacho
Chief Executive Officer
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118

Steve Ritchie
Assistant General Manager, Water Enterprise
SF PUC
525 Golden Gate
San Francisco, CA 94102

Re: Water Resource Planning Update

Greetings!

I noticed in the ACWA update that Region 5 is having an upcoming event – Water Supply & Reliability: Agencies Working Together for Bay Area Regional Reliability. Our District has met with and been in communication with your agencies since 2013 regarding our water availability here on the north coast. We still have up to 35 MGD of water available for transport. We just wanted to keep you up to date and remind you of the availability. Feel free to contact me if you have any questions.

Respectfully,

John Friedenbach

Encl: Letter from May 8, 2015
Water Supply Fact Sheet



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

BOARD OF DIRECTORS

BARBARA HECATHORN, PRESIDENT
ALDARON LAIRD, VICE-PRESIDENT
J. BRUCE RUPP, SECRETARY-TREASURER
KAITLIN SOPOCI-BELKNAP, DIRECTOR
SHERI WOO, DIRECTOR

GENERAL MANAGER

CAROL RISCHE

May 8, 2015

Robert Shaver
General Manager
Alameda County Water District
43885 S. Grimmer Blvd.
Fremont, CA 94538

Alex Coates
General Manager
East Bay MUD
PO Box 24055
Oakland, CA 94623

Jerry Brown
General Manager
Contra Costa Water District
1331 Concord Avenue
Concord, CA 94520

Beau Goldie
Chief Executive Officer
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118

Steve Ritchie
Assistant General Manager, Water Enterprise
SF PUC
525 Golden Gate
San Francisco, CA 94102

Re: Water Resource Planning Update– Pipeline Reconnaissance Study

Dear Messrs. Shaver, Coates, Brown, Goldie, and Ritchie

In March 2013, we met with you (or your senior staff) to introduce the District and our unique situation with respect to an available water supply. The purpose of this letter is to provide an update regarding our Water Resource Planning efforts and to transmit a Pipeline Reconnaissance Report which was not available at the time we met. We would welcome the opportunity to speak with you again regarding possible interest in advancing consideration of a water transfer.

Introduction

The Humboldt Bay Municipal Water District (HBMWD) is a regional water supplier that provides drinking water on a wholesale basis to seven municipal agencies located in and around Eureka, California. HBMWD's current average annual municipal demand is approximately 10 million gallons per day (MGD). Until recently, HBMWD also supplied up to 60 MGD of untreated water to two large industrial customers - pulp mills who converted wood waste generated by the timber industry into a useful product.

The District is in a unique situation among California water agencies. Given loss of the pulp mills, we are currently using less than 20 percent of the water supply that is permitted and reliably available. Several years ago, HBMWD embarked on a collaborative community process to plan for its future in light of California's use-it-or-lose-it water rights policy, significant revenue reduction given loss of the mills, and the region's commitment to sustainability and use of local resources for local benefit.

The District is committed to an integrated, fiscally and environmentally sustainable solution. HBMWD hopes to advance consideration and eventual pursuit of three water-use options: 1) restore some degree of local water use by attracting new commercial or industrial users; 2) transfer water to another municipality outside the District for responsible municipal use; and 3) dedicate a portion of the available water for in-stream flows in the Mad River for environmental enhancement pursuant to Section 1707 of the California Water Code.

Transfer

The District initially explored transferring water only via a marine-based mode. When we met in 2013, we shared the results of a "Reconnaissance Evaluation - Financial Viability Transporting Potable Water by Sea" which found the cost of moving water via tanker or barge to be prohibitively expensive. We also learned that your systems are designed to receive source water from the east given the CVP, SWP and other projects which receive Sierra-generated water supplies.

Given interest expressed by several agencies, and after consultation with our Advisory Committee and stakeholder groups, the District decided to conduct a companion reconnaissance-level study to assess possible pipeline routes. The District engaged GHD (formerly Winzler & Kelly Consulting Engineers) to assess the feasibility and develop cost estimates for the most viable routes. The purpose of the study is to develop alternative feasible pipeline routes to transfer HBMWD water to potential customers to the north, south or east of the District's current service territory. The study explored routes in three general directions: 1) east then north to the Trinity River system, 2) east to the State Water Project (which provide access to Bay Area agencies), and 3) south to Mendocino and Sonoma Counties with service options to southern Humboldt. All pipeline routes initiate at the District's Essex diversion facility on the Mad River near Arcata. The study presents WaterCAD model results and estimated design, permitting, and construction costs, as well as operation and maintenance costs, for what appear to be two of the most feasible routes. The study calculates a cost estimate (\$/acre-foot) for delivery of water. The study also summarizes initial feedback provided by stakeholders.

Next Steps

Our District has a preference for a finding solution "closer to home," ideally in the north coast region. To that end, we shared the pipeline reconnaissance study within our region first. It is under consideration by a number of agencies in Sonoma and Mendocino counties. Given that the Bay Area market is within northern California just beyond the north coast region, we wanted to share the pipeline study with you too to assess your interest should a north-coast project not materialize. We are available to answer questions and would be happy to schedule another meeting with you or your staff.

Sincerely,

Carol Rische
General Manager

Enclosures:

- March 13, 2013 letter introducing HBMWD and availability of water for transfer
- Pipeline Routes Reconnaissance-Level Pipeline Study

C c: John Winzler, Pat Kaspari, Alex Culick GHD
Jim Fielder, COO Water Utilities Enterprise, Santa Clara Valley Water District
Michael Tognolini Manager, Water Supply Improvements, East Bay MUD

THE DISTRICT

The Humboldt Bay Municipal Water District (District) was formed in 1956 pursuant to the Municipal Water District Act. The District was created to develop a regional water system that provides a reliable supply of drinking and industrial water to customers in the greater Humboldt Bay area of Humboldt County, California.

WATER RIGHTS

The District has been granted water rights permits for municipal and industrial water use that allow the District to store 48,030 acre-feet (AF) of water from the Mad River at Ruth Lake reservoir and then divert up to 75 million gallons per day (MGD) at its diversion facilities located 70 miles downstream on the Mad River near Arcata. These water rights and the District's storage and diversion facilities allow the District to deliver a highly reliable year-round water supply of 75 MGD (84,000 AFY).

DISTRICT WATER USES

The regional water system is comprised of two delivery systems – a domestic water system which supplies drinking water and a separate industrial water system which supplies raw river water. The District operates at the wholesale level supplying drinking water to seven public agencies. For over 40 years, the District also supplied water to two very large industrial users (pulp mills). Approximately 75 percent of the District's delivery capacity is available on the industrial water system (which is 60 MGD). Both pulp mills ceased operations with no prospect of resuming. As a result, water use on that system is now zero. Attachment 1 shows the water use on each system over the past 40-plus years.

CURRENT CHALLENGES

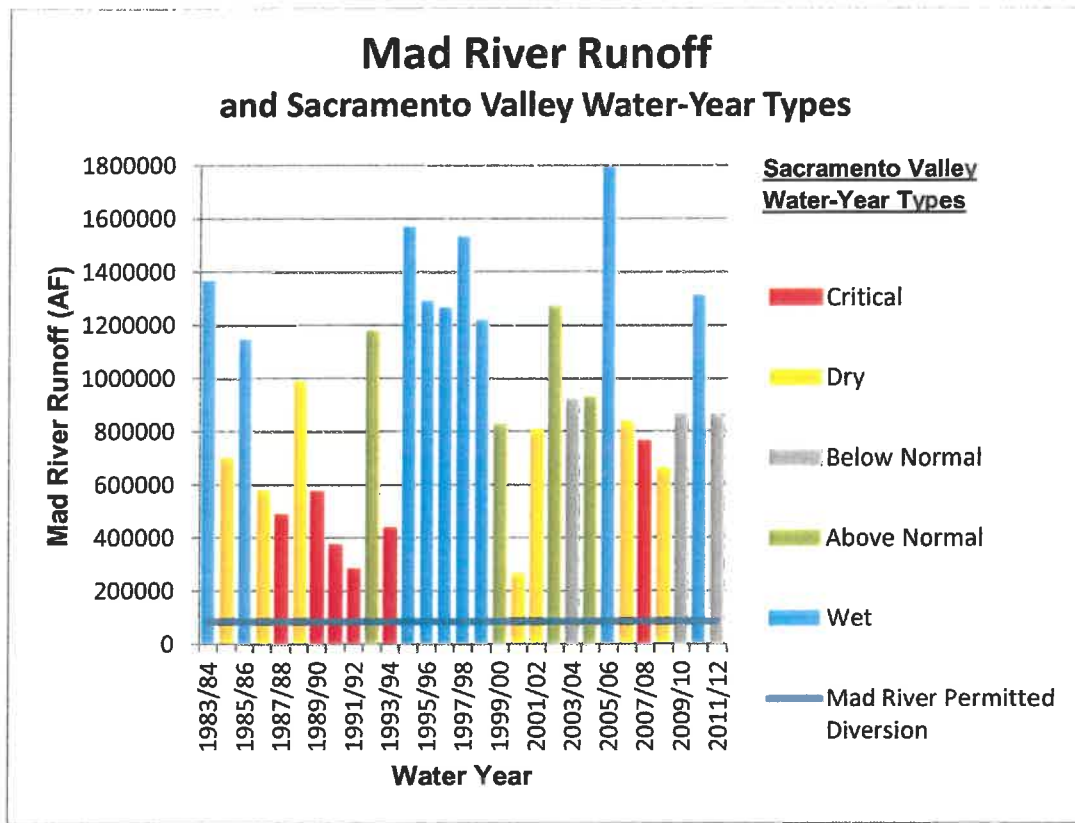
The loss of the District's industrial customers has resulted in a significant reduction in revenues necessary to cover the costs of operating, maintaining and improving the regional water system, thereby triggering cost increases to the District's municipal customers. Additional revenues are desired to offset the current ratepayer burden of covering the costs of the regional water system.

WATER SUPPLY – HIGH RELIABILITY

The District has a highly reliable, abundant water supply due to its location within California's water-rich north coast region which experiences frequent and heavy precipitation. The District's operations are located in the Mad River watershed where precipitation ranges from 30-40 inches per year near the coast up to 100 inches per year in the upper watershed. As a result, river runoff and Ruth Lake reservoir levels consistently exceed District needs.

Historical annual runoff of the Mad River Basin averages approximately 1 million AFY. This significantly exceeds the District's permitted water allotment of 84,000 AFY, which comprises only 8.5 percent of that average annual runoff. Figure 1 shows the Mad River runoff and Sacramento Valley Water Years and demonstrates the reliability of the District's water supplies. The water resources within the North Coast region are generated predominantly from rainfall rather than snowpack and are projected to be relatively insulated from the effects of climate change compared to the rest of California.

Figure 1. Mad River Watershed Runoff by Sacramento Valley Water-year Types



WATER SUPPLY – HIGH QUALITY

The quality of the District's raw water supplies is extremely high. Due to its sparsely populated and largely undeveloped watershed, the Mad River is minimally exposed to common sources of contaminants or watershed hazards such as agricultural fertilizers, chemicals or heavy metal-tainted urban runoff. The raw water is low in mineral content. Turbidity levels are normally low, but increase during or following winter storm events.

POTENTIAL CHALLENGES - CLIMATE CHANGE AND REGULATORY UNCERTAINTY

Many water agencies in California recognize that long-term water supply planning is an ongoing responsibility to their customers. California law requires that agencies plan for water demands at least twenty years in the future; however forward-looking agencies are now planning for estimated demands 30, 40 or 50 years in the future.

No one can accurately predict the future; however, it is highly likely that there will be major challenges for water agencies during the next half-century.

First, there will be the need to adapt to the ongoing challenges of projected climate change. Although a warming climate is expected to increase total precipitation in areas like the north coast region, current global model projections estimate that the Sierra snowpack could be about half of its current size and water content by mid-century and may disappear by the end of the century. Because the Sierra snowpack holds most of the water delivered by the Central Valley Project and the State Water Project, finding alternative ways to capture water and/or addressing reduced yield will be a major challenge.

Second, and related, as water supplies decrease there will be increased competition for the limited supplies to meet agricultural, environmental and urban demands. That competition may lead to renewal of the "water wars" and further decrease water supply reliability.

Third, in the absence of a fully implemented Bay Delta Conservation Plan, reliable conveyance through the Delta will likely remain uncertain given continued regulatory challenges. Additionally, the Delta levee system is vulnerable to natural disasters (e.g. earthquakes) and, if damaged, would adversely affect water supply reliability.

A prudent water agency will look to water supplies that mitigate these uncertainties to diversify their portfolio and improve supply reliability.

POTENTIAL TERM AND QUANTITY

The District has abundant high quality supplies that greatly exceed its current or projected needs. The District is seeking new water uses for up to 40 to 50 MGD. As part of this effort the District is contemplating a long-term (30-40 years) transfer of 30-40 MGD (34,000-45,000 AFY).

The District is seeking a cooperative agreement with potential purchaser(s) to explore and advance a water transfer. The District contemplates this would likely occur in two phases. An initial period (5-10 years) would be spent conducting necessary technical studies, obtaining regulatory approvals, performing environmental reviews under NEPA and CEQA, and designing and constructing required infrastructure. The main term of the agreement (25-30 years) would allow the parties to finance and amortize any infrastructure needed for the proposed transfer. The District is willing to consider subsequent terms (5-10 years each), subject to demand for water within Humboldt County and other factors.

**HUMBOLDT BAY MUNICIPAL WATER DISTRICT
WATER SUPPLY FACT SHEET**

SECTION H16 PAGE NO. 7

POTENTIAL PRICE

The purchasing entity will need to pay a per-unit (acre-foot) price that covers the District's fixed and variable costs to provide that water through its Industrial Water System as well as an appropriate contribution to the cost of the District's regional water system in Trinity and Humboldt Counties which provides the reliable water supply.

The purchasing agency will also need to pay the costs of transporting water from Eureka to its service area including requisite infrastructure construction costs.

POTENTIAL DELIVERY MECHANISMS

The District is interested in exploring the viability of marine-based conveyance given the distance and geographic challenges between Humboldt County and the Bay Area, or other coastal areas in northern California. The District realizes that marine-based conveyance to transfer water – whether by barge, ships, or “water bags” - would be new and unique in California and not without its challenges. Small scale operations existed in the Mediterranean. Several entities have considered this mode of conveyance, including the City of San Diego who considered a Marine Transport Demonstration Project in the late 1990's. The Metropolitan Water District of Southern California acknowledged that “water bag technology is feasible and could potentially be applied for emergency use or regular water supply.”

To initiate consideration of marine-based conveyance, the District completed a Reconnaissance Evaluation which explores moving water by tanker, tug and barge, or water bags. The evaluation includes a very preliminary economic analysis based on information provided by shipping companies and maritime consultants. Based on this preliminary investigation the estimated costs to ship water from Eureka to the San Francisco Bay appear very high. However, shipping company representatives indicated the costs are overstated and they would be willing to refine the shipping options and costs if a more serious proposal emerges.

While the current preliminary cost estimate greatly exceeds the present cost of water available to Bay Area agencies, the District's water supply may be competitive in the future due to the reduced reliability of the Central Valley Project and the State Water Project. As mentioned above, there are projections indicating that the Sierra snowpack (which provides storage for most of the water released from rim reservoirs) could be substantially reduced in the next 30-40 years. If that occurs, the water supply reliability of the two projects will be reduced. Under those circumstances, an agency may find that the increased cost of water from the District is a worthwhile investment to round out its portfolio to improve supply reliability.

Once an interested agency is identified, the technical feasibility and associated cost estimate will be refined.

T|L|G Thomas Law Group

TINA A. THOMAS

AMY R. HIGUERA
CHRISTOPHER J. BUTCHER
Senior CounselANNE L. BAPTISTE
BRITTANY N. BRACE455 CAPITOL MALL, SUITE 801 | ONE KAISER PLAZA, SUITE 875
SACRAMENTO, CA 95814 | OAKLAND, CA 94612Telephone: (916) 287-9292 Facsimile: (916) 737-5858
www.thomaslaw.comNICHOLAS S. AVDIS
Of Counsel

August 29, 2019

Mr. John Ford, Director and
Planning Commissioners
Humboldt County Planning and Building Department
3015 H Street
Eureka, CA 95501**RE: Application by Michael Brosgart and Arielle Brosgart; APN 516-111-064**

Dear Director Ford and Commissioners:

Thomas Law Group submits this letter on behalf of Humboldt Bay Municipal Water District (District) to express concern about the County's intent to approve the proposed Glendale Cannabis project (Project), to be located at APN 516-111-064, on the property known as 1691 Glendale Drive, McKinleyville, CA 95519, based on an environmental analysis contained in a mitigated negative declaration (MND). As discussed in detail below, the County must analyze the proposed Project in an environmental impact report (EIR) to properly understand the scope of impacts before it makes a determination on whether to approve the Project.

The Project proposes volatile and non-volatile extracting manufacturing, processing, and distribution on a 1.77 acre site that lies approximately 550 feet from Hall Creek, which drains into the Mad River, and approximately 2,000 feet from the Mad River itself.

The District is a municipal water district, which supplies high quality water to the greater Humboldt Bay Area, including 88,000 residents of Humboldt County. It operates intake wells in the Mad River, which are located downstream of both the Project site and the point at which Hall Creek flows into the Mad River.

The District is concerned that Project construction and operation will result in contaminated soils and groundwater flowing into Hall Creek to the Mad River and, ultimately, into the District's downstream intake wells. An EIR is required because there is a fair argument that the Project may result in significant environmental impacts related to contaminated soil and groundwater. In addition, the MND fails to analyze the impacts of a "foreseeable" spill or accident involving hydrocarbon based solvents. Further, adoption of the MND is improper because the County failed to provide proper notice to the District, as required by law.

1. The Project Improperly Relies on a Mitigated Negative Declaration Where There is a Fair Argument that the Project Will Result in Significant Environmental Impacts Related to Contaminated Soils and Groundwater.

A lead agency may not rely on an MND for project approval where substantial evidence supports a fair argument that the project may have a significant impact on the environment. (*Clews Land & Livestock, LLC v. City of San Diego* (2017) 19 Cal.App.5th 161, 183-184.) This standard sets a “low threshold” for preparation of an EIR, such that an EIR must be prepared if there is a “reasonable probability” that the project will result in a significant impact. (*Consolidated Irrig. Dist. v City of Selma* (2012) 204 Cal.App.4th 187, 207; *Sundstrom v County of Mendocino* (1988) 202 Cal.App.3d 296, 309, citing *No Oil, Inc. v. Los Angeles* (1974) 13 Cal.3d 68, 83, fn. 16.) Here, there is a reasonable probability that contaminated soil and groundwater will be disturbed during Project construction, which may result in a significant environmental impact.

Impacts Related to Potential Pentachlorophenol Contamination

The Project site is located on land that was used for timber processing for decades. The timber processing activities included the use of highly toxic pentachlorophenol (PCP) and tetrachlorophenol (TCP) wood preservatives. Use of these chemicals led to significant levels of contamination beneath and near the “green chain,” which was a conveyor system where lumber was moved, sorted, and submersed in solutions containing PCP and TCP. Figure 2 in the Phase II shows that the former “green chain” lies approximately 700 feet to the west of the Project site.

The MND suggests that the contaminated area near the green chain was remediated under DTSC oversight. In doing so, the MND improperly relies upon the 2003 Phase II and fails to address the fact that remedial measures have failed, such that PCP concentrations have skyrocketed above the maximum contaminant level (MCL) of 1 µg/L at numerous monitoring wells surrounding the former green chain. Grab groundwater samples in 2005 contained PCP and TCP concentrations as high as 16,000 µg/L and 1,500 µg/L, respectively. (Exhibit A [DTSC Decertification Letter, Dec. 28, 2018], p. 3.) DTSC explained that groundwater elevations rose approximately 15 feet since 2002 causing groundwater to come into contact with PCP- and TCP-impacted soil, which has resulted in “mobilizing hazardous substances from soil to groundwater.” (*Ibid.*) During the most recent groundwater sampling event of monitoring wells surrounding the former green chain area, PCP levels exceeded the MCL in 4 of 8 wells sampled, reaching as high as 570 µg/L, and the levels of PCP in each of those wells had increased since the prior sampling event in 2016. (Exhibit B [Second Quarter 2017 Groundwater Monitoring Report], p. 4-1, 5-1.) Significantly, PCP levels increased and exceeded the MCL at MW-11—the monitoring well closest to the Project site. (Exhibit B, Figure 3 & Table 2.) **In December 2018, DTSC rescinded the prior Remedial Action Certification finding “soil and groundwater contamination at the Site is not under control and the implemented remedial actions are no longer protective of human health and the environment.”** (Exhibit A, p. 1.)

The depth to groundwater at the Project site may be as little as 7 feet below ground surface. The MND states construction of the sewer line would require excavation to depths of 6-8 feet. Given DTSC’s finding that groundwater contamination is no longer under control and remedial actions are no longer protective of human health and the environment, it is possible that the groundwater under the site is

contaminated with PCP and has contaminated the soil at the Project site as well. Therefore, it is possible that contaminated groundwater and soil will be encountered during excavation. Moreover, installing sewer lines will provide a preferential pathway likely to further exacerbate migration of any contaminants present in the soil or groundwater. Accordingly, further study is necessary to determine: (1) the extent of contamination at the Project site; (2) whether installing a sewer line will exacerbate the plume's migration; and (3) the environmental impact of excavating potentially contaminated soil and groundwater.

As the water provider for 88,000 residents of Humboldt County, the District is concerned that construction activities will result in PCP from contaminated groundwater and soil flowing into Hall Creek to the Mad River and, ultimately, into the District's downstream intake wells. At minimum, the fact that the PCP plume is migrating and may have contaminated the Project site constitutes substantial evidence to support a fair argument that the Project may result in a significant environmental impact.

Impacts Related to Potential Hydrocarbon Contamination

In addition, part of the Project will involve volatile extraction manufacturing, using hydrocarbon based solvents. The MND fails to analyze the potential environmental impacts related to potential hazardous material spills on site arising from the transport, storage, or use of the hydrocarbon solvents on the Project site. While the MND recognizes that a spill or accident involving the solvents is "foreseeable," it simply concludes, without analysis, that such a spill or accident would be unlikely to create a significant hazard to the public or environment. In particular, the MND fails to address the potentially significant impact to the District's water supply if a hazardous material release occurred on the Project site. Given that the MND admits hazardous material "spill or accident conditions" are "foreseeable," an EIR is required to analyze the impacts of such a spill or accident on the environment, particularly on the County's drinking water supply.

2. The County Failed to Comply with CEQA's Notice Requirements.

One of CEQA's primary purposes is to ensure informed decisionmaking and public participation. (*Clews Land & Livestock, LLC, supra*, 19 Cal.App.5th at p. 183.) "[N]oncompliance with the information disclosure provisions of [CEQA] which precludes relevant information from being presented to the public agency . . . may constitute a prejudicial abuse of discretion . . . regardless of whether a different outcome would have resulted if the public agency had complied with [the information disclosure] provisions." (Pub. Resources Code, § 21005(a).)

CEQA requires notice of the intent to adopt a mitigated negative declaration to individuals and organizations that previously submitted written requests for notice. (Pub. Resources Code, §§ 20192(b)(3), 21092.2(a); CEQA Guidelines § 15072(b).) On May 21, 2018, the District submitted a written request for notice of all development projects within the Mad River Watershed proposed under Industrial/Commercial related zoning. Despite its request, the District was not properly notified of the County's intent to adopt the MND. Because the MND was sent to the State Clearinghouse, the statutorily required notice and comment period was to run 30 days. (CEQA Guidelines, § 15073(a).) Accordingly, the public notice and comment period was open from April 4 to May 3, 2019. However,

the District was not provided notice until April 15, 2019, 11 days into the comment period. This constitutes a failure to provide proper notice pursuant to CEQA sections 21092(b)(3) and 21092.2(a) as well as Guidelines section 15072(b).

Additionally, CEQA Guidelines section 15073(c) requires a notice of intent to adopt a proposed MND be sent to every “public agency with jurisdiction by law over resources affected by the project.” Given that the District is legally authorized to supply drinking water to the residents of Humboldt County and that the Project could impact drinking water supplies of over 80,000 customers, the District is unquestionably a public agency with legal jurisdiction over a resource affected by the Project. As discussed above, the County failed to provide timely notice to the District because it did not notify the District of the intent to adopt the MND until 11 days into the notice and comment period. Because the County provided less than 30 days’ time to the District to comment on the Project, the County failed to comply with CEQA Guidelines section 15073. A failure to provide notice to public agencies listed in CEQA Guidelines section 15073 may constitute prejudicial error, warranting the MND to be set aside. (*Fall River Wild Trout Foundation v. County of Shasta* (1999) 70 Cal.App.4th 482, 493 [finding prejudicial abuse of discretion arising from lack of notice to relevant public agency]; see *Gentry v City of Murrieta* (1995) 36 Cal.App.4th 1359, 1387-1388 [“caution[ing] that the initial study is not necessarily the *only* basis for finding that a proposed negative declaration must be sent to another public agency” with jurisdiction over an affected resource and concluding that failure to notify a public agency as required under CEQA Guidelines section 15073(b) constituted an abuse of discretion] (emphasis original).) Had the required notice been timely provided to the District, the District would have lodged the above arguments in opposition to the MND within the notice and comment period. (See *Fall River Wild Trout Foundation, supra*, 70 Cal.App.4th at p. 493 [discussing prejudice to the public based on unavailability of comments from relevant agency due to lack of notice to the agency].)

In sum, adoption of the MND is improper on procedural and substantive grounds. The County failed to provide notice as required by CEQA, impairing informed decisionmaking and public participation. Furthermore, there is substantial evidence to support a fair argument that the Project may have significant environmental impacts related to contamination of soils and groundwater on the Project site. An EIR is required to adequately analyze these impacts and provide mitigation to prevent any potential contamination of District water.

Respectfully,



Anne Baptiste

cc: Humboldt Bay Municipal Water District
California Department of Toxic Substances Control
California Department of Fish and Wildlife
Humboldt Baykeeper

Exhibit A

Available at

https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/8383564591/Decertification%20%5BDTSC%2012-28-18%5D.pdf



Department of Toxic Substances Control

Matthew Rodriguez
Secretary for
Environmental Protection

Barbara A. Lee, Director
700 Heinz Avenue
Berkeley, California 94710-2721

Edmund G. Brown Jr.
Governor

December 28, 2018

Mr. Charles D. Aalfs
Blue Lake Forest Products, Inc.
4175 Cloverway Drive
Redding, California 96002
danaaalfs@gmail.com

Ms. Jennifer Finch and Mr. Robert Schultz
P.O. Box 146
Arcata, California 95518
magnaws@gmail.com

DECERTIFICATION, MCNAMARA AND PEEPE LUMBER MILL, GENDALE, HUMBOLDT COUNTY, CALIFORNIA

Dear Mr. Aalfs, Ms. Finch, and Mr. Schultz:

The Department of Toxic Substances Control (DTSC) issued a Remedial Action Certification on March 9, 1998 for McNamara and Peepe Lumber Mill (Site) upon implementation of the remedial actions pursuant to the December 4, 1994 Remedial Action Plan. However, subsequent soil and groundwater investigations have revealed that soil and groundwater contamination at the Site is not under control and the implemented remedial actions are no longer protective of human health and the environment. Therefore, DTSC rescinds the March 9, 1998 Remedial Action Certification and issues this Decertification based on the following findings:

Site Identification and Landowners: The Site is located in Glendale, an unincorporated community in Humboldt County, approximately 0.9 miles southeast of the City of McKinleyville and approximately 1.2 miles northwest of the City of Blue Lake, Humboldt County, California. The Site occupies approximately 26 acres with nine Assessor's Parcel Numbers (APNs). The current landowners of the Site are (a) Blue Lake Forest Products, Inc. and (b) Jennifer Finch and Robert Schultz.

Mr. Aalfs, Ms. Finch, and Mr. Schultz
December 28, 2018
Page 2

- Blue Lake Forest Products, Inc. owns seven parcels with APNs 516-091-020, 516-101-040, 516-101-060, 516-111-062, 516-111-063, 516-111-064, and 516-111-066 located on 1619 Glendale Drive.
- Jennifer Finch and Robert Schultz own two parcels with APNs 516-151-003 and 516-151-004 located on 1678 Glendale Drive.

1998 Remedial Action Certification: On December 5, 1994, DTSC approved the Remedial Action Plan with the following remedies for the Site:

- Consolidation of pentachlorophenol (PCP) and tetrachlorophenol (TCP) contaminated soils at the Green Chain area and installation of a new cap over such contaminated soils at areas encompassing APNs 516-101-060 and 516-111-063;
- Surface water and groundwater monitoring; and
- A land use covenant prohibiting any site activities which may compromise the integrity of the cap located at areas within APNs 516-101-060 and 516-111-063 and concrete slab located at an area within APN 516-151-003, as well as prohibiting development of these areas for uses for a residence, long-term care hospital, day-care facility, and school.

On March 9, 1998, DTSC issued the Remedial Action Certification stating that (a) all appropriate remedial actions have been completed, (b) a deed restriction was recorded the County's Recorder Office, and (c) long-term surface water and groundwater monitoring are necessary at the Site.

Subsequent Investigations and Contamination: During groundwater monitoring events conducted from 1997 through 2002, PCP concentrations were predominately below the cleanup goal of 1 µg/L and TCP concentrations were all below the laboratory reporting limit of 1 µg/L. In April 2002, Blue Lake Forest Products, Inc. declared bankruptcy and ceased groundwater pumping from an onsite lumber mill production well PW-1, which caused a rise of the groundwater elevation to approximately 15 feet higher than the previous groundwater elevation measured while the production well was operational. Since April 2002, groundwater has been in contact with the PCP- and TCP-impacted soil beneath the cap, thereby mobilizing hazardous substances from soil to groundwater.

Mr. Aalfs, Ms. Finch, and Mr. Schultz
December 28, 2018
Page 3

Grab groundwater samples collected in May 2005 at various Site locations contained PCP and TCP concentrations as high as 16,000 µg/L and 1,500 µg/L, respectively. From December 2003 through May 2017, PCP and TCP have been detected in groundwater monitoring wells at concentrations up to 2,200 µg/L and 120 µg/L, respectively.

On April 22, 2008, DTSC issued an Imminent and Substantial Endangerment Determination, Docket No. I&SED 07/08-009 for this Site, because there has been a release or a threatened release of hazardous substances at the Site.

The former saw mill area, located within APNs 516-111-062 and 516-111-063, is partially unpaved and located adjacent to the cap at the Green Chain area encompassing APNs 516-101-060 and 516-111-063. The former saw mill building at the former saw mill area was demolished in 2006. Portions of the building foundation, in poor condition, remain at the former saw mill area. In 2010 and 2011, DTSC conducted investigation at the former saw mill area and found PCP concentrations in soil ranging from 1.8 mg/kg to 40 mg/kg, above the PCP cleanup goal of 1.75 mg/kg established in the 1994 Remedial Action Plan.

Therefore, the remedy selected in the 1994 Remedial Action Plan is no longer protective because (a) rising groundwater level have mobilized PCP/TCP in soil beneath the Green Chain area cap due to cessation of production well pumping in 2002; (b) surface water can percolate through PCP/TCP-impacted soil present below the former saw mill area as this area is partially unpaved and/or covered with a building foundation in poor condition; and (c) PCP/TCP can migrate offsite in groundwater or surface water runoff across the former saw mill area. Since the former saw mill area is partially unpaved and the pavement is in poor condition, people also run the risk of coming into direct contact with the contaminants. Therefore, additional remedial action is necessary to prevent potential exposures and rainwater infiltration at the former saw mill area.

Remedial Action Plan Amendment: To address the contaminated soil and groundwater, DTSC plans to prepare a Remedial Action Plan Amendment and select the appropriate remedy or remedies necessary to mitigate the impact of hazardous substances at the Site. The Remedial Action Plan Amendment will evaluate a range of the alternatives including capping of the former saw mill area, enhanced biodegradation of chemicals in groundwater, long-term groundwater monitoring, and amending the land use covenant.

Mr. Aalfs, Ms. Finch, and Mr. Schultz
December 28, 2018
Page 4

If you have any questions, please contact Henry Wong of my staff at (510) 540-3770 or henry.wong@dtsc.ca.gov.

Sincerely,



Janet Naito
Branch Chief
Site Mitigation and Restoration Program

cc: Stephanie Lai
Senior Staff Counsel
DTSC - Office of Legal Counsel
stephanie.lai@dtsc.ca.gov

Garry Rees
Streamline Planning Consultants
garry@streamlineplanning.net

Chad Waters
CEO
Royal Gold LLC
chadwaters707@gmail.com

Exhibit B

Full Report available at

https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/8077635049/Groundwater%20Monitoring%20Report%2C%20May%202017%20%5BSGI%207-19-17%5D.pdf

**SECOND QUARTER 2017
GROUNDWATER MONITORING REPORT**

**McNamara and Peepe Lumber Mill
1619 and 1678 Glendale Drive
Arcata, California**

01-DTSC-006

Prepared For:

California Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, California 94710
Contract No. 14-T3913

Prepared By:



The Source Group, Inc., A division of Apex Companies, LLC.
3478 Buskirk Avenue, Suite 100
Pleasant Hill, California 94523

July 19, 2017

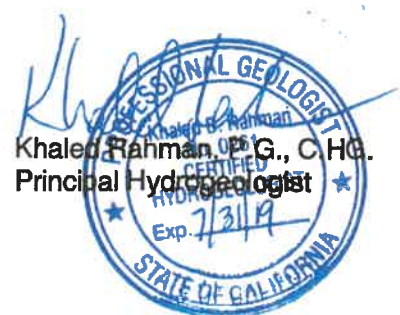


TABLE OF CONTENTS

| | PAGE |
|--|------------|
| LIST OF FIGURES..... | ii |
| LIST OF TABLES | ii |
| LIST OF APPENDICES..... | ii |
| 1.0 INTRODUCTION | 1-1 |
| 2.0 SITE BACKGROUND | 2-1 |
| 2.1 Site and Vicinity Description..... | 2-1 |
| 2.2 Geological and Hydrogeological Setting..... | 2-1 |
| 2.3 Historic Land Use | 2-1 |
| 2.4 Regulatory Oversight..... | 2-2 |
| 2.5 Remedial Activities | 2-2 |
| 2.6 Groundwater Monitoring Well Network..... | 2-2 |
| 2.7 Recent and Planned Activities | 2-3 |
| 3.0 GROUNDWATER MONITORING ACTIVITIES..... | 3-1 |
| 3.1 Groundwater Monitoring Wells..... | 3-1 |
| 3.2 Groundwater Sampling Activities | 3-1 |
| 3.3 Laboratory Analysis | 3-1 |
| 3.4 Investigation-Derived Waste Disposal..... | 3-1 |
| 3.5 Site Walk of 1678 Glendale Drive Dip Tank Building | 3-2 |
| 4.0 GROUNDWATER MONITORING RESULTS..... | 4-1 |
| 4.1 Groundwater Elevations | 4-1 |
| 4.2 Water Quality Parameter Data Summary..... | 4-1 |
| 4.3 PCP and TCP Groundwater Analytical Results | 4-1 |
| 4.4 Groundwater Monitoring Quality Assurance/Quality Control | 4-2 |
| 5.0 FINDINGS | 5-1 |
| 5.1 Water Levels..... | 5-1 |
| 5.2 PCP and TCP Distribution..... | 5-1 |
| 6.0 LIMITATIONS | 6-1 |
| 7.0 REFERENCES | 7-1 |

LIST OF FIGURES

| | |
|----------|--|
| Figure 1 | Site Location Map |
| Figure 2 | Site Layout |
| Figure 3 | Site Features |
| Figure 4 | Groundwater Elevation Contours, PCP and TCP Concentrations in Groundwater – May 2017 |

LIST OF TABLES

| | |
|---------|---|
| Table 1 | Groundwater Elevation and Field Parameters |
| Table 2 | Groundwater Analytical Results – PCP and TCP |
| Table 3 | Comparison of Primary and Duplicate Sample Analytical Results |

LIST OF APPENDICES

| | |
|------------|---|
| Appendix A | Monitoring Well Logs |
| Appendix B | Field Sampling Forms |
| Appendix C | Laboratory Analytical Reports |
| Appendix D | IDW Documentation |
| Appendix E | Photographic Log – Site Walk, 1678 Glendale Drive |

1.0 INTRODUCTION

The Source Group, Inc., a division of Apex Companies, LLC. (SGI-Apex), has prepared this *Second Quarter 2017 Groundwater Monitoring Report* (Report) for the McNamara and Peepe Lumber Mill located at 1619 and 1678 Glendale Drive in Arcata, California (hereinafter the Site, Figure 1). This Report and the scope of work presented herein were conducted for the California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC) under Contract No. 14-T3913.

This Report presents the results of the groundwater monitoring and sampling event conducted at the Site on May 8, 2017. The field activities were conducted in general accordance with the *Soil and Groundwater Investigation Work Plan* (Work Plan; URS Corporation [URS], 2011). This Report summarizes the monitoring and sampling field activities, laboratory analytical results for pentachlorophenol (PCP) and 2,3,4,6-tetrachlorophenol (TCP), water quality parameters, and quality assurance protocols. In response to a DTSC request, the concrete slab at the “new” dip tank building (Dip Tank Building), which is located at 1678 Glendale Drive, was also inspected during the May 2017 event.

2.0 SITE BACKGROUND

The Site is a former lumber mill located in an unincorporated area of Humboldt County, approximately one mile southeast of McKinleyville, California and five miles northeast of Arcata, California. The Site operated as a lumber mill under multiple owners from the 1940s until 2002 (URS Corporation [URS], 2011). A detailed summary of background information for the Site is presented in a *Five-Year Comprehensive Review* prepared by the DTSC (DTSC, 2014). The following section provides a brief overview of the Site.

2.1 Site and Vicinity Description

As shown on Figure 2, the Site totals approximately 21 acres located north and south of Glendale Drive (DTSC, 2014). The northern portion of the Site is located at 1619 Glendale Drive (Assessor Parcel Numbers [APNs]: 516-111-062 and 516-111-063) and consisted of the former Green Chain area, Saw Mill, Planer Chain, and a groundwater production well (URS, 2011). The 1619 Glendale Drive portion of the Site is currently leased to Royal Gold for storage and distribution of potting soil and compost. The southern portion of the Site is located at 1678 Glendale Drive (APNs: 516-151-003 and 516-151-004) and is the location of the Dip Tank Building. Based on the findings of our Site walk (see below), the 1678 Glendale Drive portion of the Site is currently owned by Gary Johnson and is used for equipment and vehicle maintenance storage.

The Site is surrounded by residential and commercial/light industrial properties to the west, north, east and south. The Mad River is located approximately 0.25 miles south of the Site.

2.2 Geological and Hydrogeological Setting

The Site is located in the Dows Prairie Subbasin, which is the northern portion of the Mad River Groundwater Basin (California Department of Water Resources [DWR], 2004). The Hookton Unit is the primary water-bearing unit in the Dows Prairie Subbasin and underlain by the Franciscan Formation (DWR, 2004). The Hookton Unit consists of fine-grained (clay) and coarse-grained (sand and gravel) intervals that are approximately 150-200 feet in depth (DWR, 2004).

Previous investigations conducted at the Site indicate that the shallow subsurface consists of alluvial and terrace deposits composed of fine-grained silts and clays, and coarse-grained sands and gravels. Based on previous investigations, groundwater was measured at depths of approximately 8.0 feet below ground surface (bgs) to 30 feet bgs and generally flows to the south-southwest toward the Mad River (URS, 2011).

2.3 Historic Land Use

McNamara and Peepe operated the lumber mill from 1969 until they filed for bankruptcy in 1985 (DTSC, 2014). Chemical fungicides containing PCP and TCP were applied to processed lumber at the Site in dip tanks or with spray applications from 1967 to 1984 (URS, 2011). Dip tanks were present near the Green Chain area on the 1619 Glendale Drive portion of the Site (Figure 3), and in

the Dip Tank Building on the 1678 Glendale Drive portion of the Site (Figure 2). Spray applications were conducted at the Planer Chain building (Figure 2). During this period, several incidents of improper storage, spills, and leaks are documented (DTSC, 2014). Blue Lake Forest Products leased and operated the mill without the use of PCP and TCP from 1986 until lumber mill operations ceased at the Site in 2002 (DTSC, 2014).

2.4 Regulatory Oversight

Regulatory oversight of the Site was conducted by the North Coast Regional Water Quality Control Board (NCRWQCB) from 1968 to 1984 and included establishment of waste discharge requirements (WDRs) for the Site (URS, 2011). In 1982, NCRWQCB adopted WDRs, issued a Cease-and Desist Order (Order No. 82-3; the Order), required the lumber mill operator to cease discharge of fungicide wastes, determine the source of the discharge, prepare a plan for eliminating discharges, and implement the plan according to the schedule outlined in the Order (URS, 2011). DTSC became the lead oversight agency for the Site in 1984 and issued a Remedial Action Order (RAO; No. 88/89-023), which was amended in 1996 (No. 95/96-072). In 2008, DTSC issued an Imminent and Substantial Endangerment Determination (ISED No. 07/08-009; DTSC, 2008).

2.5 Remedial Activities

DTSC approved a *Remedial Action Plan* (RAP) for the Site in 1994 (DTSC, 2014). The former Green Chain area and former Saw Mill building were identified as the source area for PCP and TCP in soil and groundwater (Figure 3). A concrete cap over the Green Chain area was selected as a remedy for the Site and was constructed in 1998 (DTSC, 2014). A land use covenant (LUC) was issued in 1998 to restrict use in two areas of the Site: the "Cap Restricted Area" on the former lumber mill property located at 1619 Glendale Drive and the "Concrete Slab Restricted Area" located in the Dip Tank Building located at 1678 Glendale Drive. Routine assessments of the concrete cap indicate the condition of the cap was excellent. Since construction of the concrete cap, the former Saw Mill building has been demolished.

Elevated PCP concentrations (>1,100 micrograms per liter [$\mu\text{g/L}$]) in groundwater were detected in Site monitoring wells during the 2003 annual monitoring event. A remedial investigation (RI) was conducted in 2005 to evaluate the source of the elevated PCP concentrations in groundwater (DTSC, 2014). The RI concluded that dissolution of PCP and TCP from soil into groundwater was due to a rise in groundwater elevations of up to 15 feet across the Site since 2001. The rise in groundwater elevations was attributed to cessation of groundwater extraction from production well PW-1 in the northern portion of the Site in 2002 (DTSC, 2014).

2.6 Groundwater Monitoring Well Network

The groundwater monitoring well network consists of wells MW-1, MW-5, MW-7, MW-8, MW-9, MW-11, and MW-12, which are located at 1619 Glendale Avenue, and well MW-10 offsite on Glendale Avenue (Figure 3). As summarized on the table below, well construction details indicate that the monitoring wells are screened to maximum depths of 25 feet bgs, except for well MW-7,

which is screened from 22 feet bgs to 37 feet bgs. Readily available groundwater monitoring well logs are included in Appendix A.

| Well Name | TOC (feet amsl) | Screened Interval (feet btoc) |
|-----------|--------------------|----------------------------------|
| MW-1 | 90.92 | 19-23 |
| MW-5 | 93.25 | 18-23 |
| MW-7 | 98.90 | 22-37 |
| MW-8 | 96.04 | 8.5-24 |
| MW-9 | 99.65 | 21-25 |
| MW-10 | 95.65 | 9-24 |
| MW-11 | 91.70 | 9.5-24.5 |
| MW-12 | 91.73 | 10-20 |

Notes:

TOC = top of casing
amsl = above mean seal level
btoc = below top of casing

2.7 Recent and Planned Activities

Groundwater monitoring events conducted in December 2016 were documented in the *Fourth Quarter 2016 Groundwater Monitoring Report*, which included supplemental analytical results collected to support an evaluation of remedial alternatives (SGI-Apex, 2017). A remedial alternative evaluation for PCP and TCP in groundwater is in preparation.

3.0 GROUNDWATER MONITORING ACTIVITIES

3.1 Groundwater Monitoring Wells

On May 8, 2017, eight (8) groundwater monitoring wells (MW-1, MW-5, MW-7, MW-8, MW-9, MW-10, MW-11, and MW-12) were gauged and sampled. Field data forms are included in Appendix B.

3.2 Groundwater Sampling Activities

Groundwater sampling activities were completed in accordance with the Groundwater Monitoring Well Low Flow Sampling Standard Operating Procedure (SOP-005) included in Appendix D of the Work Plan (URS, 2011). No deviations from the SOP were noted. Sampling activities consisted of the following:

- Depth to groundwater and total depth were gauged in each monitoring well to the nearest 0.01 foot using an electronic water level indicator;
- Low-flow sampling methods were used to collect samples from groundwater monitoring wells. Well purging and water quality parameters (pH, temperature, specific conductance, dissolved oxygen [DO], and oxidation-reduction potential [ORP], turbidity, and total dissolved solids [TDS]) using a water quality meter were recorded on groundwater sampling forms (Appendix B);
- One duplicate sample was collected from well MW-1 for quality assurance/quality control (QA/QC) purposes;
- Sample containers provided by the analytical laboratory were labeled with a unique sample identification number consistent with previous sampling events (e.g., MW-1), date and time of sample collection, sampler, preservation, and analytical method; and
- Samples were submitted to North Coast Laboratories of Arcata, California, a California State Environmental Laboratory Accreditation Branch (CA ELAP)-certified laboratory under standard chain-of-custody protocols.

3.3 Laboratory Analysis

Groundwater samples were analyzed for:

- PCP and TCP by Canadian Pulp Method (Chlorinated Phenols) National Council for Air and Stream Improvement (NCASI) 86.07.

Laboratory analytical reports are presented in Appendix C.

3.4 Investigation-Derived Waste Disposal

Purgewater and decontamination water produced during sampling activities were stored onsite in a Department of Transportation (DOT)-approved 55-gallon drum. The drum was transported to the

Woodward Drilling Company, Inc. wastewater treatment facility, in Rio Vista, California on May 9, 2017 (Appendix D).

3.5 Site Walk of 1678 Glendale Drive Dip Tank Building

A reconnaissance of the concrete slab floor of the Dip Tank Building located at 1678 Glendale Drive was completed in response to an April 21, 2017 DTSC email request. Prior to the monitoring event, contact information for the owner of this property was not readily available. During the monitoring event, an onsite facility representative indicated that Gary Johnson was the property owner. During a subsequent discussion, Mr. Johnson verbally approved access to the property for inspection.

The condition of the concrete slab floor of the Dip Tank Building appeared similar to DTSC's 2007 observations documented in the Annual Inspection Report (DTSC, 2007). The building is largely used to store vehicles and maintenance equipment. Localized oil staining and surface deterioration (e.g., chatter marks) were observed. No signs of cracking or settling were observed in the readily accessible areas. Photographs of the concrete slab floor of the Dip Tank Building are provided in Appendix E.

4.0 GROUNDWATER MONITORING RESULTS

4.1 Groundwater Elevations

During the May 2017 gauging event, depth to groundwater measurements ranged from 5.00 feet below top of casing (btoc) in well MW-1 to 11.38 feet btoc in well MW-7. The water levels are approximately 0.9 feet to 2.0 feet deeper than observed during the December 2016 monitoring event. Note that the depth to water in well MW-10, which was considered anomalous in December 2016, was more consistent with historic levels in May 2017.

Groundwater elevations ranged from 84.71 feet above mean sea level (msl) in well MW-10 to 90.66 feet above msl in well MW-9. Based on the groundwater elevation data collected during the May 2017 gauging event, horizontal hydraulic gradients are generally to the south-southwest. The May 2017 groundwater elevation data and contours are presented on Figure 4. Groundwater level measurements and elevation calculations are presented in Table 1.

4.2 Water Quality Parameter Data Summary

The water quality parameters measured in the field during the May 2017 monitoring event is summarized on Table 1. General findings for May 2017 water quality parameters are described below.

- DO concentrations ranged from 0.17 milligrams per liter (mg/L) to 1.47 mg/L. DO concentrations below 1 mg/L were measured in wells MW-1, MW-5, MW-8, MW-10, and MW-11;
- ORP levels ranged from 14.4 millivolts (mV) to 465.7 mV;
- pH ranged from 5.08 to 6.00. The prevalence of pH values below 7.0 indicates slightly acidic groundwater conditions beneath the Site;
- Conductivity measurements ranged from 0.094 millisiemens per centimeter (mS/cm) to 0.546 mS/cm; and
- TDS levels ranged from 62 mg/L to 355 mg/L.

4.3 PCP and TCP Groundwater Analytical Results

The PCP and TCP analytical results for groundwater samples collected during the May 2017 monitoring event are summarized on Table 2. Laboratory analytical reports are presented in Appendix C. General findings for PCP and TCP in groundwater are described below.

- PCP was detected above laboratory reporting limits in four of the eight monitoring wells sampled. Detected concentrations were reported at up to 570 µg/L in well MW-1, 81 µg/L in well MW-12, 46 µg/L in well MW-5, and 1.9 µg/L in well MW-11.
- TCP was detected above laboratory reporting limits in two of the eight monitoring wells sampled at a concentration of up to 8.4 µg/L in well MW-1 and 2.3 µg/L in well MW-5.

The May 2017 distribution of PCP and TCP in shallow water-bearing zone are depicted on Figure 4.

4.4 Groundwater Monitoring Quality Assurance/Quality Control

The groundwater analytical data collected during the May 2017 monitoring event were evaluated to ensure that the data quality objectives identified in the *Quality Assurance Project Plan* were met (URS, 2011). The results were reviewed for precision, accuracy, representativeness, completeness, comparability, and method detection limits. The laboratory reports were reviewed for data completeness, chain-of-custody, holding times, blanks, surrogates, and laboratory control samples and duplicates. In addition, QA/QC samples (field duplicate samples) were collected during the 2017 monitoring event. QA/QC analyses included the following:

- Method blank;
- Laboratory control spike (LCS)/laboratory control spike duplicate (LCSD);
- Surrogate recoveries; and
- Field duplicate samples for similarity.

The QA/QC findings indicate the following:

- No detections in the method blanks were noted;
- LCS/LCSD and surrogate recoveries were within control limits; and
- Field duplicates results were sufficiently similar (RPD < 30%) in PCP and TCP concentrations (Table 3).

Based on these findings, the overall data quality is considered acceptable.

5.0 FINDINGS

5.1 Water Levels

Findings of the water level data for May 2017 indicate:

- Groundwater elevations were approximately 1.0 to 2.0 feet lower than during the December 2016 monitoring event; and
- Horizontal hydraulic gradients to the south, in general, were consistent with historic observations.

5.2 PCP and TCP Distribution

PCP and TCP concentrations were detected in monitoring wells in the central area of the Site near the former Green Chain area and former Saw Mill building (Figure 4). For screening level purposes, the California maximum contaminant level (CA MCL) for PCP of 1 µg/L was used. There is no CA MCL for TCP. A summary of the May 2017 findings indicates:

- PCP concentrations exceed the CA MCL of 1 µg/L in wells MW-1, MW-5, MW-11, and MW-12, which are located hydraulically downgradient and south of the former Green Chain area and former Saw Mill building. The December 2016 and May 2017 data indicate PCP concentrations increased in each of these four wells. The PCP concentration in well MW-1 increased from up to 1.2 µg/L in December 2016 to 570 µg/L in May 2017. Concentration increases may be attributed to a dissolution of mass associated with observed higher groundwater elevations in the fourth quarter of 2016 across the Site;
- TCP was detected above laboratory reporting limits in wells MW-1 and MW-5. The December 2016 and May 2017 data indicate that the TCP concentration in well MW-1 increased but was similar to May 2016 concentration. TCP concentrations in well MW-5 were similar to previous results since 2002; and
- The May 2017 PCP and TCP distributions are similar and consistent with the historical distribution. As depicted on Figure 4, the absence of TCP in well MW-12, suggests PCP has a slightly larger distribution than TCP. The presence of a low concentration of PCP in well MW-11 was similar to intermittent low detections since 2010.

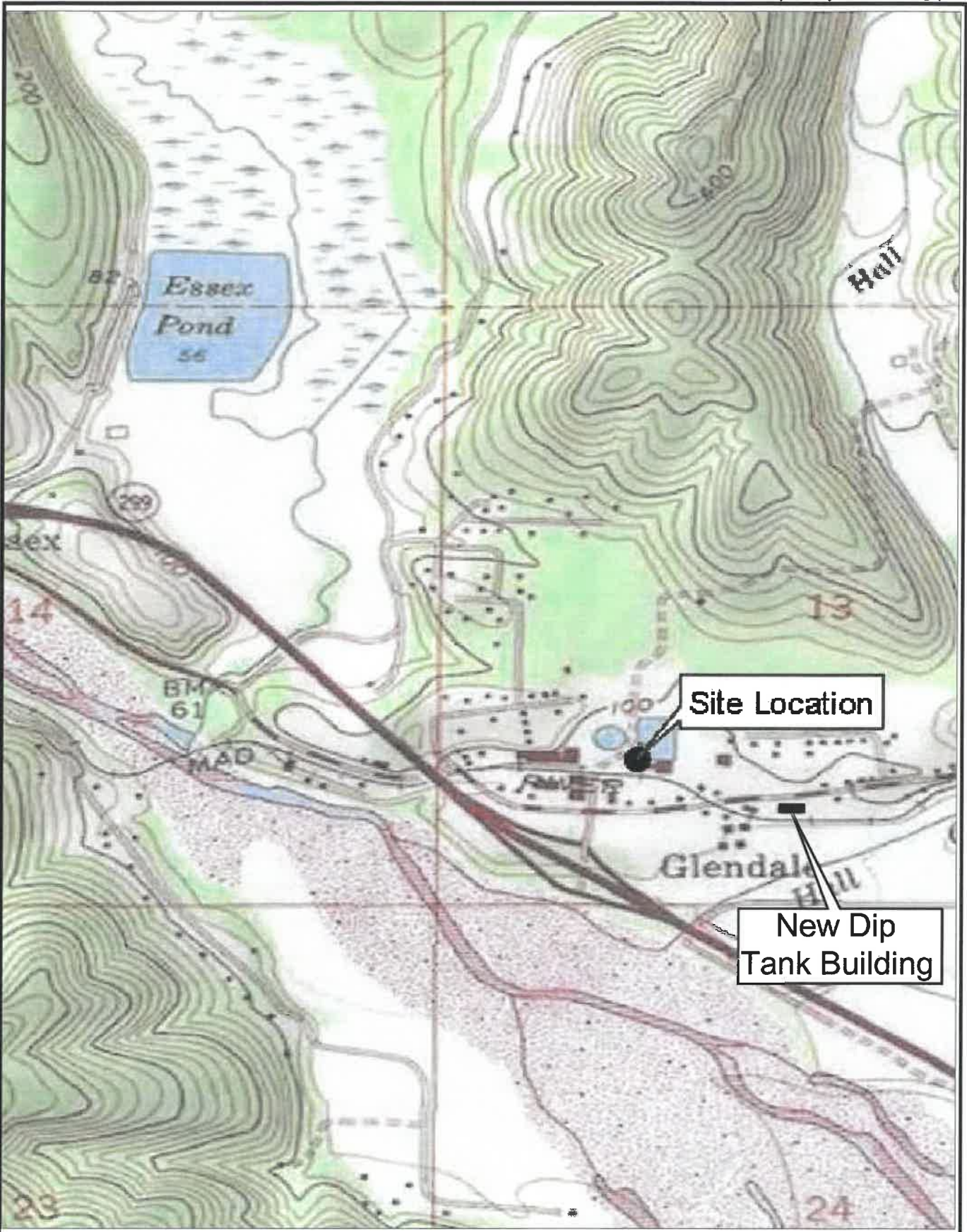
6.0 LIMITATIONS

This document was prepared for the exclusive use of the DTSC for the express purpose of complying with a client- or regulatory directive for environmental investigation or restoration. SGI-Apex and DTSC must approve any re-use of this work product in whole or in part for a different purpose or by others in writing. If any such unauthorized use occurs, it shall be at the user's sole risk without liability to SGI-Apex or DTSC. To the extent that this document is based on information provided to SGI-Apex by third parties, including DTSC, their direct contractors, previous workers, and other stakeholders, SGI-Apex cannot guarantee the completeness or accuracy of this information, even where efforts were made to verify third-party information. SGI-Apex has exercised professional judgment to collect and present findings and opinions of a scientific and technical nature. The opinions expressed are based on the conditions of the Site existing at the time of the field investigation, current regulatory requirements, and any specified assumptions. The presented findings and recommendations in this document are intended to be taken in their entirety to assist DTSC in applying their own professional judgment in making decisions related to the property. SGI-Apex cannot provide conclusions on environmental conditions outside the completed scope of work. SGI-Apex cannot guarantee that future conditions will not change and affect the validity of the presented conclusions and recommended work. No warranty or guarantee, whether expressed or implied, is made with respect to the data or the reported findings, observations, conclusions, and recommendations.

7.0 REFERENCES

- California Department of Toxics Substances Control (DTSC). 2007. Annual Inspection Report, Former McNamara and Peepe Lumber Mill. July 11.
- DTSC. 2008. McNamara and Peepe Lumber Mill, Docket Number I&SE 07/08-009, Imminent and Substantial Endangerment Determination. April 22.
- DTSC. 2014. Five-Year Comprehensive Review, McNamara and Peepe Lumber Mill, 1619 Glendale Drive, McKinleyville, California. November.
- California Department of Water Resources (DWR). 2004. California's Groundwater Bulletin 118. Updated February 27.
- The Source Group, Inc., a division of Apex Companies, LLC., (SGI-Apex). 2017. Fourth Quarter 2016 Groundwater Monitoring Report, McNamara and Peepe Lumber Mill, 1589 Glendale Drive, Arcata, California. January 27.
- URS Corporation (URS). 2011. Soil and Groundwater Investigation Work Plan, McNamara & Peepe Lumber Mill, 1589 Glendale Drive, Arcata, California. October 24.

FIGURES



S:\Clients A - F\DTSC_McNamara_Peepe Corp - DTSC-006\Report - May 2017\Fig. 1-Site location Map.dwg, 7/19/2017 2:30:08 PM



3478 BUSKIRK AVENUE, SUITE 100
PLEASANT HILL, CA 94523

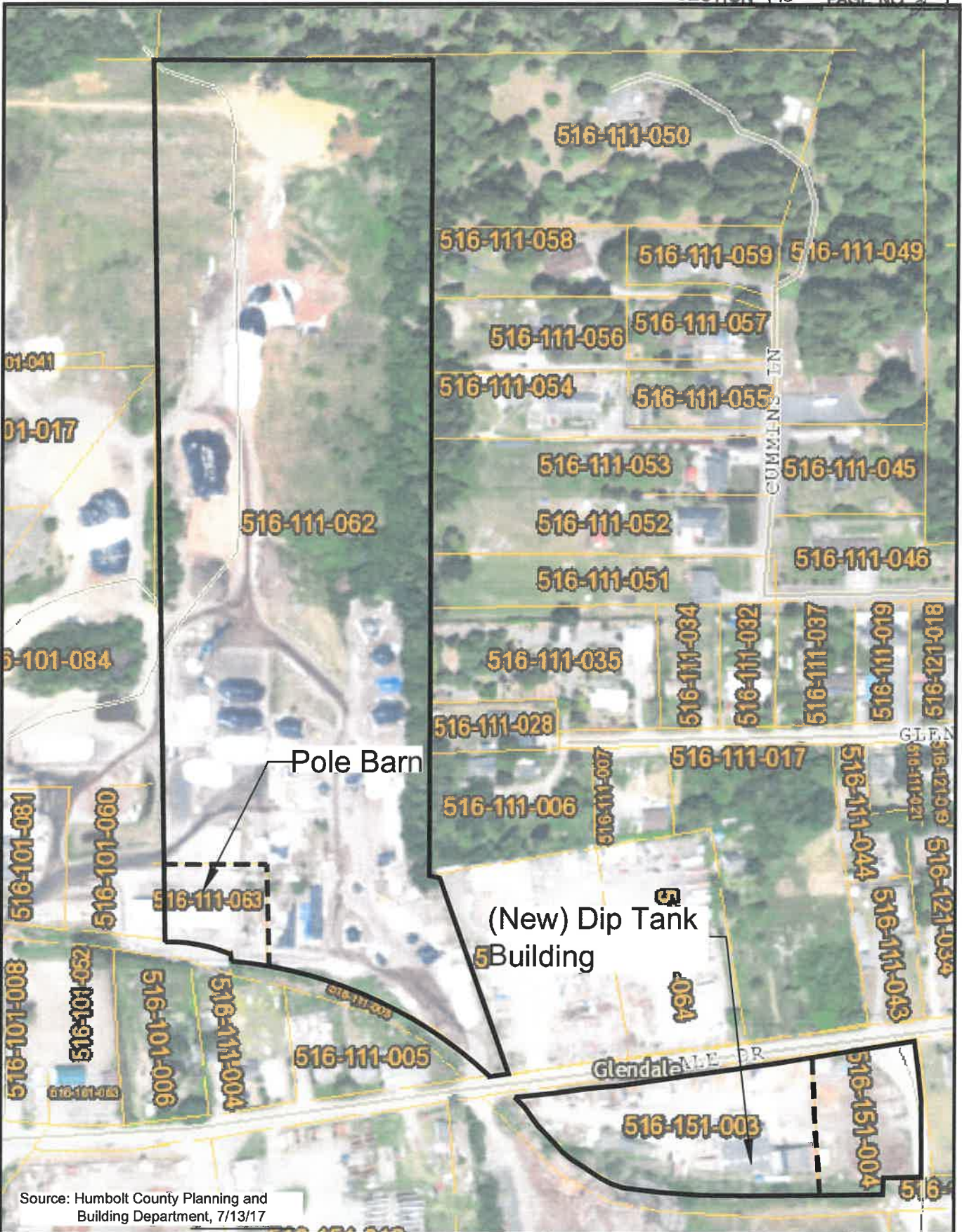
McNAMARA AND PEEPE
LUMBER MILL
ARCATA, CALIFORNIA

SITE LOCATION MAP



| | | | |
|----------------------------|------------------|---------------|----------------|
| PROJECT NO. 01-DTSC-006 | DATE 07/19/17 | DR. BY: ZA | APP. BY: KR |
|----------------------------|------------------|---------------|----------------|

**FIGURE
1**



Source: Humbolt County Planning and Building Department, 7/13/17

S:\Clients A - F\DTSC_McNamara_Peepe Corp - DTSC-006\Report - May 2017\Fig.2 - Site Layout.dwg, 7/19/2017 12:44:30 PM



3478 BUSKIRK AVENUE, SUITE 100
PLEASANT HILL, CA 94523

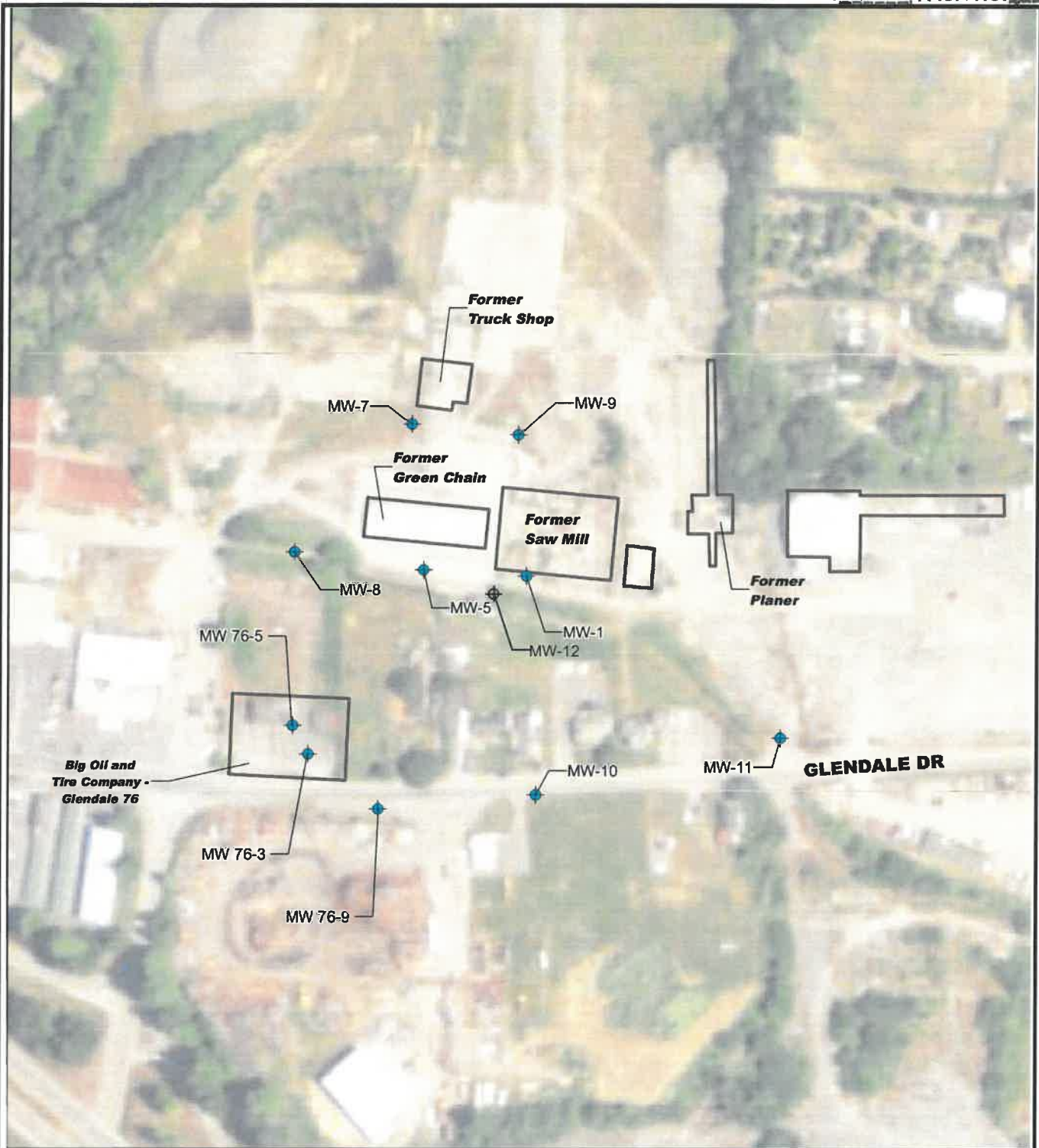
McNAMARA AND PEEPE
LUMBER MILL
ARCATA, CALIFORNIA

| | | | |
|----------------------------|------------------|---------------|----------------|
| PROJECT NO. 01-DTSC-006 | DATE 07/19/17 | DR. BY: ZA | APP. BY: KR |
|----------------------------|------------------|---------------|----------------|

SITE LAYOUT



FIGURE
2



LEGEND

-  Monitoring well location
-  Building/former building

Source: URS, 2011 Soil and Groundwater Investigation Work Plan, October.

S:\Clients A - FIDTSC_McNamara_Peepe Corp - DTSC-006\Report - May 2017\Fig.3-Site Features.dwg, 7/19/2017 12:47:31 PM



3478 BUSKIRK AVENUE, SUITE 100
PLEASANT HILL, CA 94523

McNAMARA AND PEEPE
LUMBER MILL
ARCATA, CALIFORNIA

| | | | |
|----------------------------|------------------|--------------|----------------|
| PROJECT NO. 01-DTSC-006 | DATE 07/19/17 | DR.BY: ZA | APP. BY: KR |
|----------------------------|------------------|--------------|----------------|

SITE FEATURES

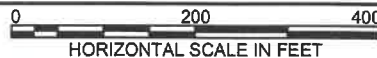


FIGURE 3

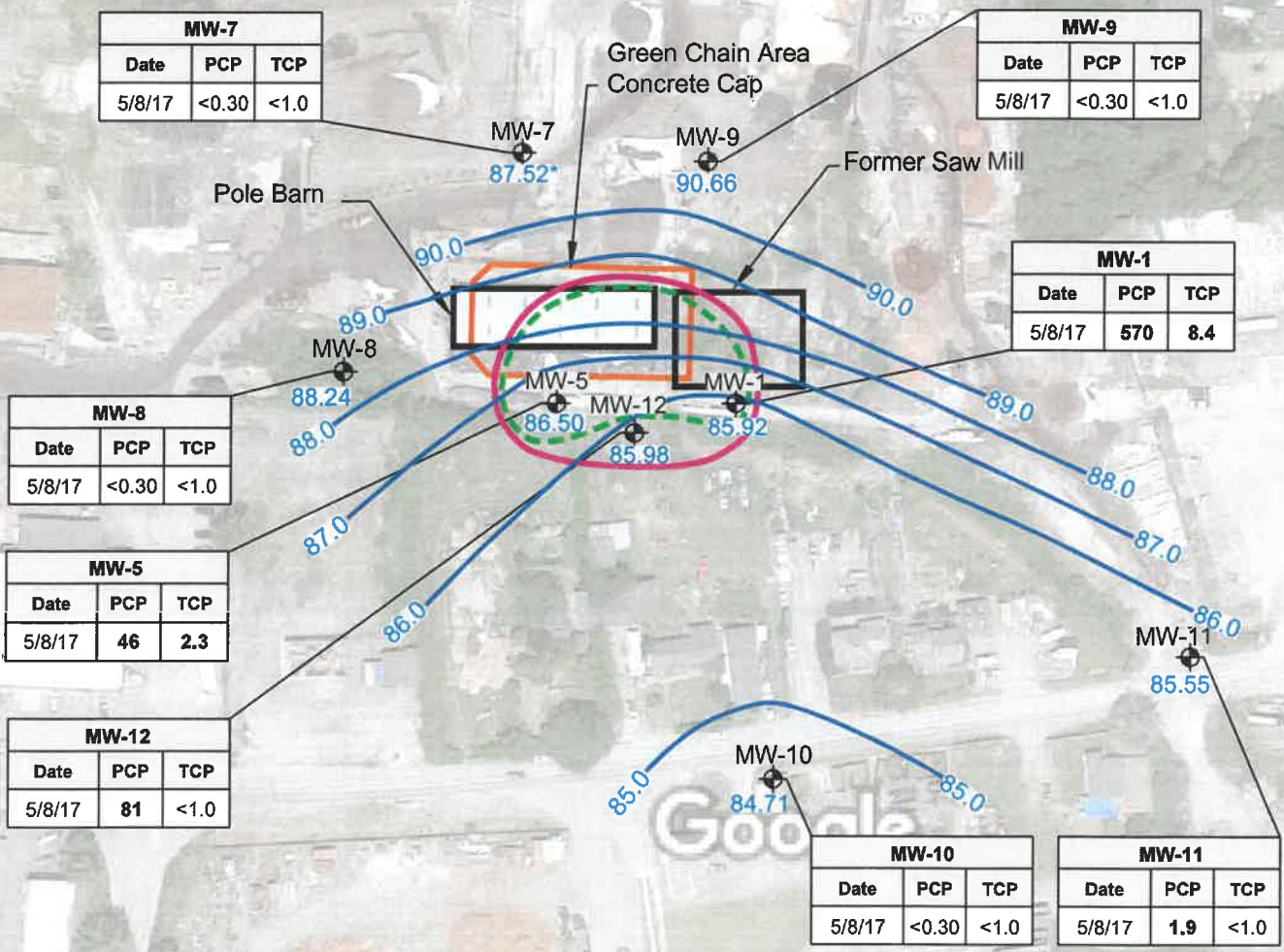
LEGEND

- MW-7 Monitoring Well Designation
- ⊕ Monitoring Well Location
- 87.52 Groundwater Elevation
- PCP Pentachlorophenol
- TCP 2,3,4,6-Tetrachlorophenol
- * Data Not Used in Contouring
- Groundwater Elevation Contour
- PCP Concentration Contour >1.0 µg/L
- TCP Concentration Contour >1.0 µg/L

All results in micrograms/liter (µg/L)
 Bolded results: Analyte concentration exceeds laboratory reporting limit

Basemap Source: Google, 2015
 URS, 2011

S:\Clients A - FDTSC - McNamara_Peepe Corp - DTSC-006\Report - May 2017\Fig.4-GW Elevation Contours, PCP & TCP Concentration in GW (from Server5).dwg, 7/19/2017 12:49:59 PM



| | | | | | |
|--|--|------------------|--|----------------|--|
| | McNAMARA AND PEEPE LUMBER MILL ARCATA, CALIFORNIA | | GROUNDWATER ELEVATION CONTOURS, PCP AND TCP CONCENTRATIONS IN GROUNDWATER MAY 2017 | | |
| | PROJECT NO. 01-DTSC-006 | DATE 07/19/17 | DR. BY: ZA | APP. BY: KR | |

3478 BUSKIRK AVENUE, SUITE 100
 PLEASANT HILL, CA 94523

TABLES

Table 1
Groundwater Elevation and Field Parameters
 McNamara and Peepe Lumber Mill
 Arcata, California

| Well | Screened Interval (feet btoc) | Date | Depth to Water (feet btoc) | TOC Elevation (feet msl) | Groundwater Elevation (feet msl) | Temperature (degrees C) | pH | DO (mg/L) | ORP (mV) | Conductivity (mS/cm) | Turbidity (NTU) | TDS (mg/L) |
|------|----------------------------------|------------|-------------------------------|-----------------------------|-------------------------------------|----------------------------|------|--------------|-------------|-------------------------|---------------------|---------------|
| | | | | | | | | | | | | |
| MW-1 | 19-23 | 11/2011 | 3.19 | 90.92 | 87.73 | 14.39 | -- | 0.95 | 134 | NR ⁽¹⁾ | 57.6 | NR |
| | | 5/13/2015 | 7.32 | | 83.60 | 15.51 | 5.42 | 0.75 | 70.7 | 0.279 | 3.9 | NR |
| | | 11/10/2015 | 11.15 | | 79.77 | 18.39 | 5.61 | 1.27 | 121.3 | 0.281 | -3.8 ⁽²⁾ | NR |
| | | 5/23/2016 | 6.87 | | 84.05 | 16.37 | 6.25 | 0.80 | -15.1 | 0.479 | 3.1 | 372 |
| | | 12/14/2016 | 3.00 | | 87.92 | 13.20 | 6.69 | 2.89 | 150.1 | 0.491 | 3.6 | 319 |
| | | 5/8/2017 | 5.00 | | 85.92 | 15.50 | 6.00 | 0.21 | 102.7 | 0.546 | 46.8 | 355 |
| MW-5 | 18-23 | 11/2011 | 5.21 | 93.25 | 88.04 | 14.37 | 5.88 | 0.99 | -22 | NR ⁽¹⁾ | 121 | NR |
| | | 5/13/2015 | 9.40 | | 83.85 | 14.65 | 5.15 | 0.87 | 183.7 | 0.243 | 1.1 | NR |
| | | 11/10/2015 | 12.15 | | 81.10 | 16.62 | 5.13 | 1.32 | 170.1 | 0.205 | 1.1 ⁽²⁾ | NR |
| | | 5/23/2016 | 8.90 | | 84.35 | 15.68 | 5.44 | 0.54 | 22.7 | 0.250 | 48.5 | 200 |
| | | 12/14/2016 | 5.20 | | 88.05 | 16.20 | 5.28 | 0.05 | 176.9 | 0.275 | 3.3 | 178 |
| | | 5/8/2017 | 6.75 | | 86.50 | 15.30 | 5.17 | 0.17 | 155.8 | 0.302 | 68.3 | 197 |
| MW-7 | 22-37 | 11/2011 | 9.67 | 98.90 | 89.23 | 15.17 | 5.55 | 1.67 | 119 | 0.062 | 104 | NR |
| | | 5/13/2015 | 13.63 | | 85.27 | 16.86 | 5.28 | 1.55 | 151.3 | 0.095 | 1.4 | NR |
| | | 11/10/2015 | 17.90 | | 81.00 | 15.33 | 5.50 | 1.43 | 223.7 | 0.089 | -2.8 ⁽²⁾ | NR |
| | | 5/23/2016 | 13.33 | | 85.57 | 18.15 | 5.70 | 2.01 | 17.3 | 0.130 | 5.9 | 96 |
| | | 12/14/2016 | 9.82 | | 89.08 | 16.80 | 5.60 | 2.34 | 237.2 | 0.108 | 15.1 | NR |
| | | 5/8/2017 | 11.38 | | 87.52 | 14.80 | 5.31 | 1.32 | 264.8 | 0.111 | 50.3 | 72 |
| MW-8 | 8.5-24 | 5/13/2015 | 8.48 | 96.04 | 87.56 | 15.55 | 5.96 | 0.70 | 26.6 | 0.476 | 2.0 | NR |
| | | 11/10/2015 | 11.40 | | 84.64 | 18.03 | 5.40 | 1.80 | 190.5 | 0.712 | 3.5 ⁽²⁾ | NR |
| | | 5/23/2016 | 8.72 | | 87.32 | 16.12 | 6.22 | 0.82 | -137.4 | 0.392 | 6.7 | 302 |
| | | 12/14/2016 | 5.90 | | 90.14 | 14.10 | 6.16 | 0.71 | 103.1 | 0.321 | 7.1 | NR |
| | | 5/8/2017 | 7.80 | | 88.24 | 13.60 | 5.96 | 0.68 | 14.4 | 0.495 | 48.3 | 321 |

Table 1
Groundwater Elevation and Field Parameters
 McNamara and Peepe Lumber Mill
 Arcata, California

| Well | Screened Interval (feet btoc) | Date | Depth to Water (feet btoc) | TOC Elevation (feet msl) | Groundwater Elevation (feet msl) | Temperature (degrees C) | pH | DO (mg/L) | ORP (mV) | Conductivity (mS/cm) | Turbidity (NTU) | TDS (mg/L) |
|-------|----------------------------------|------------|-------------------------------|-----------------------------|-------------------------------------|----------------------------|------|--------------|-------------|-------------------------|---------------------|---------------|
| | | | | | | | | | | | | |
| MW-9 | 21-25 | 11/2011 | 6.27 | 99.65 | 93.38 | 14.26 | 5.64 | 1.18 | 408 | NR ⁽¹⁾ | 33.6 | NR |
| | | 5/13/2015 | 11.17 | | 88.48 | 17.08 | 5.83 | 1.65 | 164.7 | 0.251 | 1.5 | NR |
| | | 11/10/2015 | 14.29 | | 85.36 | 17.30 | 5.70 | 1.79 | 465.7 | 0.178 | -4.2 ⁽²⁾ | NR |
| | | 5/23/2016 | 10.97 | | 88.68 | 16.72 | 6.01 | 1.09 | 18.5 | 0.290 | 49.1 | 224 |
| | | 12/14/2016 | 8.09 | | 91.56 | 16.60 | 6.00 | 4.82 | 241.2 | 0.207 | 3.4 | NR |
| | | 5/8/2017 | 8.99 | | 90.66 | 14.40 | 5.69 | 1.47 | 465.7 | 0.301 | 70.3 | 196 |
| MW-10 | 9-24 | 11/2011 | 9.74 | 95.65 | 85.91 | 12.12 | 5.22 | 7.14 | 207 | 0.013 | 68.1 | NR |
| | | 5/13/2015 | 13.44 | | 82.21 | 15.85 | 5.03 | 1.29 | 179.7 | 0.118 | 48.2 | NR |
| | | 11/10/2015 | 16.15 | | 79.50 | 16.93 | 5.32 | 1.79 | 180.5 | 0.039 | 36.4 ⁽²⁾ | NR |
| | | 5/23/2016 | 13.36 | | 82.29 | 15.28 | 5.37 | 2.91 | 57.1 | 0.094 | 48.3 | 74 |
| | | 12/14/2016 | 5.70 | | 89.95 | 11.70 | 5.80 | 9.28 | 217.0 | 0.020 | 24.1 | NR |
| | | 5/8/2017 | 10.94 | | 84.71 | 13.60 | 5.93 | 0.69 | 117.1 | 0.094 | 50.3 | 62 |
| MW-11 | 9.5-24.5 | 11/2011 | 5.20 | 91.70 | 86.50 | 14.00 | 5.12 | 1.37 | 155 | 0.048 | 29.8 | NR |
| | | 5/13/2015 | 7.80 | | 83.90 | 16.88 | 5.04 | 0.78 | 202.8 | 0.086 | 1.5 | NR |
| | | 11/10/2015 | 9.97 | | 81.73 | 17.28 | 5.07 | 1.40 | 252.7 | 0.079 | -4.4 ⁽²⁾ | NR |
| | | 5/23/2016 | 7.25 | | 84.45 | 16.42 | 5.16 | 1.74 | 64.8 | 0.145 | 0.3 | 111 |
| | | 12/14/2016 | 4.24 | | 87.46 | 16.90 | 5.01 | 0.57 | 214.9 | 0.260 | 4.2 | NR |
| | | 5/8/2017 | 6.15 | | 85.55 | 14.70 | 5.08 | 0.47 | 194.1 | 0.281 | 65.7 | 183 |

Table 1
Groundwater Elevation and Field Parameters
 McNamara and Peepe Lumber Mill
 Arcata, California

| Well | Screened Interval (feet btoc) | Date | Depth to Water (feet btoc) | TOC Elevation (feet msl) | Groundwater Elevation (feet msl) | Temperature (degrees C) | pH | DO (mg/L) | ORP (mV) | Conductivity (mS/cm) | Turbidity (NTU) | TDS (mg/L) |
|-------|----------------------------------|------------|-------------------------------|-----------------------------|-------------------------------------|----------------------------|------|--------------|-------------|-------------------------|---------------------|---------------|
| | | | | | | | | | | | | |
| MW-12 | 10-20 | 11/2011 | 3.92 | 91.73 | 87.81 | 14.14 | -- | 0.91 | 11 | NR ⁽¹⁾ | 41.6 | NR |
| | | 5/13/2015 | 8.20 | | 83.53 | 14.69 | 5.28 | 0.81 | 167.3 | 0.189 | 31.7 | NR |
| | | 11/10/2015 | 12.05 | | 79.68 | 16.09 | 5.38 | 1.24 | 77.9 | 0.196 | -1.1 ⁽²⁾ | NR |
| | | 5/23/2016 | 7.75 | | 83.98 | 15.19 | 5.55 | 1.01 | 10.1 | 0.230 | 4.1 | 184 |
| | | 12/14/2016 | 3.80 | | 87.93 | 14.40 | 5.42 | 0.52 | 240.2 | 0.228 | 4.3 | NR |
| | | 5/8/2017 | 5.75 | | 85.98 | 15.70 | 5.32 | 1.07 | 180.4 | 0.221 | 43.7 | 139 |

Notes:

Data prior to 2015 from URS (2011).

TOC = Top of casing

bgs = Below ground surface

btoc = Below top of casing

C = Celsius

DO = Dissolved oxygen

TDS = total dissolved solids

msl = mean sea level

mS/cm = Millisiemens per centimeter

mg/L = Milligrams per liter

mV = Millivolts

NTU = Nephelometric Turbidity Units

ORP = Oxidation Reduction Potential

NR = Not Recorded

⁽¹⁾ Conductivity not recorded due to equipment errors.

⁽²⁾ Negative turbidity readings during November 2015 considered suspect due to equipment errors.

Table 2
Groundwater Analytical Results - PCP and TCP
 McNamara and Peepe Lumber Mill
 Arcata, California

| Well Name | Date | PCP | TCP |
|---------------|--------------------------|-----------------------------|-------------|
| | CA MCL | 1.0 | NV |
| | Analytical Method | Canadian Pulp Method | |
| MW-1 | 7/31/1997 | <0.30 | <1.0 |
| | 1/12/1998 | <0.30 | <1.0 |
| | 4/8/1998 | <0.30 | <1.0 |
| | 7/8/1998 | <0.30 | <1.0 |
| | 10/10/1998 | -- | -- |
| | 1/26/1999 | <0.30 | <1.0 |
| | 7/14/1999 | <0.30 | <1.0 |
| | 4/13/2000 | <0.30 | <1.0 |
| | 10/19/2000 | <0.30 | <1.0 |
| | 6/7/2001 | 0.49 | <1.0 |
| | 12/26/2002 | <0.30 | <1.0 |
| | 12/12/2003 | 1,100 | 19 |
| | 12/24/2003 | 720 | 11 |
| | 3/15/2004 | 1,100 | 15 |
| | 6/10/2004 | 900 | 19.8 |
| | 6/28/2005 | 890 | 11 |
| | 8/4/2005 | 890 | 14 |
| | 06/2010 | 0.34 | <1.0 |
| | 10/2010 | 2,200 | 36 |
| | 11/2011 | 1,300 | 25 |
| | 4/2012 | 1,300 | 24 |
| | 5/13/2015 | 690 | 14 |
| | 5/13/2015 (FD) | 560 | 12 |
| | 11/11/2015 | 610 | 120 |
| | 11/11/2015 (FD) | 670 | 120 |
| | 5/23/2016 | 830 | 7.1 |
| | 5/23/2016 (FD) | 1,100 | 8.0 |
| | 12/14/2016 | 1.2 | <1.0 |
| | 12/14/2016 (FD) | 1.2 | <1.0 |
| | 5/8/2017 | 570 | 8.4 |
| 5/8/2017 (FD) | 530 | 7.9 | |
| MW-5 | 7/31/1997 | <0.30 | <1.0 |
| | 1/12/1998 | <0.30 | <1.0 |
| | 4/8/1998 | <0.30 | <1.0 |
| | 7/8/1998 | <0.30 | <1.0 |
| | 7/8/1998 (FD) | <0.30 | <1.0 |
| | 10/10/1998 | -- | -- |
| | 1/26/1999 | <0.30 | <1.0 |
| | 7/14/1999 | <0.30 | <1.0 |

Table 2
Groundwater Analytical Results - PCP and TCP
 McNamara and Peepe Lumber Mill
 Arcata, California

| Well Name | Date | PCP | TCP |
|-----------------|-----------------|-------------|------------|
| | CA MCL | 1.0 | NV |
| MW-5 (Cont.) | 4/13/2000 | <0.30 | <1.0 |
| | 10/19/2000 | <0.30 | <1.0 |
| | 10/19/2000 (FD) | <0.30 | <1.0 |
| | 6/7/2001 | <0.30 | <1.0 |
| | 6/7/2001 (FD) | 0.68 | <1.0 |
| | 12/26/2002 | <0.30 | <1.0 |
| | 12/26/2002 (FD) | <0.30 | <1.0 |
| | 12/12/2003 | <0.30 | <1.0 |
| | 12/12/2003 (FD) | <0.30 | <1.0 |
| | 1/28/2005 | <0.30 | <1.0 |
| | 1/28/2005 (FD) | <0.30 | <1.0 |
| | 8/4/2005 | <0.30 | <1.0 |
| | 06/2010 | 1.7 | <1.0 |
| | 10/2010 | 1.6 | <1.0 |
| | 11/2011 | 5.1 | <1.0 |
| | 4/2012 | 54 | 2.2 |
| | 5/13/2015 | 35 | 4.3 |
| | 11/11/2015 | 65 | 3.3 |
| 5/23/2016 | 56 | 1.6 | |
| 12/14/2016 | 39 | 2.3 | |
| 5/8/2017 | 46 | 2.3 | |
| MW-6 | 7/31/1997 | <0.30 | <1.0 |
| MW-7 | 1/12/1998 | <0.30 | <1.0 |
| | 4/8/1998 | <0.30 | <1.0 |
| | 4/8/1998 | <0.30 | <1.0 |
| | 7/8/1998 | <0.30 | <1.0 |
| | 10/10/1998 | <0.30 | <1.0 |
| | 1/26/1999 | <0.30 | <1.0 |
| | 1/26/1999 | <0.30 | <1.0 |
| | 7/14/1999 | <0.30 | <1.0 |
| | 4/13/2000 | <0.30 | <1.0 |
| | 4/13/2000 | <0.30 | <1.0 |
| | 10/19/2000 | <0.30 | <1.0 |
| | 6/7/2001 | 0.36 | <1.0 |
| | 12/26/2002 | <0.30 | <1.0 |
| | 12/12/2003 | <0.30 | <1.0 |
| | 1/28/2005 | <0.30 | <1.0 |
| | 8/4/2005 | <0.30 | <1.0 |
| 8/4/2005 (FD) | <0.30 | <1.0 | |

Table 2
Groundwater Analytical Results - PCP and TCP
 McNamara and Peepe Lumber Mill
 Arcata, California

| Well Name | Date | PCP | TCP |
|-----------------|----------------|-------------|-----------|
| | CA MCL | 1.0 | NV |
| MW-7 (Cont.) | 06/2010 | <0.30 | <1.0 |
| | 10/2010 | <0.30 | <1.0 |
| | 11/2011 | <0.30 | <1.0 |
| | 4/2012 | <0.30 | <1.0 |
| | 5/13/2015 | 0.39 | <1.0 |
| | 11/11/2015 | <0.30 | <1.0 |
| | 5/23/2016 | <0.30 | <1.0 |
| | 12/14/2016 | <0.30 | <1.0 |
| | 5/8/2017 | <0.30 | <1.0 |
| MW-8 | 1/12/1998 | <0.30 | <1.0 |
| | 4/8/1998 | 1.3 | <1.0 |
| | 4/27/1998 | <0.30 | <1.0 |
| | 7/8/1998 | <0.30 | <1.0 |
| | 10/10/1998 | -- | -- |
| | 1/26/1999 | <0.30 | <1.0 |
| | 7/14/1999 | <0.30 | <1.0 |
| | 4/13/2000 | <0.30 | <1.0 |
| | 10/19/2000 | <0.30 | <1.0 |
| | 6/7/2001 | <0.30 | <1.0 |
| | 12/26/2002 | <0.30 | <1.0 |
| | 8/4/2005 | <0.30 | <1.0 |
| | 5/13/2015 | <0.30 | <1.0 |
| | 11/11/2015 | <0.30 | <1.0 |
| | 5/23/2016 | <0.30 | <1.0 |
| | 12/14/2016 | <0.30 | <1.0 |
| 5/8/2017 | <0.30 | <1.0 | |
| MW-9 | 1/12/1998 | <0.30 | <1.0 |
| | 4/8/1998 | <0.30 | <1.0 |
| | 7/8/1998 | <0.30 | <1.0 |
| | 10/10/1998 | <0.30 | <1.0 |
| | 10/10/1998 | <0.30 | <1.0 |
| | 1/26/1999 | <0.30 | <1.0 |
| | 7/14/1999 | <0.30 | <1.0 |
| | 7/14/1999 (FD) | <0.30 | <1.0 |
| | 4/13/2000 | <0.30 | <1.0 |
| | 10/19/2000 | <0.30 | <1.0 |
| | 6/7/2001 | <0.30 | <1.0 |
| | 12/26/2002 | <0.30 | <1.0 |
| | 8/3/2005 | <0.30 | <1.0 |

Table 2
Groundwater Analytical Results - PCP and TCP
 McNamara and Peepe Lumber Mill
 Arcata, California

| Well Name | Date | PCP | TCP |
|-----------------|---------------|-------------|-----------|
| | CA MCL | 1.0 | NV |
| MW-9 (Cont.) | 06/2010 | <0.30 | <1.0 |
| | 10/2010 | <0.30 | <1.0 |
| | 11/2011 | <0.30 | <1.0 |
| | 4/2012 | <0.30 | <1.0 |
| | 5/13/2015 | <0.30 | <1.0 |
| | 11/11/2015 | <0.30 | <1.0 |
| | 5/23/2016 | <0.30 | <1.0 |
| | 12/14/2016 | <0.30 | <1.0 |
| | 5/8/2017 | <0.30 | <1.0 |
| MW-10 | 06/2010 | <0.30 | <1.0 |
| | 10/2010 | <0.30 | <1.0 |
| | 11/2011 | <0.30 | <1.0 |
| | 4/2012 | <0.30 | <1.0 |
| | 5/13/2015 | <0.30 | <1.0 |
| | 11/11/2015 | <0.60 | <2.0 |
| | 5/23/2016 | <0.30 | <1.0 |
| | 12/14/2016 | <0.30 | <1.0 |
| | 5/8/2017 | <0.30 | <1.0 |
| MW-11 | 10/2010 | 0.84 | <1.0 |
| | 11/2011 | <0.30 | <1.0 |
| | 4/2012 | 1.6 | <1.0 |
| | 5/13/2015 | <0.30 | <1.0 |
| | 11/11/2015 | 0.67 | <1.0 |
| | 5/23/2016 | <0.30 | <1.0 |
| | 12/14/2016 | <0.30 | <1.0 |
| | 5/8/2017 | 1.9 | <1.0 |
| MW-12 | 11/2011 | 24 | <1.0 |
| | 04/2012 | 53 | <1.0 |
| | 5/13/2015 | 52 | <1.0 |
| | 11/11/2015 | 51 | <1.0 |
| | 5/23/2016 | 120 | <1.0 |
| | 12/14/2016 | 46 | <1.0 |
| | 5/8/2017 | 81 | <1.0 |

Notes:

Data prior to 2015 from URS (2011).

All results in micrograms per liter

CA MCL = California Maximum Contaminant Levels

PCP = Pentachlorophenol

TCP = 2,3,4,6-Tetrachlorophenol

Table 2
Groundwater Analytical Results - PCP and TCP
McNamara and Peepe Lumber Mill
Arcata, California

| Well Name | Date | PCP | TCP |
|-----------|---------------|------------|-----------|
| | CA MCL | 1.0 | NV |

Embolden values: Analyte concentration exceeds laboratory reporting limit

Shaded values: Analyte concentration exceeds MCL

< = indicates value is below the noted laboratory reporting limit

NV = No established value

FD = Field duplicate

Table 3
Comparison of Primary and Duplicate Sample Analytical Results
McNamara and Peepe Lumber Mill
Arcata, California

| Well Name | Date | PCP | TCP |
|-----------|---------------|-----------|-----------|
| MW-1 | 5/8/2017 | 570 | 8.4 |
| | 5/8/2017 (FD) | 530 | 7.9 |
| | RPD | 7% | 6% |

Notes:

Analytical results in micrograms per liter

PCP = Pentachlorophenol

TCP = 2,3,4,6-Tetrachlorophenol

RPD = relative percent difference

FD = Field duplicate

NA = Not applicable



August 28, 2019

Mr. John Ford, Director and
Planning Commissioners
Humboldt County Planning and Building
3015 H Street
Eureka, CA 95501

Director Ford and Commissioners,

On behalf of Humboldt Baykeeper's board, staff, and members, I submit these comments on the Glendale Cannabis Facility's Initial Study and Mitigated Negative Declaration, Conditional Use Permits, and Special Permits for APN 516-111-064, located at 1691 Glendale Drive in unincorporated Humboldt County near Blue Lake (Case Nos. CUP 16-1096, CUP 16-1127, SP 16-868, SP 16-870, SP 16-871, and SP 16-872; App Nos. 13312, 13319, 13328, 13339, 13346, and 13360).

Humboldt Baykeeper works to safeguard our coastal resources for the health, enjoyment, and economic strength of the Humboldt Bay community, and is a member of the California Coastkeeper Alliance and the international Waterkeeper Alliance.

One of Humboldt Baykeeper's priorities is remediation of former industrial sites that are contaminated with dioxins, which are extremely long-lived chemicals that bind to sediment and soil. Dioxins are some of the most toxic compounds ever manufactured. They are powerful carcinogens and reproductive toxins that magnify as they move up the food web. In aquatic and marine environments, dioxins accumulate in fish, birds, marine mammals, and other fish-eating wildlife - and humans. Lumber mills, boatyards, and other industrial sites that operated from the 1940s until the late 1980s frequently used a wood preservative called pentachlorophenol (known as "penta") which contained dioxins. Due to the hazards to human health and the environment from these dioxins, the U.S. EPA banned the use of penta in lumber treatment and most other uses in the late 1980s (today it is restricted to use on power poles). Potential dioxin contamination near important waterways poses a risk to human health and the environment, and must be fully characterized and remediated prior to ground-disturbing activities, including well construction and grading.

Mailing Address: 600 F Street, Suite 3 #810
Office: 415 I Street, Arcata, CA 95521
(707) 499-3678

www.humboldtbykeeper.org



Humboldt Baykeeper believes an EIR and Phase II Site Assessment should be prepared to address contamination related to former lumber mill operations on the site, which is poorly addressed in the Phase I Environmental Site Assessment. *See, City of Redlands v. County of San Bernardino* (2002) 96 Cal.App.4th 398, 406 (“The negative declaration is inappropriate where the agency has failed either to provide an accurate project description or to gather information and undertake an adequate environmental analysis.”) The Mitigated Negative Declaration fails to disclose and analyze impacts to water quality, biological resources, and human health related to ground-disturbing activities that would be approved by the permits before you.

Any disturbance of contaminated soil cause by grading, excavation, and other heavy equipment use in or near an unremediated contamination site has the potential to have significant negative impacts to water quality, biological resources, and human health, which has not been adequately assessed, or mitigated to less than significant, in the MND.

The potential for contaminated groundwater to move off-site is especially concerning because of its proximity to the Mad River, which is the source of drinking water supplies for more than 80,000 people in Eureka, Arcata, McKinleyville, Blue Lake, Manila, Glendale, and Fieldbrook. The Mad River is also considered critical and/or essential habitat for salmonids, candlefish, and other aquatic species.

Pursuant to CEQA §15070(a), a Lead Agency shall prepare, or have prepared, a negative declaration or a Mitigate Negative Declaration when the Initial Study shows there is no substantive evidence, in light of the whole record before the agency, supporting a fair argument that the Project may have a significant effect on the environment.

Humboldt Baykeeper believes that the evidence clearly supports a fair argument that significant adverse impacts may occur due to the proposed Project, which is likely to substantially degrade the quality of the environment and cause substantial adverse effects on human beings, either directly or indirectly [CEQA Mandatory Findings of Significance §15065 (a)(1) and (a)(4)]. For these reasons, Humboldt Baykeeper strongly recommends that the Lead Agency prepare an EIR, and opposes the use of an MND for this proposed Project.

Humboldt Baykeeper believes that to avoid or mitigate potential impacts to groundwater, surface water, the Mad River, and human health and safety, it is necessary to conduct further analysis for the reasons enumerated below. Given the contaminants likely to be present on the site, the MND fails to ensure that construction and project-related ground disturbances will not result in the further spread of contamination. *See, Azusa Land Reclamation Co. v. Main San Gabriel Basin Watermaster* (1997) 52 Cal.App.4th 1165, 1200 (“It is the *possibility*, of a significant effect . . . which is at issue, not a determination of the actual effect, which would be the subject of a negative declaration or an EIR” [italics in original].)

The Mitigated Negative Declaration for this project is inadequate due to the failure to identify potential significant impacts to the environment, specifically impacts to water quality, biological resources, and human health and safety related to hazards and hazardous materials associated with the site history as described above.

In addition, the project as proposed fails to comply with Humboldt County's Commercial Cannabis Land Ordinance, which states that for proposed development of commercial cannabis facilities on existing commercial, business park, or industrial sites, "[I]f a Phase I ESA indicates the presence or likely presence of contamination, the applicant shall prepare a Phase II ESA, and recommendations of the Phase II ESA shall be fully implemented prior to ground disturbance, which will be made a condition of approval for the project." (CCLUO 2018, Mitigation Measure 3.7-2a)

I. Use of Pentachlorophenol on the Subject Site

The subject parcel was used for part of the operations of the former McNamara & Peepe Lumber Mill and Blue Lake Forest Products. Recent groundwater monitoring on nearby parcels has found elevated levels of cadmium, chromium, lead, and pentachlorophenol, a wood preservative used to prevent fungus. This fungicide, known as "penta," was used at the mill until 1984, shortly before it was banned for use on lumber due to its high dioxin content.

In October 1968, a penta spill from the Molalla-Arcata Lumber Mill caused a massive fish kill in the Mad River. State wildlife biologists reported that more than 10,000 steelhead were killed immediately following the spill. In January 1969, the McNamara & Peepe mill spilled the chemical into the Mad River.

According to the Initial Study/Mitigated Negative Declaration,

The project site is located on land that was part of a much larger parcel that has been used for lumber processing by multiple companies for decades. Some of those lumber processing activities included using wood preservatives and anti-staining compounds, specifically pentachlorophenol and tetrachlorophenol, which are hazardous materials according to the California Department of Toxic Substances Control (DTSC). These materials were not used on or in the immediate vicinity of the subject parcel. [p. 38]

We dispute the conclusion that these materials were not used on or in the immediate vicinity of the subject parcel based on our review of the 2003 Report of Findings for Phase II Investigation, Blue Lake Forest Products/AalFs Property by Winzler & Kelly, which indicates that the project site was used for finished (treated) wood storage and sorter/planer operations (adjacent to the greenchain, where wood preservatives were applied (Winzler & Kelly 2003, Fig. 3: Historical Use Map, p. 17). According to the aerial images included in the report, these activities appear to have taken place from 1966-1988, when pentachlorophenol was used.

II. 1998 Remediation of Adjacent Contaminated Site has been Rescinded

The IS/MND goes on to state that “DTSC oversaw the remediation and monitoring of areas of the larger, former parcel that were found to have hazardous material contamination,” concluding that the site contamination has been remediated [p. 38]. However, DTSC rescinded the 1998 Remedial Action Plan in December 2018, declaring that the concrete cap has failed to contain groundwater contaminated with the highly toxic wood preservative pentachlorophenol. DTSC is developing a new plan to remediate and/or control the contamination. It is unclear at this time to what extent the plume of contaminated groundwater may have migrated beneath the subject parcel.

DTSC says that the failure of the cap is related to much higher groundwater levels, which are now 15 feet higher than in 2002, when Blue Lake Forest Products closed and stopped pumping from an on-site well. Due to the higher groundwater levels, the contaminated soil has been in contact with groundwater for years.

Further sampling must be conducted prior to ground disturbing activities associated with development of the site to ensure that soil and/or groundwater contamination will not be mobilized, potential endangering Hall Creek, the Mad River, and construction workers.

Reliance on limited soil and groundwater sampling conducted in 2003 is inadequate to ensure that human health and the environment will be protected if this project is approved without further sampling.

III. Cadmium Detections in Soil

The IS/MND asserts that “In 2003, Winzler and Kelley, Consulting Engineers, conducted a Phase 2 Investigation of the broader area. Their investigation did not detect hazardous materials on the subject parcel, nor did their investigation find evidence that suggested hazardous materials were ever used on the subject parcel.” [p. 38-39]

During the 2003 site assessment, soil and groundwater samples from the subject parcel were analyzed for contaminants associated with the former lumber mill operations on the site (Fig. 4, Boring Location Map, p. 19).

Cadmium is considered on the Proposition 65 list of toxic compounds; it is listed as known to the State to cause developmental toxicity and male reproductive toxicity. 'Cadmium and cadmium compounds' listed as known to the State to cause cancer.

IV. Absence of Site on State and Federal Lists

The IS/MND asserts that “The subject parcel does not appear on the Cortese List. The site is not shown as containing hazardous materials or being involved in any cleanup or monitoring programs on the U.S. Environmental Protection Agency (EPA)

EnviroMapper¹⁰, The California Department of Toxic Substances Control EnviroStor mapper¹¹, or the State Water Resource Control Board Geotracker¹².” [p. 39]

Absence of a site on any of these lists cannot be used as evidence that a site is free of contamination; these are not “presence/absence” databases. Similarly, lack of comments from the Regional Water Quality Control Board and/or Department of Toxic Substance Control must not be regarded by the County as evidence that there is no contamination present, or that either of the agencies’ concerns have been addressed by the County’s analysis.

V. Inadequate Analysis Results in Erroneous Findings

Based on what we believe to be erroneous information, the IS/MND asserts the following findings:


- a) The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. *Less than significant impact.*

- d) The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment. *No impact.*

We dispute these findings based on our review of the 2003 Report of Findings for Phase II Investigation, Blue Lake Forest Products/AalFs Property by Winzler & Kelly, for the reasons enumerated above.

For these reasons, we strongly urge Humboldt County to prepare an Environmental Impact Report and a thorough Phase II Site Investigation focused on the proposed project site prior to approval of the Conditional Use Permit to further identify the extent and magnitude of contamination in soil and groundwater on the site, which is necessary to incorporate the most effective means of avoiding, minimizing, and mitigating these impacts to human health and the environment.

Sincerely,



Jennifer Kalt, Director
jkalt@humboldtkeeper.org

FREDDY BREWSTER / 08/16/19 @ 10:52 A.M. / CRIME

Catching Up With the Marijuana Enforcement Team; 136,719 Plants Eradicated So Far This Year, With More Surely to Come



Unpermitted greenhouse taken down during a MET raid in the Hyampom area in July. File photo.

The Humboldt County Sheriff's Office Marijuana Enforcement Team has issued 50 search warrants that have resulted in the seizure of 136,719 plants so far this summer.

Sergeant Kyle Holt of MET, who spoke with the *Outpost*, said raids have taken place countywide, with no one place being considered a hot spot. Holt could not provide an exact

pound amount for the seized and eradicated plants because of the variability of weight per plant. Holt said most indoor and light deprivation grown plants produce only about a quarter of a pound of processed weed, while outdoor grown plants can range from five to eight pounds of processed weed.

Most of the information MET receives about illegal grows come from anonymous tips, and Holt said the process to serve a warrant is multifaceted.

"Once we get a tip, we identify the property and owner and then check with the Bureau of Cannabis Control for a permit," Holt said.

MET also checks in with state regulators, Department of Fish and Wildlife for water permits as well as CalFire for any cutting permit to clear trees from a potential grow site.



Sgt. Kyle Holt. Photo: HCDSO.

Although it happens rarely, Holt said at times MET will raid a property that is legally permitted. Just last week this happened because of a mix-up in permitting. MET arrived at the property to serve a search warrant only to find out it was a legal medical grow. Nothing was seized or eradicated during the raid, but Holt acknowledged the potential problems that may arise from cutting down legally permitted plants.

"If it happened that we eradicated a legal garden, that person could file a claim with the county and possibly be reimbursed for their loss," Holt said. "We understand there are flaws in the process with big work loads and county filing mistakes. We are always double-checking and triple-checking before we get on scene. The last thing we want to do is to eradicate a garden of someone growing legally. That is our worst nightmare."

Holt said summers are the "busy season" for MET, and the California National Guard has been helping them with raids this season — primarily with aerial support. He said the National Guard helped about six times so far this summer and when they come up it is usually for a few days at a time.

"There are other local and state agencies that use the National Guard," Holt said. "Just because there's a big helicopter flying around it doesn't mean it's the Sheriff's Office."

If anyone sees helicopters flying in an area and are curious if it the Sheriff's Office, Holt said they can call the Public Information Officer who will confirm if it is the Sheriff's Office and in what general area they are operating in that day.

With the seasonal trimmigrants starting to arrive for the fall harvest season, the *Outpost* asked Holt for clarification about whether or not field hands are charged during raids on illegal farms. He said it is a "case by case situation" and that a lot of the time the property owner is not on scene when warrants are served. He said everyone on scene is detained and read their Miranda rights and are then interviewed to determine their role in the growing operation.

"We rarely proceed with prosecution with field hands and laborers on scene," Holt said.

He went on to say that seasonal workers wanting to work on a legal grow site should look out for official paperwork and tax documents that are usually filled out when starting a new job.

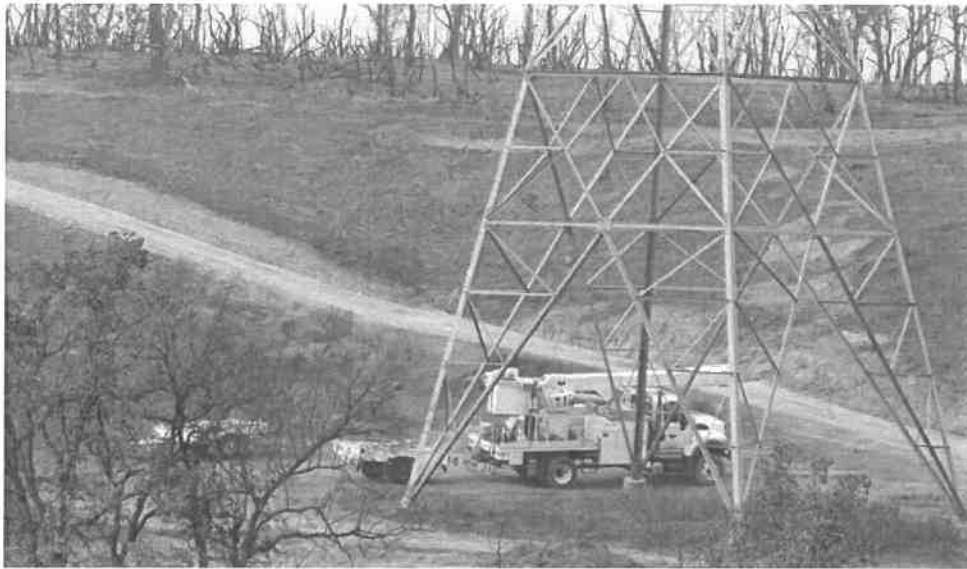
"Anytime there is a promise of payment or a cash exchange, that is definitely a red flag for anyone looking for work in the industry," Holt said.

GTM: A WOOD MACKENZIE BUSINESS

PG&E Pledges to Keep All Power Purchase Agreements Despite Bankruptcy

A few developers have accepted a 10 percent pay cut in California to gain certainty that their projects can move forward.

JULIAN SPECTOR AUGUST 09, 2019



PG&E has wrangled a discount on five new projects that are still in development.

California utility Pacific Gas & Electric said it will honor all existing power-purchase agreements in a forthcoming plan to reorganize and emerge from bankruptcy.

Whether or not legacy power contracts would survive has been a hot topic within power industry circles since the utility's role in deadly wildfires sent the company into bankruptcy. PG&E has committed to power contracts totaling \$42 billion, most of which come from renewable power plants. Early deals with wind and solar developers now carry a significant premium compared to today's market, so backing out of the contracts held the potential to save PG&E billions of dollars.

Dropping the contracts would also send a shockwave through the renewables industry, particularly affecting the renewable energy units of Consolidated Edison, Berkshire Hathaway and NextEra Energy, but also threatening California's legislative mandate to decarbonize the electric grid.

A court filing from August 6 suggests that potential outcome will not happen. The new debtor's plan would see PG&E raise money from existing shareholders and securitized bonds to pay out

wildfire victims, creditors and obligations to employees, while standing behind its power-purchase agreements, all apparently without raising electricity rates for customers, S&P reported.

"We want to be clear, we will not propose to reject these agreements as part of our plan of reorganization," PG&E spokesperson Lynsey Paulo told S&P.

That could put some fears to rest, although the plan has not been finalized and could still change. It also leaves open the possibility of "voluntary modification" of contracts by the counterparty, which has already happened.

Canadian Solar subsidiary Recurrent Energy took a voluntary pay cut of 10 percent on three solar projects, Reuters reported. Hummingbird Energy Storage and mNOC took the same cut on their energy storage contracts, part of the Moss Landing portfolio to provide cleaner alternatives to gas peaking capacity in the South Bay region.

The California Public Utilities Commission approved the Moss Landing portfolio two months before PG&E filed for bankruptcy. Originally, mNOC was supposed to get 10 megawatts/40 megawatt-hours online by October 2019, while Hummingbird had until December 2020 to build 75 megawatts/300 megawatt-hours.

Uncertainty around PG&E's intentions toward its contracts makes it hard for developers to secure financing and break ground on the new projects. Though many of PG&E's existing contracts have been operating for years, those that cut a deal with the utility are still in development. These developers opted to trade a fraction of their project value for certainty that their customer would accept it at all. The utility expects to save \$20 million from the five renegotiations, Reuters noted.

It remains to be seen whether PG&E can shake some more loose change out of its other contracts, or if all the other developers will get to keep them intact.

LOCO STAFF / 08/26/19 @ 4:17 P.M. / ART

Those Big Ugly Concrete Vaults on the Peninsula Have Been Beautified By Art, and a Party For This Has Been Scheduled



Ben Goulart art! Photos: Peninsula Community Collaborative.

Press release from the Peninsula Community Collaborative:

Nine new murals have been painted on the Samoa Peninsula this summer by nine different talented local artists. The murals are located throughout Manila, Samoa and Fairhaven, and are painted on concrete water vaults owned and maintained by Humboldt Bay Municipal Water District (HBMWD). The vaults were regularly tagged with obscenities in the past. Community members with the Peninsula Community Collaborative (PCC) noted that the previous condition of the vaults contributed to blight and a negative physical appearance in their neighborhoods. The PCC and HBMWD worked together to invite and select artists to paint the vaults, and received more than 30 applications. The selected artists who completed murals this summer with a stipend from the PCC are: Charli Murphy, Patricia Sennott, Ben Goulart, Mir de Silva, Sheala Dunlap, Laci Dane, James Rose, Julio Valdez, and Lucas Thornton. These artists were chosen because they proposed a diversity of artistic styles, subject matter, and themes that were perfectly suited to the Samoa Peninsula.

The murals have transformed the vaults into exciting and beautiful public art. HBMWD Board Chairperson Sheri Woo said "HBMWD is pleased to be part of the Peninsula beautification process! Thanks to the artists, the Peninsula Community Collaborative, and RCAA for giving us the opportunity to show our community support." Residents of the Samoa Peninsula have excitedly tracked the creation of the murals, and visitors regularly stop to enjoy them. The murals have added color, interest and delight to the everyday lives of many who live, work and recreate on the Peninsula.

The PCC has organized an Artist's Reception and Art Show to recognize the participating artists on Saturday, September 7th. It will take place at the Friends of the Dunes Humboldt Coastal Nature Center at 220 Stamps Lane in Manila from 5:00 – 7:00 pm. This event is free to the public and all are encouraged to attend! There will be hearty snacks, beverages for all ages,

and good company. Additionally, some participating artists will bring artwork for sale, so please come check out what they have to offer! For more information about the reception, please check out the PCC on Facebook at this link or contact Carla at 707-269-2055 or carla@nrsrcaa.org.

The PCC and its partners wish to warmly thank all of the artists who applied and participated, the Friends of the Dunes for their support of this project and use of their venue for the reception, Humboldt Bay Municipal Water District, the Bureau of Land Management and the St. Joseph Health Community Partnership Fund for supporting the work of the PCC to increase the places throughout the Samoa Peninsula where people feel safe, welcome and proud of their community.



Mir de Silva art.



Charli Murphy art!



UGLY: This photo is from before there was art. The art is meant to solve this problem.

RED HEADED BLACKBELT

ARTIST'S RECEPTION AND ART SHOW TO CELEBRATE NEW MURALS ON THE SAMOA PENINSULA

August 29, 2019 Robin Fleckles One comment

Press Release from the Peninsula Community Collaborative:



Charli Murphy Malel Dunes Vault [photo provided by the Peninsula Community Collaborative]

Nine new murals have been painted on the Samoa Peninsula this summer by nine different talented local artists. The murals are located throughout Manila, Samoa and Fairhaven, and are painted on concrete water vaults owned and maintained by Humboldt Bay Municipal Water District (HBMWD). The vaults were regularly tagged with obscenities in the past. Community members with the Peninsula Community Collaborative (PCC) noted that the previous condition of the vaults contributed to blight and a negative physical appearance in their neighborhoods. The PCC and HBMWD worked together to invite and select artists to paint the vaults, and received more than 30 applications. The selected artists who completed murals this summer with a stipend from the PCC are: Charli Murphy, Patricia Sennott, Ben Goulart, Mir de Silva, Sheala Dunlap, Laci Dane, James Rose, Julio Valdez, and Lucas Thornton. These artists were chosen because they proposed a diversity of artistic styles, subject matter, and themes that were perfectly suited to the Samoa Peninsula. The murals have transformed the vaults into exciting and beautiful public art. HBMWD Board Chairperson Sheri Woo said "HBMWD is pleased to be part of the Peninsula beautification process! Thanks to the artists, the Peninsula Community Collaborative, and RCAA for giving

us the opportunity to show our community support.” Residents of the Samoa Peninsula have excitedly tracked the creation of the murals, and visitors regularly slow to enjoy them. The murals have added color, interest and delight to the everyday lives of many who live, work and recreate on the Peninsula. The PCC has organized an Artist’s Reception and Art Show to recognize the participating artists on Saturday, September 7th. It will take place at the Friends of the Dunes Humboldt Coastal Nature Center at 220 Stamps Lane in Manila from 5:00 – 7:00 pm. This event is free to the public and all are encouraged to attend! There will be hearty snacks, beverages for all ages, and good company. Additionally, some participating artists will bring artwork for sale, so please come check out what they have to offer! For more information about the reception, please check out the PCC on Facebook at www.facebook.com/PeninsulaCommunityCollaborative or contact Carla at 707-269-2055 or carla@nrsrcaa.org. The PCC and its partners wish to warmly thank all of the artists who applied and participated, the Friends of the Dunes for their support of this project and use of their venue for the reception, Humboldt Bay Municipal Water District, the Bureau of Land Management and the St. Joseph Health Community Partnership Fund for supporting the work of the PCC to increase the places throughout the Samoa Peninsula where people feel safe, welcome and proud of their community.

Vivacious vaults bring beauty to Samoa Peninsula

Nine artists add to the beauty of the Samoa Peninsula



Ben Goulart painted the vault by Bay Street on the Samoa Peninsula. (PCC — Contributed)

By [THE TIMES-STANDARD](#) |
September 4, 2019 at 4:19 am

Nine new murals have been painted on the Samoa Peninsula this summer by nine different local artists. The murals are located throughout Manila, Samoa and Fairhaven, and are painted on concrete water vaults owned and maintained by Humboldt Bay Municipal Water District. The vaults were regularly tagged with obscenities in the past. Community members with the Peninsula Community Collaborative noted that the previous condition of the vaults contributed to blight and a negative physical appearance in their neighborhoods.

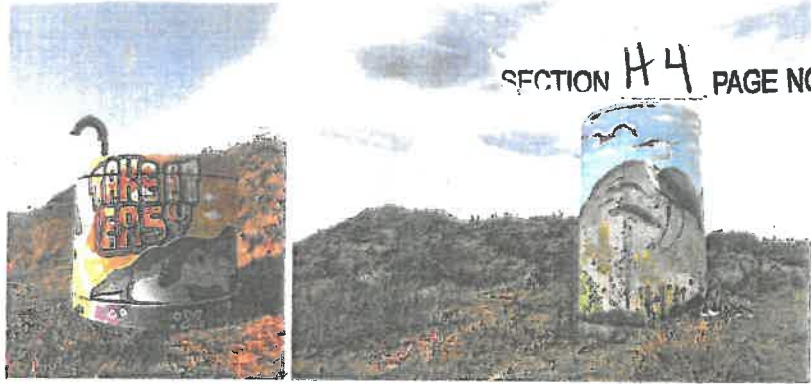
The Peninsula Community Collaborative and Humboldt Bay Municipal Water District worked together to invite and select artists to paint the vaults, and received more than 30 applications. The selected artists who completed murals this summer with a stipend from the PCC are Charli Murphy, Patricia Sennott, Ben Goulart, Mir de Silva, Sheala Dunlap, Laci Dane, James Rose, Julio Valdez and Lucas Thornton. These artists were chosen because they proposed a diversity of artistic styles, subject matter and themes that were well suited to the Samoa Peninsula.

“HBMWD is pleased to be part of the Peninsula beautification process,” said HBMWD Board Chairperson Sheri Woo. “Thanks to the artists, the Peninsula Community Collaborative and RCAA for giving us the opportunity to show our community support.”

The PCC has organized an artists’ reception and art show to recognize the participating artists on Saturday. This free event will take place at the Friends of the Dunes Humboldt Coastal Nature Center at 220 Stamps Lane in Manila from 5 to 7 p.m. The public is invited. There will be snacks and beverages for all ages. Additionally, some participating artists will bring artwork for sale.

For more information about the reception, go to www.facebook.com/PeninsulaCommunityCollaborative or contact Carla at 707-269-2055 or carla@nrsrcaa.org.

Sept 4, 2019
Mad River Union



PENINSULA BEAUTIFICATION Concrete vaults, part of the water system on the Samoa Peninsula, were recently painted by local artists. Right, a nature scene painted by Charli Murphy. Left, a vault along Old Navy Base Road painted by Mir de Silva.

SUBMITTED PHOTOS

Beautifying the peninsula

PENINSULA COMMUNITY COLLABORATIVE

SAMOA PENINSULA – Nine new murals have been painted on the Samoa Peninsula this summer by nine different talented local artists. The murals are located throughout Manila, Samoa and Fairhaven, and are painted on concrete water vaults owned and maintained by Humboldt Bay Municipal Water District (HBMWD).

The vaults were regularly tagged with obscenities in the past. Community members with the Peninsula Community Collaborative (PCC) noted that the previous condition of the vaults contributed to blight and a negative physical appearance in their neighborhoods.

The PCC and HBMWD worked together to invite and select artists to paint the vaults, and received more than 30 applications. The selected artists who completed murals this summer with a stipend from the PCC are: Charli Murphy, Patricia Sennott, Ben Goulart, Mir de Silva, Sheala Dunlap, Laci Dane, James Rose, Julio Valdez, and Lucas Thornton.

ARTIST'S RECEPTION & ART SHOW

❖ **Date:** Saturday, Sept. 7

❖ **Time:** 5 to 7 p.m.

❖ **Location:** Humboldt Coastal Nature Center, 220 Stamps Lane, Manila

These artists were chosen because they proposed a diversity of artistic styles, subject matter, and themes that were perfectly suited to the Samoa Peninsula.

The murals have transformed the vaults into exciting and beautiful public art. HBMWD Board Chairperson Sheri Woo said "HBMWD is pleased to be part of the Peninsula beautification process! Thanks to the artists, the Peninsula Community Collaborative, and RCAA for giving us the opportunity to show our community support."

Residents of the Samoa Peninsula have excitedly tracked the creation of the murals, and visitors regularly stop to enjoy

PENINSULA ❖ B3

Peninsula | Free reception Saturday

❖ FROM B1

them. The murals have added color, interest and delight to the everyday lives of many who live, work and recreate on the Peninsula.

The PCC has organized an Artist's Reception and Art Show to recognize the participating artists on Saturday, Sept. 7. It will take place at the Friends of the Dunes Humboldt Coastal Nature Center at 220 Stamps Lane, in Manila from 5 to 7 p.m. This event is free to the public and all are encouraged to attend! There will be hearty snacks, beverages for all ages, and good company.

Additionally, some participating artists will bring artwork for sale, so please

For more information about the reception, please check out the PCC on Facebook at facebook.com/PeninsulaCommunityCollaborative or contact Carla at (707) 269-2055 or carla@nrsrcaa.org.

The PCC and its partners wish to warmly thank all of the artists who applied and participated, the Friends of the Dunes for their support of this project and use of their venue for the reception, Humboldt Bay Municipal Water District, the Bureau of Land Management and the St. Joseph Health Community Partnership Fund for supporting the work of the PCC to increase the places throughout the Samoa Peninsula where people feel safe, welcome and proud of

County Administrative Office

Posted on: September 11, 2019

Public hearing to amend zoning maps coming on Sept. 19

On Thursday, September 19, 2019 at 6:00 p.m., or as soon thereafter as the matter can be heard, the Humboldt County Planning Commission will hold a public hearing in the Board of Supervisors' Chambers, Humboldt County Courthouse, 825 Fifth Street, Eureka, California, to consider the following amendments to the Humboldt County Zoning Maps to be consistent with the 2017 Humboldt County General Plan for areas outside the Blue Lake, Fieldbrook-Glendale, and Willow Creek Community Planning Areas and the McKinleyville Town Center Area:

- Mixed Use Zones applied to areas with MU - Mixed Use, VC - Village Center, or RCC - Rural Community Center General Plan designations,
- "TL - Tribal Land" Zone will be applied to the areas with a "TTL - Tribal Trust Lands" or a "TL - Tribal Lands" Land Use designation that are not zoned "TPZ"; and
- "WR - Streamside Management Areas and Wetlands" Combining Zone will be applied to properties designated by the General Plan as Streamside Management Areas and/or Wetlands;
- "RR - Railroad" Combining Zone applied to railroad rights of way held by the North Coast Railroad Authority, and those along the former Annie and Mary Railroad rail corridor between Arcata and Blue Lake,
- "MR - Mineral Resources" Combining Zone will be applied to parcels with permitted surface mining operations; and
- Specific zones are proposed to be assigned to all areas currently zoned "U - Unclassified" and other changes to the Zoning Maps are also proposed to provide consistency with the General Plan where the General Plan Land Use was changed and the existing Zone is inconsistent or where there was already an inconsistency between the General Plan & Zone.

Background information can be found at the Planning and Building Department at 3015 H Street, Eureka, and [on the county's website](#).

The proposed rezone mapping can be viewed using [the Humboldt County webGIS](#) (Select "Jurisdictional Boundaries and Land Use > Planning Layers > Draft GPU Zones" from the "Layer List").

For more information, contact John Miller Senior Planner, at 707-268-3781 or [email him](#).

[Background info on the General Plan implementation](#)

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

To: Board of Directors

From: John Friedenbach

Date: September 13, 2019

Subject: Ordinance Procedures (given potential changes to Ordinance 22)

I) Procedures Required by the Government Code

The Government Code provisions relating to “districts” do not require HBMWD to abide by any specific procedures to enact an ordinance. Instead, at least with respect to the publication of successful ordinances, the Government Code defers to the requirements set forth in the “principal act.” (Gov. Code, § 58006.) The principal act with respect to HBMWD is Division 20 of the Water Code.

II) Procedures Required by the Water Code

Division 20 of the Water Code governs “municipal water districts.” The provisions of Division 20 set forth procedures districts must follow when enacting ordinances. The relevant procedures are as follows:

1. The passage of an ordinance requires an affirmative vote from a majority of all members of the board. (Wat. Code, § 71274.)
2. The ayes and noes must be recorded in the journal of the proceedings of the board. (Wat. Code, § 71277.)
3. The enacting clause of all ordinances must be: “Be it ordained by the Board of Directors of the Humboldt Bay Municipal Water District as follows:.” (Wat. Code, § 71280.)

Publication/notice of successful ordinances is not generally required by the Water Code. However, publication is required for ordinances that relate to “Standby Charges,” “Sanitation Service,” “Water Shortages,” and ordinances that adopt any code provision by reference.

a) Publication/Notice Requirements for Ordinances fixing Standby Charges

Section 71632 states, “The ordinance fixing a standby assessment or availability charge shall be adopted by the board pursuant to the notice, protest, and hearing procedures in Section 53753 of the Government Code [Proposition 218 notice, protest, and hearing requirements] and only after adoption of a resolution setting forth the particular schedule or schedules of charges or assessments proposed to be established by ordinance and after a hearing on said resolution.”

b) Publication/Notice Requirements for Ordinances relating to Sanitation Service

Section 71689.26 provides that all ordinances “relating to the provision of sanitation services and the regulation of such services” shall take effect upon adoption. Nevertheless, the ordinance must be published once, in full, in a newspaper of general circulation, printed, published, and circulated in the district within 10 days after adoption.

c) Publication/Notice Requirements for Ordinances relating to Water Shortages

Section 71641 provides that any ordinance that prescribes or defines “restrictions, prohibitions, and exclusions referred to in Section 71640 [authority to restrict use of water]” are effective upon adoption. Nevertheless, within 10 days after adoption the ordinance must be published once, in full, in a newspaper of general circulation which is printed, published, and circulated within the district.

d) Publication/Notice Requirements for Ordinances Adopting any Code Section by Reference

Section 71281 provides that any ordinance that adopts any code by reference must follow the procedures set out in Article 2 of Chapter 1, Part 1, Division 1, Title 5 of the Government Code. The relevant procedures for adopting a code by reference include:

1. Notice of hearing on the proposition shall be published once a week for two consecutive weeks in a newspaper of general circulation. (Gov. Code, § 50022.3.)
2. The Notice must state the time and place of the hearing and that a copy of the code under consideration is on file and open to inspection with the clerk of the district. The Notice must also provide a description of the ordinance sufficient to give notice to all interested persons. (*Id.*)

If the HBMWD seeks to amend an ordinance that previously adopted a code by reference, the district must comply with the procedures above.

III) Ralph M. Brown Act

The District is a legislative body, as defined by Government Code section 54952, and therefore is subject to the open meeting requirements of the Brown Act, including the following items.

Pursuant to Government Code section 54954.2, a brief description (approximately 20 words in length) of the repealing ordinance must be included on the agenda and the agenda must be posted at least 72 hours before the general meeting.

Pursuant to Government Code section 54954.3, time for public comment must be set aside.

Pursuant to Government Code section 54953(c), votes for or against the repealing ordinance must be cast in public.



THE NATURAL CONDITION IMMUNITY

As we approach the spring season, warmer temperatures are bound to entice outdoor enthusiasts to venture out to the wide open spaces to camp, hike and backpack. As we all know, there is no shortage of visually stunning and otherwise inviting wilderness areas throughout the state of California to visit – from Big Sur, to Death Valley, to the Trinity Alps Wilderness.

Before you get excited about those hot dogs and s'mores, you should be aware of Government Code § 831.2, commonly referred to as the "natural condition immunity," which could render public entities immune against claims of premises liability and dangerous condition liability. Government Code § 831.2 provides that "neither a public entity nor a public employee is liable for an injury caused by a natural condition of any unimproved public property, including but not limited to any natural condition of any lake, stream, bay, river or beach."

§831.2.

Neither a public entity nor a public employee is liable for an injury caused by a natural condition of any unimproved public property, including but not limited to any natural condition of any lake, stream, bay, river or beach.

The purpose of the natural condition immunity is to encourage public use of unimproved government property by relieving government agencies from being "put to the expense of making the property safe, responding to tort actions, and paying damages." Sounds like a good idea, right? Keep reading to learn how you can be denied damages by a public entity if you camp in an area that is classified as "unimproved."

The natural condition immunity was discussed in the recently published case of *County of San Mateo v. Superior Court of San Mateo County* (2017) 13 Cal.App.5th 724. As shown by *County of San Mateo*, the issue is not straightforward and there are many factors to be considered such that summary judgment is generally not appropriate. Indeed, the lead

drafter of the Government Claims Act, Professor Van Alstyne, contemplated that "the distinction between the 'developed' land and the 'undeveloped' sectors of a park might well be difficult to identify in terms of boundary lines on a map, and might have to be treated as a question fact..."

In *County of San Mateo*, plaintiff child brought a lawsuit against the County of San Mateo alleging premises liability and dangerous condition of public property after he suffered injuries as a result of a 72-foot tall diseased tree falling on his tent while camping within a County-owned wilderness area. The County moved for summary judgment on the grounds that it was immune from liability under the natural condition immunity.

The trial court denied the County's motion, concluding that there were triable issues of fact as to whether the subject property was "unimproved" within the meaning of the statute. First, the trial court pointed out that the campsite where plaintiff's injuries occurred had been "improved" by a clearing, picnic tables, a fire pit, a barbecue pit, and bumper logs and that in the tree's immediate vicinity, there were two other developed campsites and a paved roadway.

Next, the trial court distinguished the matter from an earlier similar case, *Alana M. v. State of California* (2016) 245 Cal. App.4th 1482. In *Alana M.*, a public entity was found to be immune from liability in a suit brought against it by plaintiff who had similarly been injured by a falling tree. The Court there explained that the public entity was immune since the tree (and not the plaintiff) was located on unimproved property.

The *Alana M.* Court determined that in interpreting Government Code § 831.2, the relevant inquiry should be the character of the property where the natural condition

continued on page 38

Clearly, there are many nuances to the natural condition immunity. So before you load up your packs and begin your ascent up a mountaintop this spring season, consider the character of your campsite and whether the land could be described as “improved.”

(in Alana M., the tree) is located, and not the location of where the injury occurred. In County of San Mateo however, plaintiff presented expert opinion that the tree at issue had roots which grew underneath the campsite where plaintiff suffered his injuries. As such, the trail court determined that there were triable issues of fact and therefore, summary judgment would not be appropriate.

Last, the trial court considered expert opinion presented by plaintiff that man-made physical alterations contributed to the diseased condition of the tree which ultimately caused it to break and fall onto plaintiff, causing him injuries. The trial court determined that this evidence presented by plaintiff

also created a triable issue of fact of whether such man-made contributions caused the subject property to be considered “improved” such that the County would not be entitled to summary judgment.

Clearly, there are many nuances to the natural condition immunity. So before you load up your packs and begin your ascent up a mountaintop this spring season, consider the character of your campsite and whether the land could be described as “improved.” Otherwise, you may be out of luck if you try to seek monetary compensation for injuries you suffer while you are on your trip in the great outdoors.

©BRADLEY & GMELICH 2019



RECREATIONAL TRAIL IMMUNITY

831.4.

A public entity, public employee, or a grantor of a public easement to a public entity for any of the following purposes, is not liable for an injury caused by a condition of:

- (a) Any unpaved road which provides access to fishing, hunting, camping, hiking, riding, including animal and all types of vehicular riding, water sports, recreational or scenic areas and which is not a (1) city street or highway or (2) county, state or federal highway or (3) public street or highway of a joint highway district, boulevard district, bridge and highway district or similar district formed for the improvement or building of public streets or highways.
- (b) Any trail used for the above purposes.
- (c) Any paved trail, walkway, path, or sidewalk on an easement of way which has been granted to a public entity, which easement provides access to any unimproved property, so long as such public entity shall reasonably attempt to provide adequate warnings of the existence of any condition of the paved trail, walkway, path, or sidewalk which constitutes a hazard to health or safety. Warnings required by this subdivision shall only be required where pathways are paved, and such requirement shall not be construed to be a standard of care for any unpaved pathways or roads.

Of the many immunities available under the California Government Code, “trail immunity” under section 831.4 has long shielded public entities from liability when injuries are suffered by those using public property for recreational purposes. Immunity under this section even extends to private property owners who grant public easements to public entities for those purposes. The immunity was enacted to encourage public entities and private easement grantors to allow the use of public property for recreation without the burden and expense of litigation stemming from alleged injuries on the trails leading to recreational activities.

However, an appellate court recently rejected this defense in a case involving the City of Pasadena. In *Jacobo Garcia v. American Golf Corporation*, the City was sued after a young child was struck in the head by a stray golf ball, which caused a brain injury. At the time of his injury, the child was in a stroller on a walkway that was part of the City of Pasadena’s Rose Bowl Loop, located next to a golf course. The child’s mother sued the City, which owns the golf course, along with the private entity that managed and operated the golf course.

The City asserted trail immunity to defend against the lawsuit. The plaintiffs countered that the dangerous condition was not the location of the walkway — insofar as its proximity to the golf course — but rather the inadequacy of the seven-foot high fences around the golf course, and other measures taken to guard against injuries that could be caused by stray golf balls. The trial court sided with the City, and the plaintiffs appealed. The issue on appeal was whether the injury was caused by a dangerous condition of the walkway for purposes of trail immunity.

Rejecting the City’s assertion and trial court’s application of trail immunity, the appellate court found that, while the City could be protected from injuries caused by the walkway itself, the immunity did not extend to dangerous conditions caused by the golf course — an adjacent public property.

In reaching its conclusion, the appellate court had to distinguish the case from a number of contradictory cases, including *Leyva v. Crocket & Co., Inc.*, a case decided in January of this year. The *Leyva* court evaluated strikingly similar facts: a pedestrian traveling along a public path adjacent to a golf club suffered an injury caused by a stray golf ball. However, in *Leyva*, the appellate court applied trail immunity and extended the cloak of immunity to a private golf club owner who had granted adjacent easements to a county for public unpaved recreational hiking trails.

The difference between the *Leyva* opinion and the *Garcia* opinion is a matter of policy. The appellate court honed in on fairness and disincentives for immunizing the City. In particular, the court deemed it fair to deny the City immunity for a dangerous condition



on the golf course that increases the risk of harm by third party conduct and opined that cloaking the City with immunity would disincentive it from correcting the dangerous condition.

The appellate court has thus limited a public agency’s trail immunity under certain circumstances. With *Garcia* in mind, public entities and private owners/operators alike should ensure that sufficient preventative measures are considered and taken when evaluating recreational properties adjacent to public trails.

©BEST BEST & KRIEGER 2019

For additional information please contact SDRMA’s Chief Risk Officer Dennis Timoney, ARM at 916-231-4141 or email Dennis at dtimoney@sdrma.org.

New Business

Humboldt Bay Municipal Water District

To: Board of Directors

From: John Friedenbach

Date: September 11, 2019

Re: Local Hazard Mitigation Plan status

As previously reported, our District is participating as a planning partner in the update of the Humboldt County Hazard Mitigation Plan. The Disaster Mitigation Act (DMA) of 2000 was federal legislation that establishes pre-disaster mitigation program requirements for the national post-disaster Hazard Mitigation Grant Program. DMA 2000 encourages and rewards local and state pre-disaster planning, promotes sustainability, and seeks to integrate State and local planning with an overall goal of strengthening statewide hazard mitigation. In addition, the DMA stipulates that to be eligible for post-disaster mitigation assistance under FEMA's Hazard Mitigation Grant programs, local governments must develop and adopt pre-disaster, multi-hazard mitigation plans, or Local Hazard Mitigation Plans. The act specifies prescriptive planning requirements that plans must meet, including a requirement that the plans be updated at least every 5 years.

The current plan update process is nearly complete. As part of the process, planning partners prepare a "jurisdictional annex" for inclusion in the overall plan. Attached is the draft of our Hazard Mitigation Action Plan Matrix which lists potential mitigation projects for our District. The purpose of the District's participation in the plan and inclusion of projects is to position the District to apply for FEMA Hazard Mitigation Grant money when such monies may become available. The District has been successful in obtaining several such grants – the Techite Pipeline replacement project; Surge Tower Demolition; and the Mad River crossing project. There are several others still in the application process.

Once the draft plan is complete, there will be a public comment period. Upon finalization of the plan, each planning partner in the plan will be required to officially adopt the plan by resolution. The current timeline for adoption is expected to be first quarter 2020.

20. HUMBOLDT BAY MUNICIPAL WATER DISTRICT

20.1 HAZARD MITIGATION PLAN POINT OF CONTACT

Primary Point of Contact
 John Friedenbach, General Manager
 828 7th Street
 Eureka, CA 95501-1114
 Telephone: 707-443-5018
 e-mail Address: friedenbach@hbmwd.com

Alternate Point of Contact
 Chris Harris, Business Manager
 828 7th Street
 Eureka, CA 95501-1114
 Telephone: 707-443-5018
 e-mail Address: harris@hbmwd.com

20.2 JURISDICTION PROFILE

20.2.1 Overview

The Humboldt Bay Municipal Water District was formed on March 19, 1956, pursuant to the California Municipal Water District Act. It is a special district created to develop a regional water system to provide a reliable supply of drinking and industrial water to customers in the greater Humboldt Bay area of Humboldt County. The District's governing body is its Board of Directors which has adoptive powers. This board will assume the responsibility for the adoption and the General Manager the responsibility for implementation of this plan. The District has 29 employees—7 at the Eureka office, 19 at the operations center near Essex, and 3 at the District's Ruth Lake facilities. Operations are primarily funded by charging costs incurred to its customers for water delivered.

The District has two separate and distinct pipeline systems—one delivers treated drinking water and the other untreated raw water. Revenue generated from fees for service fund the District operations. Currently, the District does not serve any industrial customers. However, the District is working diligently to market this resource.

20.2.2 Service Area and Trends

The District's service area is the greater Humboldt Bay area, including the community of McKinleyville to the north, College of the Redwoods to the south, and the City of Blue Lake to the east. The service area covers 350 square miles. The District supplies treated drinking water on a wholesale basis to seven municipal agencies: the cities of Arcata, Eureka and Blue Lake; and the community services districts of Fieldbrook-Glendale, Humboldt, Manila, and McKinleyville. Through this wholesale relationship, the District serves water to a population of approximately 88,000. The District also directly serves treated drinking water to approximately 200 retail customers. The District supplies untreated, raw water on a wholesale basis to industrial customers located on the Samoa Peninsula for industrial purposes.

Service demands continue to rise at a modest pace with population and business growth within our service area. In 2005, the Board of Directors embarked on a planning process to address long-term issues of strategic importance to the District. The goal was to ensure the long-term integrity and viability of the regional water supply and system such that the District continues to meet its important service mission to the community. The Board agreed

on two initiatives that warrant priority attention in the coming years - Infrastructure Planning and Water Resource Planning.

To address the significant revenue loss and to avoid the eventual loss of its water rights, the District must find additional water uses—up to 50 million gallons per day. The District turned to the community to identify possible water use options and to provide input on important trade-offs that are inevitable. The Advisory Committee developed three broad categories in which the District can achieve increased water use:

- Use additional water within the District via projects that increase the consumptive use of water within the current District boundaries.
- Transfer water for use outside of the District’s existing service territory via projects that would generate revenues by selling water (not the underlying water right) to a Municipality or other party who would then put the water to “beneficial use.” Such a transfer would only occur under a strictly defined contract which protects the District and local interests.
- Transfer water for environmental benefit via projects that provides water for environmental restoration or enhancement.

The District continues to evaluate the most promising options and take appropriate steps towards implementation such that the District achieves additional water use.

20.2.3 Assets

Table 20-1 summarizes the critical assets of the district and their value.

Table 20-1. Special Purpose District Assets

| Asset | Value |
|--|---------------|
| Property | |
| 2,600 acres of land | \$1,400,000 |
| Equipment | |
| <u>Various – for this amount please be more specific</u> | |
| <u>Ruth Area</u> | 40,000 |
| <u>Industrial System</u> | 1,500,000 |
| <u>Radio Repeaters</u> | 50,000 |
| <u>Essex</u> | 20,000 |
| Total: | \$3,010,000 |
| Critical Facilities and Infrastructure | |
| <u>R.W. Matthews Dam/Ruth Reservoir</u> | \$120,300,000 |
| <u>Gosselin Hydro-Electric Power House</u> | \$3,600,000 |
| <u>John Winzler Diversion, pumping, and control facilities</u> | \$10,600,000 |
| <u>Treatment and storage facilities</u> | \$2,000,000 |
| <u>Pipeline systems (35 miles of pipe) – Various</u> | \$90,200,000 |
| <u>Eureka Office Building (Alternate EOC)</u> | \$780,000 |
| <u>Essex Control Building (Alternate EOC)</u> | \$420,000 |
| <u>Ruth Headquarters Building</u> | \$240,000 |
| <u>Turbidity Reduction Facility</u> | \$9,600,000 |
| Total: | \$237,740,000 |

20.3 CAPABILITY ASSESSMENT

An assessment of the district's current capabilities was conducted to identify opportunities to expand, initiate or integrate capabilities in order to further hazard mitigation goals and objectives. Where such opportunities were identified and determined to be feasible, they are included in the action plan. The "Analysis of Mitigation Actions" table in Section 20.9 identifies these as community capacity building mitigation actions.

20.3.1 Planning and Regulatory Capabilities

Jurisdictions develop plans and programs and implement rules and regulations to protect and serve residents. When effectively prepared and administered, these plans, programs and regulations can support the implementation of mitigation actions. Table 20-2 summarizes existing codes, ordinances, policies, programs or plans that are applicable to this hazard mitigation plan.

Table 20-2. Planning and Regulatory Capability

| Plan, Study or Program | Date of Most Recent Update | Comment |
|--|----------------------------|---|
| State Water Resources Control Board California and U.S. Environmental Protection Agencies | 9/1/2015 | Water supply permit, water rights permits RMP, Air Resources Board, Department of Toxic Substances Control, Drinking water standards |
| Federal Energy Regulatory Commission | 8/23/2018 | All development impacting the dam and hydro plant must meet FERC requirements |
| Federal Endangered Species Act | 4/2004 | Must comply with ESA and the resulting HCP for HBMWD |
| Capital Improvement Plan California Coastal Commission | 1/11/2018 | All development impacting the coastal zone need a coastal development permit |
| Army Corp of Engineers California Environmental Quality Act | 10/6/2010 | CWA 404 Permit for Essex and Ruth |

20.3.2 Fiscal, Administrative and Technical Capabilities

Fiscal capability is an indicator of a jurisdiction's ability to fulfill the financial needs associated with hazard mitigation projects. An assessment of fiscal capabilities is presented in Table 20-3. Administrative and technical capabilities represent a jurisdiction's staffing resources for carrying out the mitigation strategy. An assessment of administrative and technical capabilities is presented in Table 20-4.

Table 20-3. Fiscal Capability

| Financial Resource | Accessible or Eligible to Use? |
|--|--------------------------------|
| Capital Improvements Project Funding | Yes |
| Authority to Levy Taxes for Specific Purposes | Yes |
| User Fees for Water, Sewer, Gas or Electric Service | Yes |
| Incur Debt through General Obligation Bonds | Yes |
| Incur Debt through Special Tax Bonds | Yes |
| Incur Debt through Private Activity Bonds | No |
| State-Sponsored Grant Programs | Yes |
| Development Impact Fees for Homebuyers or Developers | No |
| Federal Grant Programs | Yes |

Table 20-4. Administrative and Technical Capability

| Staff/Personnel Resource | Available? | Department/Agency/Position |
|---|------------|------------------------------------|
| Planners or engineers with knowledge of land development and land management practices | Yes | Contracted support |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | Contracted support |
| Planners or engineers with an understanding of natural hazards | Yes | Contracted support |
| Staff with training in benefit/cost analysis | Yes | Contracted support |
| Surveyors | Yes | Contracted support |
| Personnel skilled or trained in GIS applications | Yes | Operations staff |
| Scientist familiar with natural hazards in local area | Yes | Contracted support |
| Emergency manager | Yes | Operations manager |
| Grant writers | Yes | Admin staff and Contracted support |

20.3.3 Education and Outreach Capabilities

Outreach and education capability identifies the connection between government and community members, which opens a dialogue needed for a more resilient community. An assessment of education and outreach capabilities is presented in Table 20-5.

Table 20-5. Education and Outreach

| Criterion | Response |
|--|--|
| Do you have a public information officer or communications office? | Yes |
| Do you have personnel skilled or trained in website development? | Yes |
| Do you have hazard mitigation information available on your website? • If yes, please briefly describe | Yes Link to Humboldt & Trinity County LHMPs |
| Do you use social media for hazard mitigation education and outreach? • If yes, please briefly describe | No |
| Do you have any citizen boards or commissions that address issues related to hazard mitigation? • If yes, please briefly specify | No |
| Do you have any other programs already in place that could be used to communicate hazard-related information? • If yes, please briefly describe | Yes Automated telephoning to customers |
| Do you have any established warning systems for hazard events? • If yes, please briefly describe | Yes Dam Failure Emergency Action Plan |

20.3.4 Adaptive Capacity for Climate Change

Given the uncertainties associated with how hazard risk may change with a changing climate, a jurisdiction's ability to track such changes and adapt as needed is an important component of the mitigation strategy. Table 20-6 summarizes the jurisdiction's adaptive capacity for climate change.

Table 20-6. Adaptive Capacity for Climate Change

| Criterion | Jurisdiction Rating ^a |
|---|----------------------------------|
| Technical Capacity | |
| Jurisdiction-level understanding of potential climate change impacts <i>Comment:</i> | Low |
| Jurisdiction-level monitoring of climate change impacts <i>Comment:</i> | Low |
| Technical resources to assess proposed strategies for feasibility and externalities <i>Comment:</i> | Low |
| Jurisdiction-level capacity for development of greenhouse gas emissions inventory <i>Comment:</i> | Low |
| Capital planning and land use decisions informed by potential climate impacts <i>Comment:</i> | Low |
| Participation in regional groups addressing climate risks <i>Comment:</i> | Low |
| Implementation Capacity | |
| Clear authority/mandate to consider climate change impacts during public decision-making processes <i>Comment:</i> | Low |
| Identified strategies for greenhouse gas mitigation efforts <i>Comment:</i> | Low |
| Identified strategies for adaptation to impacts <i>Comment:</i> | Low |
| Champions for climate action in local government departments <i>Comment:</i> | Low |
| Political support for implementing climate change adaptation strategies <i>Comment:</i> | Medium |
| Financial resources devoted to climate change adaptation <i>Comment:</i> | Low |
| Local authority over sectors likely to be negative impacted <i>Comment:</i> | Low |
| Public Capacity | |
| Local residents' knowledge of and understanding of climate risk <i>Comment:</i> | Unsure |
| Local residents support of adaptation efforts <i>Comment:</i> | Unsure |
| Local residents' capacity to adapt to climate impacts <i>Comment:</i> | Unsure |
| Local economy current capacity to adapt to climate impacts <i>Comment:</i> | Low |
| Local ecosystems capacity to adapt to climate impacts <i>Comment:</i> | unsure |

- a. High = Capacity exists and is in use; Medium = Capacity may exist, but is not used or could use some improvement; Low = Capacity does not exist or could use substantial improvement; Unsure= Not enough information is known to assign a rating.

20.4 INTEGRATION WITH OTHER PLANNING INITIATIVES

For hazard mitigation planning, “integration” means that hazard mitigation information is used in other relevant planning mechanisms, such as capital facilities planning, and that relevant information from those sources is used in hazard mitigation. This section identifies where such integration is already in place, and where there are opportunities for further integration in the future. Resources listed in Section 20.10 were used to provide information on integration. The progress reporting process described in Volume 1 will document the progress of hazard mitigation actions related to integration and identify new opportunities for integration.

20.4.1 Existing Integration

Some level of integration has already been established between local hazard mitigation planning and the following other local plans and programs:

- Emergency Operations Plan—HBMWD internal plan
- Capital Improvement Plan—HBMWD internal plan
- Emergency Action Plan—dam failure

DRAFT

20.4.2 Opportunities for Future Integration

The capability assessment presented in this annex identified the following plans and programs that do not currently integrate hazard mitigation information but provide opportunities to do so in the future:

- Humboldt County Debris Management Plan

20.5 JURISDICTION-SPECIFIC NATURAL HAZARD EVENT HISTORY

Table 20-7 lists past occurrences of natural hazards for which specific damage was recorded in HBMWD. Other hazard events that broadly affected the entire planning area, including HBMWD, are listed in the risk assessments in Volume 1 of this hazard mitigation plan.

Table 20-7. Natural Hazard Events

| Type of Event | FEMA Disaster # | Date | Damage Assessment |
|--|-----------------------------|------------|-----------------------------|
| Winter storms, flooding, and mudslides | DR-4308 | 4/1/2017 | \$7,600 |
| Winter storms, flooding, and mudslides | DR-4301 | 2/14/2017 | \$180,000 |
| Flooding, sever winter storms, and landslides | M #1628 | 2/3/2006 | \$84,000 |
| Severe winter storms, flooding | DR-1155 | 1/4/1997 | \$204,500 |
| Severe winter storms, flooding | DR-1203 | 2/9/1998 | \$59,000 |
| Severe winter storms, flooding | DR-1155 | 1/4/1997 | \$204,500 |
| Severe weather | N/A | 12/12/1995 | \$115,000 |
| Severe winter storms, flooding | DR-1046 | 3/12/1995 | \$97,000 |
| Winter storms, flooding, landslides, mud flows | DR-1044 | 1/9/1995 | \$22,500 |
| Earthquake | N/A | 12/1994 | \$7,000 |
| Drought | Emergency Declaration #3023 | 1977 | Minimal (short duration) |
| Flood | DR 183 | 12/24/1964 | Significant, amount unknown |

20.6 HAZARD RISK RANKING

Table 20-8 presents a local ranking for all hazards of concern for which this hazard mitigation plan provides complete risk assessments. This ranking summarizes how hazards vary for this jurisdiction. As described in detail in Volume 1, the ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property and the economy. Mitigation actions target hazards with high and medium rankings.

Table 20-8. Hazard Risk Ranking

| Rank | Hazard Type | Risk Rating Score (Probability x Impact) | Category |
|------|----------------|--|----------|
| 1 | Earthquake | 48 | High |
| 2 | Flood | 30 | Medium |
| 3 | Dam Failure | 24 | Medium |
| 4 | Severe Weather | 22 | Medium |
| 5 | Sea-Level Rise | 18 | Medium |
| 5 | Tsunami | 18 | Medium |
| 6 | Landslide | 12 | Low |
| 7 | Wildfire | 6 | Low |
| 7 | Drought | 6 | Low |

NOTE: The process used to assign risk ratings and rankings for each hazard is described in Volume 1 of this hazard mitigation plan.

20.7 JURISDICTION-SPECIFIC VULNERABILITIES

Volume 1 of this hazard mitigation plan provides complete risk assessments for each identified hazard of concern. The following jurisdiction-specific issues have been identified based on a review of the results of the risk assessment, public involvement strategy, and other available resources:

- The Essex Control Facilities is partially located within the flood zone of the Mad River (flood and dam failure)
- Insert facilities that are missing generators
- TRF back wash facility backup generator power
- Samoa Booster Pump Station backup generator power
- Chlorine gas release containment or treatment
- Dam failure due to seismic or flood event

Mitigation actions addressing these issues were prioritized for consideration in the action plan presented in Section 20.9.

20.8 STATUS OF PREVIOUS PLAN ACTIONS

Table 20-9 summarizes the actions that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

Table 20-9. Status of Previous Plan Actions

| Action Item from Previous Plan | Completed | Removed; No Longer Feasible | Carried Over to Plan Update | |
|--|-----------|-----------------------------------|--------------------------------|-----------------------|
| | | | Check if Yes | Action # in Update |
| HBMWD-1A—Install 3 emergency interties to improve supply reliability to Cities of: Arcata, Eureka, McKinleyville CSD. <i>Comment:</i> This project was completed in April 2016. | X | | | |
| HBMWD-1B—Replace water transmission pipeline over the Mad River which serves City of Blue Lake and Fieldbrook-Glendale CSD to improve supply reliability <i>Comment:</i> Completed October 2018. | X | | | |
| HBMWD-2—Acquire Emergency Response Equipment—K Rails and Traffic Plates <i>Comment:</i> Partially completed. Additional K Rails and Traffic Plates should be acquired. | | | x | |
| HBMWD-3—Acquire Support Equipment for Emergency Operation Centers at Essex, Korblex and Eureka <i>Comment:</i> Completed in 2014 plan. Delete for update. | | | | |
| HBMWD-4—Conduct public awareness education regarding hazards affecting water supplies <i>Comment:</i> ongoing | | | x | 4 |
| HBMWD-5—Conduct design and feasibility studies for construction of critical infrastructure / facilities <i>Comment:</i> ongoing | | | x | 5 |
| HBMWD-6—Replace Techite domestic water transmission pipeline on Samoa Peninsula to improve supply reliability <i>Comment:</i> Project completed May 2015. | x | | | |
| HBMWD-7—Replace critical isolation valves on domestic transmission system (one from Collectors 1,3 and 4 and one from Collector 2) <i>Comment:</i> | | | x | 6 |
| HBMWD-8—Install cut-out disconnects on District's 12-kv electric distribution system to isolate outages & improve water supply reliability. <i>Comment:</i> | | | x | 7 |
| HBMWD-9—Install emergency supply connection to Collector system at Essex (to access raw Collector water in an emergency which damages transmission system) <i>Comment:</i> | | | x | 8 |
| HBMWD-10—Replace Laterals and Pumps/Motors in Ranney Collector 3 <i>Comment:</i> Project completed May 2016. | x | | | |
| HBMWD-11—Replace Laterals and Pumps/Motors in Ranney Collectors 1,2 or 4 <i>Comment:</i> Collector 1 completed. Collectors 2 and 4 carry over. | | | x | 9 |
| HBMWD-12—Replace Transformers on Collectors 1,2 and 4 <i>Comment:</i> Collector 2 completed. Collectors 1 and 4 carry over. | | | x | 10 |
| HBMWD-13—Replace Transformers on Collectors 3 <i>Comment:</i> Completed in 2017. | x | | | |

| Action Item from Previous Plan | Completed | Removed; No Longer Feasible | Carried Over to Plan Update | |
|---|-----------|-----------------------------------|--------------------------------|-----------------------|
| | | | Check if Yes | Action # in Update |
| HBMWD-14—Remove existing Surge Tower and replace with alternate surge protection on industrial water system on Samoa Peninsula (to protect domestic water supply) <i>Comment:</i> | | | x | 11 |
| HBMWD-15—Replace or retrofit Mad River Slough Single Pipeline Crossing <i>Comment:</i> | | | x | 12 |
| HBMWD-16—Replace Log boom at R.W. Matthews Dam (Ruth Reservoir) to improve dam safety <i>Comment:</i> Project completed June 2014. | x | | | |
| HBMWD-17—Develop Dam Contingency Failure Plan & Implement recommended action re: notification & evacuation systems <i>Comment:</i> County Dam Break Contingency Failure Plan adopted June 2016. | x | | | |
| HBMWD-18—Retrofit or replace spillway wall at R.W. Matthews Dam <i>Comment:</i> | | | x | 13 |

DRAFT

20.9 HAZARD MITIGATION ACTION PLAN AND EVALUATION OF RECOMMENDED ACTIONS

Table 20-10 lists the actions that make up the hazard mitigation action plan for this jurisdiction. Table 20-11 identifies the priority for each action. Table 20-12 summarizes the mitigation actions by hazard of concern and mitigation type.

Table 20-10. Hazard Mitigation Action Plan Matrix

| Applies to New or Existing Assets | Objectives Met | Lead Agency | Support Agency | Estimated Cost | Sources of Funding | Timeline ^a |
|--|----------------|-----------------|----------------|----------------|---|-----------------------|
| Action HBMWD1— Where appropriate, support retrofitting, purchase or relocation of structures located in hazard areas, prioritizing those that have experienced repetitive losses and/or are located in high- or medium-risk hazard areas. | | | | | | |
| <i>Hazards Mitigated:</i> Earthquake, flooding, landslide, tsunami, wildfire, SLR | | | | | | |
| Existing | 3, 4, 10 | HBMWD | | High | HMGP, PDM, FMA | Short-term |
| Action HBMWD2— Actively participate in the plan maintenance protocols outlined in Volume 1 of this hazard mitigation plan. | | | | | | |
| <i>Hazards Mitigated:</i> Earthquake, Flood, Dam Failure, Severe Weather, Sea-Level Rise, Tsunami, Landslide, Wildfire, Drought | | | | | | |
| New | 1, 5, 8 | Humboldt County | HBMWD | Low | Staff Time, General Funds | Short-term |
| Action HBMWD3— Purchase generators for critical facilities and infrastructure that lack adequate backup power, including booster stations. | | | | | | |
| <i>Hazards Mitigated:</i> Dam failure, earthquake, flooding, landslide, severe weather, tsunami, wildfire | | | | | | |
| New | 2, 6, 9 | HBMWD | None | High | FEMA HMA, District Funds | Short term |
| Action HBMWD4— Conduct public awareness education regarding hazards affecting water supplies | | | | | | |
| <i>Hazards Mitigated:</i> Earthquake, Flood, Dam Failure, Severe Weather, Sea-Level Rise, Tsunami, Landslide, Wildfire, Drought | | | | | | |
| Existing | 6, 7 | Humboldt County | HBMWD | | County and participating cities and districts | Ongoing |
| Action HBMWD5— Conduct design and feasibility studies for construction of critical infrastructure / facilities | | | | | | |
| <i>Hazards Mitigated:</i> Earthquake, Flood, Landslide, Severe Weather, Tsunami | | | | | | |
| Existing | 2,3,9 | HBMWD | | \$250,000 | District Funds | Ongoing |

Humboldt County Operational Area Hazard Mitigation Plan 2019; Volume 2—Planning Partner Annexes

| Applies to New or Existing Assets | Objectives Met | Lead Agency | Support Agency | Estimated Cost | Sources of Funding | Timeline ^a |
|---|----------------|-------------|----------------|----------------|-----------------------------|-----------------------|
| Action HBMWD6 — Replace critical isolation valves on domestic transmission system (one from Collectors 1,3 and 4 and one from Collector 2) | | | | | | |
| <i>Hazards Mitigated:</i> Earthquake, Flood | | | | | | |
| Existing | 2,3,9 | HBMWD | | \$60,000 | District Funds | Short term |
| Action HBMWD7 — Install cut-out disconnects on District's 12-kv electric distribution system to isolate outages & improve water supply reliability. | | | | | | |
| <i>Hazards Mitigated:</i> Earthquake, Severe weather | | | | | | |
| Existing | 2,3,9 | HBMWD | | \$3,000 | District Funds | Short term |
| Action HBMWD8 — Install emergency supply connection to Collector system at Essex (to access raw Collector water in an emergency which damages transmission system) | | | | | | |
| <i>Hazards Mitigated:</i> Earthquake, Flood | | | | | | |
| Existing | 4,5 | HBMWD | | \$11,000 | District Funds | Short term |
| Action HBMWD9 — Replace Laterals and Pumps/Motors in Ranney Collectors 2 or 4 | | | | | | |
| <i>Hazards Mitigated:</i> Earthquake | | | | | | |
| Existing | 2,3,9 | HBMWD | | \$4 M | District Funds | Long term |
| Action HBMWD10 — Replace Transformers on Collectors 1 and 4 | | | | | | |
| <i>Hazards Mitigated:</i> Earthquake | | | | | | |
| Existing | 2,3,9 | HBMWD | | \$320,000 | District Funds | Long term |
| Action HBMWD11 — HBMWD-14—Remove existing Surge Tower and replace with alternate surge protection on industrial water system on Samoa Peninsula (to protect domestic water supply) | | | | | | |
| <i>Hazards Mitigated:</i> Earthquake, Tsunami, Severe weather | | | | | | |
| Existing | 2,3,9 | HBMWD | | \$600,000 | FEMA HMGP & District Funds | Short term |
| Action HBMWD12 — Replace or retrofit Mad River Slough Single Pipeline Crossing | | | | | | |
| <i>Hazards Mitigated:</i> Earthquake, Tsunami | | | | | | |
| Existing | 2,3,9 | HBMWD | | \$2 M | FEMA HMGP or District Funds | Long term |
| Action HBMWD13 —Retrofit or replace spillway wall at R.W. Matthews Dam | | | | | | |
| <i>Hazards Mitigated:</i> Dam Failure, Earthquake | | | | | | |
| Existing | 2,3,9 | HBMWD | | \$2 M | FEMA HMGP or District Funds | Long term |
| Action HBMWD14 —12kV Switchgear Relocation Outside of Flood Plain | | | | | | |
| <i>Hazards Mitigated:</i> Flood | | | | | | |
| New | 2,3,9 | HBMWD | | \$2 M | FEMA HMGP or District Funds | Short term |
| Action HBMWD15 —Collector Mainline Redundancy | | | | | | |
| <i>Hazards Mitigated:</i> Earthquake | | | | | | |
| New | 2,3,9 | HBMWD | | \$3 M | FEMA HMGP or District Funds | Long term |
| Action HBMWD16 —Reservoir Seismic Retrofit – (Three Reservoirs) | | | | | | |
| <i>Hazards Mitigated:</i> Earthquake | | | | | | |
| New | 2,3,9 | HBMWD | | \$3.5 M | FEMA HMGP or District Funds | Long term |
| Action HBMWD17 —Matthews Dam Spillway Retrofit | | | | | | |
| <i>Hazards Mitigated:</i> Dam Failure, Earthquake | | | | | | |
| Existing | 2,3,9 | HBMWD | | \$6.7 M | FEMA HMGP or District Funds | Long term |

20. Humboldt Bay Municipal Water District

| Applies to New or Existing Assets | Objectives Met | Lead Agency | Support Agency | Estimated Cost | Sources of Funding | Timeline ^a |
|---|----------------|-----------------|----------------|----------------|-----------------------------|-----------------------|
| Action HBMWD18 —Chlorine Scrubber for Essex Location | | | | | | |
| <i>Hazards Mitigated:</i> Earthquake, Flood | | | | | | |
| Existing | 2,3,9 | HBMWD | | \$1.3 M | FEMA HMGP or District Funds | Long term |
| Action HBMWD19 —Emergency Generator for Turbidity Reduction Facility | | | | | | |
| <i>Hazards Mitigated:</i> Earthquake, Severe Weather | | | | | | |
| Existing | 2,3,9 | HBMWD | | \$1.9 M | District Funds | Short term |
| Action HBMWD20 —Turbidity Reduction Facility Emergency Operations Center | | | | | | |
| <i>Hazards Mitigated:</i> Flood, Dam Failure | | | | | | |
| Existing | 2,3,9 | HBMWD | | \$2M | District Funds | Long term |
| Action HBMWD21 —Replace Sand Dunes Covering Water Mainline on Samoa Peninsula | | | | | | |
| <i>Hazards Mitigated:</i> Sever Weather, Tsunami | | | | | | |
| Existing | 2 | HBMWD | | \$500,000 | FEMA HMGP or District Funds | Long term |
| Action HBMWD22 —Continue to Support Countywide Initiatives Identified in this Plan | | | | | | |
| <i>Hazards Mitigated:</i> All Hazards | | | | | | |
| New & Existing | All objectives | Humboldt County | HBMWD | Low | District Funds | Short term ongoing |

a. Short-term = Completion within 5 years; Long-term = Completion within 10 years; Ongoing= Continuing new or existing program with no completion date

See the introduction to this volume for list of acronyms used here.

Table 20-11. Mitigation Action Priority

| Action # | # of Objectives Met | Benefits | Costs | Do Benefits Equal or Exceed Costs? | Is Project Grant-Eligible? | Can Project Be Funded Under Existing Programs/Budgets? | Implementation Priority ^a | Grant Pursuit Priority ^a |
|----------|---------------------|----------|--------|------------------------------------|----------------------------|--|--------------------------------------|-------------------------------------|
| HBMWD1 | 3 | High | High | Yes | Yes | No | Medium | High |
| HBMWD2 | 3 | Low | Low | Yes | No | Yes | High | Low |
| HBMWD3 | 3 | High | Medium | Yes | Yes | No | Medium | High |
| HBMWD4 | 2 | Medium | Medium | Yes | No | No | Low | Low |
| HBMWD5 | 3 | Medium | Medium | Yes | Yes | Yes | High | Medium |
| HBMWD6 | 3 | High | Low | Yes | Yes | Yes | High | Medium |
| HBMWD7 | 3 | High | Low | Yes | Yes | Yes | High | Medium |
| HBMWD8 | 2 | High | Low | Yes | Yes | Yes | High | Medium |
| HBMWD9 | 3 | Medium | High | Yes | Yes | No | Medium | Medium |
| HBMWD10 | 3 | High | High | Yes | Yes | No | High | Medium |
| HBMWD11 | 3 | High | High | Yes | Yes | No | High | High |
| HBMWD12 | 3 | Low | High | Yes | Yes | No | High | Medium |
| HBMWD13 | 3 | High | High | No | Yes | Yes | Medium | Medium |
| HBMWD14 | 3 | High | High | Yes | Yes | No | High | High |
| HBMWD15 | 3 | High | High | Yes | Yes | No | Medium | Medium |
| HBMWD16 | 3 | High | High | Yes | Yes | No | Medium | Medium |
| HBMWD17 | 3 | High | High | Yes | Yes | No | Medium | Medium |

| Action # | # of Objectives Met | Benefits | Costs | Do Benefits Equal or Exceed Costs? | Is Project Grant-Eligible? | Can Project Be Funded Under Existing Programs/Budgets? | Implementation Priority ^a | Grant Pursuit Priority ^a |
|----------|---------------------|----------|--------|------------------------------------|----------------------------|--|--------------------------------------|-------------------------------------|
| HBMWD18 | 3 | High | High | Yes | Yes | No | Medium | Medium |
| HBMWD19 | 3 | High | High | Yes | Yes | No | High | Medium |
| HBMWD20 | 3 | High | High | Yes | Yes | No | Medium | Medium |
| HBMWD21 | 2 | Medium | Medium | Yes | Yes | No | Medium | High |
| HBMWD22 | 12 | Medium | Medium | Yes | NO | No | Medium | Low |

a. See the introduction to this volume for explanation of priorities.

Table 20-12. Analysis of Mitigation Actions

| Hazard Type | Action Addressing Hazard, by Mitigation Type ^a | | | | | | | |
|----------------------------|---|-------------------------|--------------------------------|-----------------------------|--------------------|---------------------|-------------------|-----------------------------|
| | Prevention | Property Protection | Public Education and Awareness | Natural Resource Protection | Emergency Services | Structural Projects | Climate Resilient | Community Capacity Building |
| High-Risk Hazards | | | | | | | | |
| Earthquake | 2, 22 | 1,8,9,10,11,12,13,15,16 | 4 | 18 | 6,7,8 | 5 | | 3,8, 19 |
| Medium-Risk Hazards | | | | | | | | |
| Flood | 2, 22 | 1, 8, 20 | 4 | 18 | 6,8 | 5 | 14 | 3, 19 |
| Dam Failure | 2, 22 | 1, 13, 17, 20 | 4 | | | 5 | | 3 |
| Severe Weather | 2, 22 | 1, 11, 21 | 4 | | 7 | 5 | | 3, 19 |
| Tsunami | 2, 22 | 1 | 4 | | | 5 | | 3 |
| Sea-Level Rise | 2, 22 | 1 | 4 | | | 5 | | 3 |
| Low-Risk Hazards | | | | | | | | |
| Landslide | 2, 22 | 1 | 4 | | | 5 | | 3 |
| Wildfire | 2, 22 | 1 | 4 | | | 5 | | 3 |
| Drought | 2, 22 | 1 | 4 | | | 5 | | 3 |

a. See the introduction to this volume for explanation of mitigation types.

20.10 REVIEW AND INCORPORATION OF RESOURCES FOR THIS ANNEX

20.10.1 Existing Reports, Plans, Regulatory Tools and Other Resources

The following technical reports, plans, and regulatory mechanisms were reviewed to provide information for this annex.

- HBMWD Capital Improvement Plan
- GEI Seismic Analysis

The following outside resources and references were reviewed:

- Hazard Mitigation Plan Annex Development Toolkit—The toolkit was used to support the identification of past hazard events and noted vulnerabilities, the risk ranking, and the development of the mitigation action plan.
- USGS fault maps
- FEMA floodplain mapping

20.10.2 Staff and Local Stakeholder Involvement in Annex Development

The following HBMWD staff provided input to this annex development:

- General Manager
- Superintendent
- Business Manager
- Executive Assistant
- District Engineer.

DRAFT

Local planners met on April 16, 2019 to review the risk assessment for this community and to identify appropriate actions to mitigate the risks. Attendees are listed in Table 20-13.

Table 20-13. Participants in Hazard Mitigation Action Plan Development Workshop

| Name | Title, Organization |
|------------------|----------------------------|
| John Friedenbach | General Manager, HBMWD |
| Dale Davidsen | Superintendent, HBMWD |
| Chris Harris | Business Manager, HBMWD |
| Sherrie Sobol | Executive Assistant, HBMWD |
| Patrick Kaspari | District Engineer, GHD |

20.11 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

Collaborate with County of Humboldt on implementation of Dam Failure response. Collaborate with City of Blue Lake and City of Arcata on implementation of evacuation planning in the event of dam failure. Collaborate with Trinity County on implementation of evacuation planning in the event of dam failure. Collaborate with Fire Districts located within the Mad River Basin on implementation of evacuation planning in the event of dam failure. Collaborate with County of Humboldt and other Plan jurisdictions on post disaster waste removal process and site location.



County of Humboldt • Arcata • Blue Lake • Eureka • Ferndale • Fortuna • Rio Dell • Trinidad • Humboldt Bay Municipal Water District

Re: Humboldt Bay Municipal Water District - Water System Optimization – Well Pump Sequencing Measures

Date: September 11, 2019

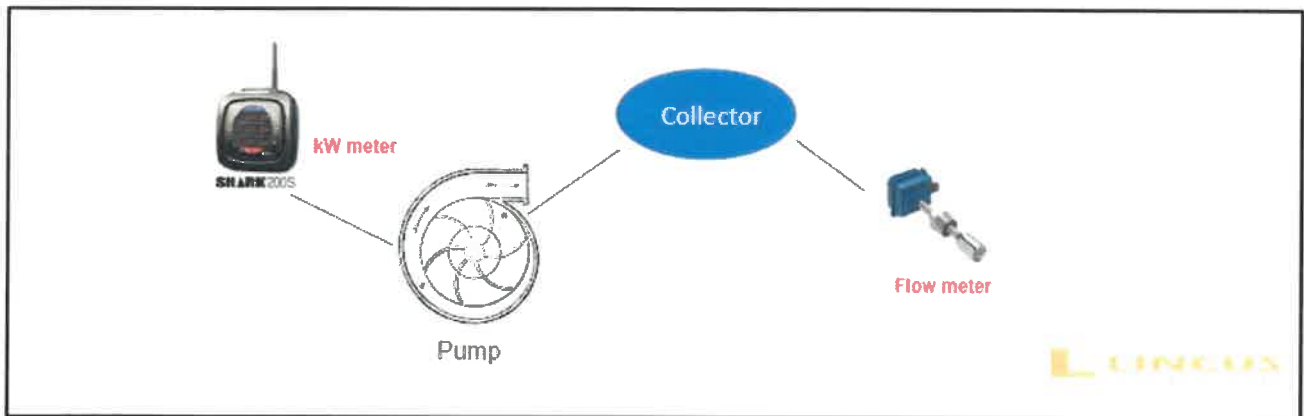
John Friedenbach,

Redwood Coast Energy Authority has been working with Lincus Inc. and HBMWD staff to assess Water System Optimization measures through PG&E's Water Infrastructure System Efficiency (WISE) program. As a part of this effort, Lincus investigated the optimization of water pumped and related energy use across multiple wells within the District. This effort started with Lincus performing an onsite assessment to understand system conditions and operations. This specific project proposes sequencing pumping operations to optimize the energy usage through the utilization of least energy intensive pumps to meet a greater portion of the water demands.

Measure Description:

Implement Pump Sequencing in order to more efficiently meet system demand by applying the least energy intensive pumps as the lead by providing active feedback of kWh/AF readings to SCADA.

- Install four (4) power meters and four (4) flow meters across four collectors.
 - Install SHARK meters on each pump for kW readings.
 - Install magnetic flow meters on each collector.



The measure will also involve associated telemetry to transfer these active readouts of coincident power and flow across the various pumps. The SCADA will be programmed with an algorithm that continuously provides the lead-lag sequence from the least energy intensive pumps as the lead to the most energy intensive pumps as the lag, thus ensuring an energy efficient pumping operation at the site.

Project Summary:

Table 1 below provides a high-level summary of the recommended Energy Efficiency Measure (EEM).

| Savings Summary | EEM 1 |
|---|----------------------|
| | Well Pump Sequencing |
| Energy Savings | |
| Annual Electricity Savings (kWh) | 271,763.4 |
| Demand Savings (kW) ¹ | 0.0 |
| Total Annual Utility Cost Savings (\$)² | \$ 37,716.49 |
| Water Savings (gallons) | 257,460.1 |
| Cost Summary | |
| Total Measure Cost (\$)³ | \$ 109,373.16 |
| PG&E Incentive (\$)⁴ | \$ 32,611.61 |
| Net Measure Cost (\$) | \$ 76,761.55 |
| Simple Payback (Years) | |
| Without PG&E Incentive | 2.9 |
| With PG&E Incentive | 2.0 |

Financing Options

- PG&E's On-Bill Financing:
 - 0% Interest loans
 - Financing term up to 10 years
 - https://www.pge.com/en_US/small-medium-business/save-energy-and-money/energy-efficiency-financing.page?WT.mc_id=Vanity_eef
- California Energy Commission Energy Conservation Assistance Act (ECAA)
 - 1% Interest loans for Public Agencies
 - Finance terms based on simple payback plus interest
 - <https://www.energy.ca.gov/programs-and-topics/programs/energy-conservation-assistance-act>
- Clean Water State Revolving Fund (CWSRF)
 - Fund water quality protection projects under section 8 of the clean water act
 - Interest Rate: Half of Recent State general bond rate at time of funding approval, ~1.7%
 - <https://www.epa.gov/cwsrf>

Recommended Next Steps:

1. HBMWD Board approves project for implementation
2. HBMWD Board/Staff determine finance option
3. Lincus and/or RCEA helps develop funding application as required
4. HBMWD decides whether project will be In-House installation or Contractor project
5. Lincus helps develop Scope of Work and Request for Proposal (RFP) docs as required



HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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

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

FAX 707-443-5731 707-822-8245

EMAIL OFFICE@HBMWD.COM

Website: www.hbmwd.com

BOARD OF DIRECTORS

SHERI WOO, PRESIDENT

NEAL LATT, VICE-PRESIDENT

J. BRUCE RUPP, SECRETARY-TREASURER

BARBARA HECATHORN, DIRECTOR

MICHELLE FULLER, DIRECTOR

GENERAL MANAGER

JOHN FRIEDENBACH

DATE

Name

Title

Company

Mailing address

Peninsula Community Services District's Cost Share of Capital Replacement Work Done by Humboldt Bay Municipal Water District

On November 7th 2017, Measure Z was passed, creating the Peninsula Community Services District (PCSD). As part of the CSD formation, it will be taking over the water customers and infrastructure on the Peninsula from Humboldt Bay Municipal Water District (HBMWD). HBMWD started collecting capital replacement charges from these customers in the fiscal year of 2009/2010, and at the end of June 2018 will have collected a total of \$108,990.96. Attached you can find the summary of funds collected from 2009-2018 as well as the justification for the rates set.

From 2008-2015, HBMWD undertook the capital replacement project of replacing old piping heading out Old Navy Base Rd and Lincoln Ave as well as Bay St and Lindstrom Ave. The pipes on Old Navy Base Rd and Lincoln Ave are part of HBMWD mainline that serves what is now PCSD as well as Humboldt Community Services District. However the pipes on Bay St and Lindstrom Ave, are solely for the customers of the newly formed PCSD. Based on this, HBMWD is asking to be reimbursed for the portion of the cost that went towards PCSD infrastructure less the amount HBMWD has already collected in capital replacement charges.

HBMWD applied for and received a grant (FEMA-1731-DR-CA, Project #0035, FIPS #023-91000) through the FEMA Hazard Mitigation Grant Program to replace old techite piping going out Old Navy Base Rd and Lincoln Ave as well as Bay St & Lindstrom Ave. It was a \$4,545,563 project, where \$2,795,178 (61.492%) came from federal funds and the \$1,750,385 came from the HBMWD's funds. The total construction costs were \$3,170,538.57, of which, \$630,316.96 went toward the Bay St neighborhood. HBMWD's share of that cost was 38.508% or \$242,722.45.

HBMWD is asking for \$133,731.49 from PCSD, which is the capital replacement construction costs minus the capital replacement charges that have been collected.

Attached is the final progress payment summary that shows the breakdown of all the construction costs. These costs were broken down to PCSD costs, Main line costs, and unassigned construction costs that could were for both parts of the project (mobilization, traffic control, asphalt, etc). Based on the fact that 19.88% of the assigned construction costs came from the Bay St and Lindstrom Ave, PCSD's share of the unassigned costs would be \$169,399.65, but HBMWD is not asking for this to be reimbursed for these costs.

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

| Fiscal Year | # of Cust. | Capital Replacement Charge | Domestic/Small Business Collected Yearly | 4 th Fairhaven Power | 4 th Town of Samoa | 6 th Humboldt Bay Harbor & Rec | 6 th US Coast Guard | 6 th DG Farhaven Power Fire | 8 th CA Redwood Company Fire | 8 th Sequoia Investments | Large Bus./Fire Collected Yearly | TOTAL COLLECTED YEARLY |
|-------------|------------|----------------------------|--|---------------------------------|-------------------------------|---|--------------------------------|--|---|-------------------------------------|----------------------------------|------------------------|
| 2020/2021 | 71 | \$ 36.33 | \$ 30,953.16 | \$ 73.11 | \$ 55.04 | \$ 82.33 | \$ 86.81 | \$ 9.00 | \$ 70.16 | \$ 144.91 | \$ 6,256.32 | \$ 37,209.48 |
| 2019/2020 | 71 | \$ 30.10 | \$ 25,645.20 | \$ 73.11 | \$ 55.04 | \$ 82.33 | \$ 86.81 | \$ 9.00 | \$ 70.16 | \$ 144.91 | \$ 6,256.32 | \$ 31,901.52 |
| 2018/2019 | 71 | \$ 23.87 | \$ 20,337.24 | \$ 73.11 | \$ 55.04 | \$ 82.33 | \$ 86.81 | \$ 9.00 | \$ 70.16 | \$ 144.91 | \$ 6,256.32 | \$ 26,593.56 |
| 2017/2018 | 71 | \$ 17.64 | \$ 15,029.28 | \$ 73.11 | \$ 55.04 | \$ 82.33 | \$ 86.81 | \$ 9.00 | \$ 70.16 | \$ 144.91 | \$ 6,256.32 | \$ 21,285.60 |
| 2016/2017 | 71 | \$ 11.41 | \$ 9,721.32 | \$ 73.11 | \$ 55.04 | \$ 82.33 | \$ 86.81 | \$ 9.00 | \$ 70.16 | \$ 144.91 | \$ 6,256.32 | \$ 15,977.64 |
| 2015/2016 | 71 | \$ 5.18 | \$ 4,413.36 | \$ 76.40 | \$ 51.64 | \$ 71.02 | \$ 81.77 | \$ 7.53 | \$ 71.02 | \$ 159.24 | \$ 6,223.44 | \$ 10,636.80 |
| 2014/2015 | 71 | \$ 5.18 | \$ 4,413.36 | \$ 76.40 | \$ 51.64 | \$ 71.02 | \$ 81.77 | \$ 7.53 | \$ 71.02 | \$ 159.24 | \$ 6,223.44 | \$ 10,636.80 |
| 2013/2014 | 71 | \$ 5.09 | \$ 4,336.68 | \$ 75.12 | \$ 50.78 | \$ 69.83 | \$ 80.40 | \$ 7.40 | \$ 69.83 | \$ 156.58 | \$ 6,119.28 | \$ 10,455.96 |
| 2012/2013 | 71 | \$ 5.00 | \$ 4,260.00 | \$ 73.86 | \$ 49.93 | \$ 68.66 | \$ 79.06 | \$ 7.28 | \$ 68.66 | \$ 153.96 | \$ 6,016.92 | \$ 10,276.92 |
| 2011/2012 | 71 | \$ 4.85 | \$ 4,132.20 | \$ 71.71 | \$ 48.48 | \$ 66.66 | \$ 76.76 | \$ 7.07 | \$ 66.66 | \$ 149.48 | \$ 5,841.84 | \$ 9,974.04 |
| 2010/2011 | 71 | \$ 4.80 | \$ 4,089.60 | \$ 71.00 | \$ 48.00 | \$ 66.00 | \$ 76.00 | \$ 7.00 | \$ 66.00 | \$ 148.00 | \$ 5,784.00 | \$ 9,873.60 |
| 2009/2010 | 71 | \$ 4.80 | \$ 4,089.60 | \$ 71.00 | \$ 48.00 | \$ 66.00 | \$ 76.00 | \$ 7.00 | \$ 66.00 | \$ 148.00 | \$ 5,784.00 | \$ 9,873.60 |
| 2008/2009 | 71 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| 2007/2008 | 71 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| 2006/2007 | 71 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| 2005/2006 | 71 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| 2004/2005 | 71 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| 2003/2004 | 71 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| 2002/2003 | 71 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| 2001/2002 | 71 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| 2000/2001 | 71 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| | | | | | | | | | | | | \$ 108,990.96 |
| | | | | | | | | | | | | \$ 204,695.52 |

Domestic 8/31/2018
 Business 8/31/2018
 Total
 Grand Total thru 8/31/18
 3389.54
 1042.72
 4432.26
 \$113,423.22

Bay St Lindstrom Ave Construction Summary

| Item Number | Description | Total |
|--|--|---------------------|
| 6 | 6" PVC Pipe & Fitting | \$7,650.00 |
| 7 | 12" PVC Pipe & Fitting | \$407,930.00 |
| 13 | 20" Pipe Casing by Jack and Bore (Bay St) | \$40,000.00 |
| 15 | Connection Assembly At Vance Ave | \$8,000.00 |
| 16 | Connection Assembly at Bay St West to DG Fairhaven Power Company | \$6,000.00 |
| 17 | Connection Assembly at Bay St East to CA Redwood Company | \$9,300.00 |
| 19 | Connection Assembly at Lindstrom Ave and Bendixsen | \$14,000.00 |
| 20 | Connection Assembly at Lindstrom and Park St | \$22,000.00 |
| 22 | 4" Connection Assembly at Duprey St | \$6,500.00 |
| 24 | Remove & Replace Existing Fire Hydrants (4 Grid) | \$26,400.00 |
| 25 | 12" Butterfly Valves and Box | \$3,700.00 |
| 27 | 2" Combination Air Valve Assembly under Roadway | \$15,400.00 |
| 31 | 1" Water Service Lateral at Lindstrom and Duprey | \$1,500.00 |
| 32 | 4" Water Service Lateral at Sta 106+52 | \$9,000.00 |
| 1a | Add Concrete Thrust Blocks | \$2,988.91 |
| 1c | Change in # of bell joint restraints and change to all ss hardware | \$19,665.12 |
| 1d | Overhead, Profit, and Bond | \$1,323.78 |
| 3a | Installation of 12" butterfly valve to Vance Ave | \$3,064.04 |
| | Overhead, Profit, and Bond | \$494.85 |
| 6c | Changes to Bay St East Connection per RFI#11 | \$2,628.22 |
| 6d | Replacing Service Laterals on Lindstrom | \$21,546.61 |
| 7a | Misc Piping Changes to Lindstrom | \$1,750.00 |
| 1d | Reduction in Labor for Deleting 34 Bell Restraints | (\$126.85) |
| 8b | Credit for 6" Valve Not Used | (\$397.72) |
| | Total= | \$630,316.96 |
| | HBMWD Share= | \$242,722.45 |
| | Federal Share= | \$387,594.51 |
| *Item number corresponds to Wahlund Construction, Inc. Invoice | | |

Humboldt Bay Municipal Water District

To: Board of Directors
From: John Friedenbach
Date: September 11, 2019
Re: Earthquakes and Water Preparedness Public Outreach

Discussion

Staff was approached by Eureka Broadcasting seeking participation by the District in an Earthquake Preparedness public education project as it relates to water. Topics for presentation would include the following to name just a few:

- How much water should households store for an emergency?
- What is the proper storage method and frequency of rotation?
- How can water be sterilized safely at home?
- How can the taste of sterilized water be improved?
- What is potable vs non-potable water?
- What is a "Boil Water" notice?

Other topics would be explored and developed.

Staff Request

The attached proposal was prepared by Eureka Broadcasting which includes the total cost, airing frequency and draft sample message. Staff is seeking direction from the Board if this concept/project is desired and should be pursued?



Overview

For those of us growing up in our part of California, earthquakes are a fact of life and most times we have a “natural response” to preparation for earthquakes and reaction to earthquakes. However, things change - and they have.

We are wanting to accomplish multiple goals with our Earthquake Preparedness initiative with our partners.

Execution of the Plan

The many facets of this plan may be overwhelming, it is one that we can focus upon. While the “Emergency Response” components will be addressed by other partners, for the Humboldt Bay Municipal Water District, we would be focus on the critical concerns of water. Water storage. Water safety. Water everything.

This ongoing daily educational effort focusing on water-safety message would have multiple approaches - some which may be directly under the umbrella of the District and others that are simply water-related. The individual topics would be addressed in a series of 30-second messages which would be rotated through the overall earthquake safety campaign.

There will be 11 commercial segments airing every day once we begin. Of the 11, since OES/Sheriff will be underwriting a majority of the campaign, they will get the majority of the exposure. However, I still envision that the Water District would receive a minimum of 2 daily messages per station.

Messaging

The many facets of this plan may be overwhelming, it is one that is critical to segregate and tackle topic by topic. In the arena of water-related concerns, there seem to be some general topic areas to include: drinking water safety after an earthquake; water storage for earthquake preparedness; water preparedness prior to earthquakes; tidal waves following earthquakes; broken/leaking pipes and fixtures; don’t drink untreated water from local streams and creeks; etc. ... And then there is the entire issue of well water and what that water quality may be like following a seismic event.



Additionally, I think there needs to be a few of the segments discussing the measures already taken in order to help the existing infra-structure to withstand the next event. At the dam, at the Rainey wells, at the primary transmission pipe lines - throughout the entire system. The secondary aspect of the advertising would serve to increase the level of confidence in the district as well as help to “sell the story” of the Water District. This strategy proved successful in the past years and would also serve the future well.



The Investment

This community educational effort is one that Eureka Broadcasting feels very strongly about. As such, we have committed a schedule valued in excess of \$165,000. Overall, we are providing this initiative a 90% “Grant” for the underwriters with a majority being paid for by Humboldt County OES.

The \$1,000 annual commitment asked for as your part of the support will provide the Water District with \$32,485 worth of exposure (2,190 total airings of your messages.) $\div 365 = 6 \text{ messages/day}$.

Humboldt Bay Municipal Water District

1 @ 30-seconds

Talent: John or his staff

2019 – 2020

Topic: Water set aside

DRAFT

ARE YOU READY FOR THE NEXT EARTHQUAKE? ... I'M JOHN FRIEDENBACH FROM THE HUMBOLDT BAY MUNICIPAL WATER DISTRICT. ... WE ARE. OVER THE PAST DECADES, THE INFRA-STRUCTURE HAS BEEN REPLACED AND UPGRADED. WHAT HAVE YOU DONE TO BE PREPARED? DO YOU HAVE THE RECOMMENDED 7 DAYS OF WATER SET ASIDE IN YOUR HOME? THAT'S ONE GALLON PER PERSON IN YOUR HOUSEHOLD. ... AND IS THAT WATER IN A LOCATION WHERE IT IS EASILY REACHABLE AFTER AN EARTHQUAKE? ... AT THE HUMBOLDT BAY MUNICIPAL WATER DISTRICT, WE WANT YOU TO BE AS PREPARED FOR OUR NEXT NATURAL DISASTER. ... WE ARE. ARE YOU?

DRAFT

AGENDA-DRAFT
Thursday, September 12, 2019**MORNING – TABLETOP EXERCISE:**

- 9:00-9:30** **Participants Arrive and Sign-in**
- 9:30** **Welcome**
- 9:40** **Purpose and Use of EAP**
- 10:00** **Video – “Oroville Spillway Incident 2017”**
- 10:10** **R.W. Matthews Dam Failure Specifics**
- Potential Failure Modes-Bill Rettberg, GEI
 - Dam Specs and Flows
- 10:30** **Rainy Day Failure Brainstorm 1**
- 10:45** **Break**
- 10:55** **Response Plans**
- HBMWD’s Response Plan
 - Trinity County Emergency Operations Plan- Ed Prestley, OES
 - Humboldt County’s Dam Break Contingency Plan – Dorie Lanni, OES
 - NOAA’s Role and EAS system –Kathleen Zontos, NOAA
- 12:00** **Rainy Day Failure Brainstorm 2**
- 12:15** **Afternoon Description**
- 12:30** **Lunch (provided)**

AFTERNOON – FUNCTIONAL EXERCISE:

- 1:15** **Participants move to Assigned Places**
- 1:30** **Functional Exercise – Emergency Simulation**
- 3:00** **Participant Critique of Functional Exercise**
- 3:30** **Adjourn**

Humboldt Bay Municipal Water District

To: Board of Directors

From: John Friedenbach

Date: September 11, 2019

Re: Cannabis Encroachment onto District Property at Ruth

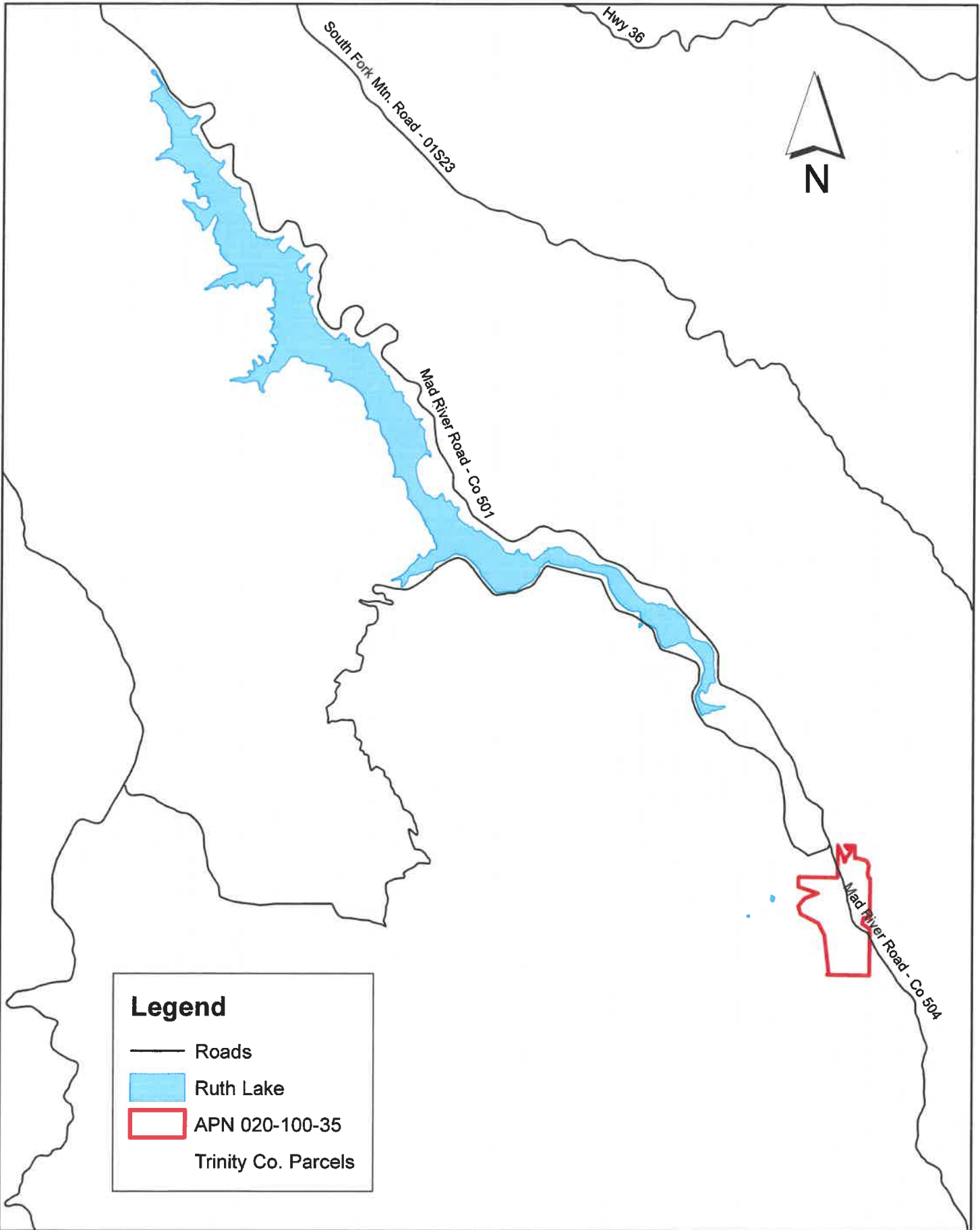
Discussion

Staff has learned that a legal cannabis cultivation facility has been partially constructed on District property near Ruth Lake. The affected District parcel is APN: 020-100-035 located at the headwaters area of Ruth Lake in Trinity County. See attached parcel map. Without extensive investigation, it appears that the adjacent property owner, Vivid Green, LLC., was provided with erroneous property line survey information and possible clerical errors were made by the Trinity County Building Department during the building permit issuance process. Staff is continuing to investigate the circumstances; however, due to threatened actions by the Trinity County Building Department against Vivid Green, LLC., they have voluntarily requested to negotiate with the District to resolve this issue in a mutually agreeable manner. A representative from Vivid Green, LLC. will be present at our Board meeting to discuss this situation.

Options

Although the extent of information available to staff at this time is preliminary, there appear to be several options for the Board to consider to resolve this situation.

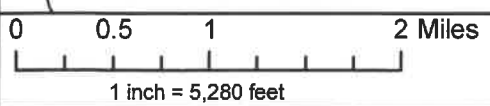
1. Request removal of all structures that have encroached onto District property.
2. Enter into a short term lease (6 to 12 months) while a more permanent solution is developed such as:
 - a. Declare a portion (survey required) of the affected parcel as surplus and negotiate a sale of the portion of property that has been impacted.
 - b. Negotiate a lot line adjustment (survey required) so that equal portions of land are exchanged between the parties allowing the structures to remain in place.
3. Declare the entire parcel as surplus and negotiate a sale of the parcel (appraisal recommended).



Legend

- Roads
- Ruth Lake
- APN 020-100-35

Trinity Co. Parcels



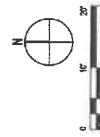
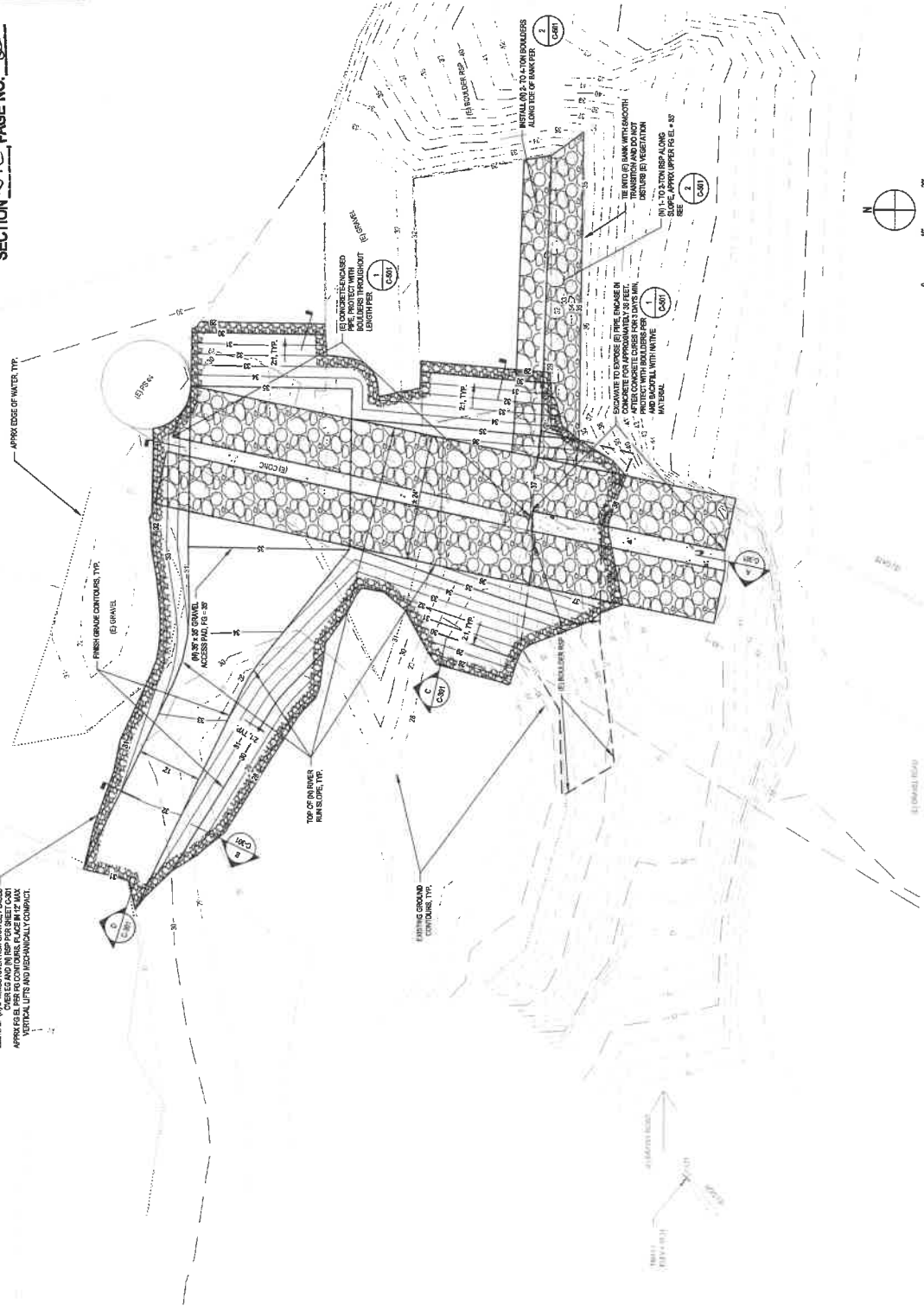
Engineering

SHEET GENERAL NOTES

1. SEE THE NOTES ON SHEET G-002.
2. ALL RIVERBANK SHALL BE PLACED IN 12" MAXIMUM VERTICAL LIFTS AND MECHANICALLY COMPACTED.
3. SITE SAFETY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND THIS RESPONSIBILITY SHALL NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR SHALL MAINTAIN SUFFICIENT PUBLIC ACCESS TO THE CONSTRUCTION SITE DURING NONWORKING HOURS.

SECTION N/C PAGE NO. 2

LIMITS OF 40" IF MINUS RIVER BANK GRAVEL PLACED OVER EG AND IN RSP FOR SHEET G-002 SHALL BE SHOWN BY VERTICAL LIFTS AND MECHANICALLY COMPACT.



| | | | | |
|---|---|---|--|--|
| | Date: 09/25/2018 Drawn: M. STEPHENS Check: P. HARRIS | Design: M. STEPHENS Check: P. HARRIS | Project: 11220845 Manager: M. STEPHENS Date: 9/25/2018 | Project No.: 11220845 Sheet No.: C-101 |
| | Title: HUMBOLDT BAY MUNICIPAL WATER DISTRICT COLLECTOR & STORM DAMAGE EMERGENCY REPAIRS CIVIL SITE PLAN | | | Project No.: 11220845 Sheet No.: C-101 |
| Date: 09/25/2018 Drawn: M. STEPHENS Check: P. HARRIS | | Design: M. STEPHENS Check: P. HARRIS | | Project: 11220845 Manager: M. STEPHENS Date: 9/25/2018 |
| The document and all its contents are the property of GHD and shall not be used for any other project without the written consent of GHD. | | | | |
| GHD Inc. 715 Third Street Emeryville, California 94608 USA T 415 443-8300 F 415 443-8300 W www.ghd.com | | | | |

John Friedenbach

From: Ashley Burke
Sent: Tuesday, August 20, 2019 2:27 PM
To: nathan.stevens@ghd.com
Cc: friedenbach@hbmwd.com
Subject: 2019 ASCE SF Section Awards Recipient

Hello & Congratulations!

On behalf of the ASCE San Francisco Section, we would like to thank you for your 2019 Section Award submission. The Mad River Crossing Pipeline Replacement Project has been selected as the winning project for the Water Project of the Year. Your project will be recognized at our annual Section Meeting taking place on September 12th in the Historic Green Room at the San Francisco War Memorial and Performing Arts Center.

As an honoree, we would like to invite one recipient from the project to accept the award during the presentation, and attend the dinner at no cost. You may sign up as many guests as you like with the link below. Due to the length of our program, we ask that honoree's limit the acceptance speech to one minute.

We ask that you send the following information by Sept 2nd.

-The full name (phonetically) and company of the individual who will accept the award and attend the dinner.

-1 PowerPoint slide that features a picture of the final project that best displays the project and a quick summary of the project. This will be briefly shown in the background as the award is accepted.

We also encourage you to spread the word by inviting your colleagues involved with the honored project to the awards celebration.

Again, congratulations on your outstanding project, we look forward to your attendance at this event. Please feel free to contact me with any questions.

Ashley Burke

Mad River Crossing Pipeline Replacement

Owner - Humboldt Bay Municipal Water District

Funding Agencies – SWRCB, CalOES, FEMA

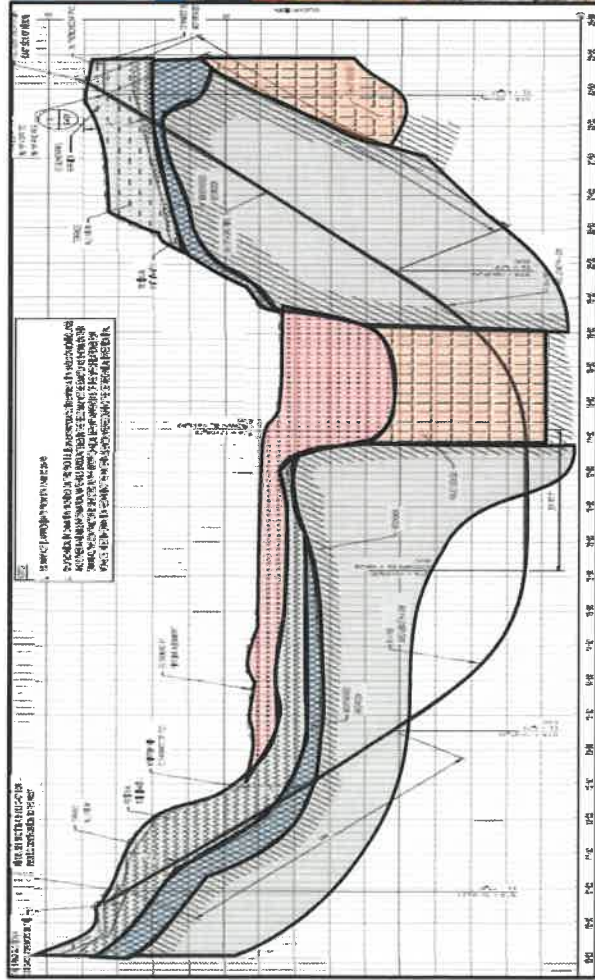
Engineers – GHD Inc.

Bennett Trenchless

Crawford & Associates

Contractor - Mercer Fraser

Driller – J.C. General Engineering, Inc.



FINANCIAL

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
STATEMENT OF FUND BALANCES

| <u>ACCOUNT BALANCES AT MONTH-END</u> | August 31, 2019 | August 31, 2018 |
|---|---------------------|---------------------|
| US BANK ACCOUNTS | | |
| US Bank General Fund Account | 1,809,660.58 | 399,222.74 |
| US Bank Money Markey Acct (DWR/SRF Account) | 165,558.79 | 163,175.21 |
| US Bank CD Account (DWR/SRF Reserve) | 547,336.94 | 547,336.94 |
| Trust Account (PARS/UAL CalPERS) | 750,701.31 | 655,438.72 |
| <i>Subtotal</i> | <i>3,273,257.62</i> | <i>1,765,173.61</i> |
| HUMBOLDT COUNTY INVESTMENT ACCOUNTS | | |
| Investment Account | 1,398,705.78 | 1,802,284.64 |
| DWFP Reserve Account | 238,086.51 | 234,232.42 |
| MSRA Reserve Account | 435,757.74 | 428,703.81 |
| SRF Loan Payment Account | 141,664.22 | 140,779.78 |
| ReMat Account | 524,922.76 | 285,264.31 |
| 1% Tax Account | 31,906.24 | - |
| <i>Subtotal</i> | <i>2,771,043.25</i> | <i>2,891,264.96</i> |
| OTHER ACCOUNTS | | |
| L. A. I. F Account | 1,677.45 | 1,637.56 |
| ReMat Deposit - Mellon Bank | 27,000.00 | 27,000.00 |
| Principle Investment Account | 28,419.48 | - |
| Cash on Hand | 650.00 | 650.00 |
| <i>Subtotal</i> | <i>57,746.93</i> | <i>29,287.56</i> |
| TOTAL CASH | 6,102,047.80 | 4,685,726.13 |

| | | |
|---|-----------------------|-----------------------|
| <u>ENCUMBRANCES AND RESERVES</u> | | |
| Prior-Year Price Factor 2 Rebate | (54,351.17) | (31,574.04) |
| Prior-Year Restricted AP Encumbrances | (89,825.00) | (40,750.00) |
| 1% Tax Credit to Muni's | (31,906.24) | - |
| Advanced Charges - Bunkhouse | - | (403,230.32) |
| Advanced Charges - 12Kv Relocation | (437,804.00) | - |
| 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 | (165,558.79) | (163,175.21) |
| Pension Trust Reserves | (750,701.31) | (655,438.72) |
| <i>Subtotal</i> | <i>(3,121,826.45)</i> | <i>(2,356,750.23)</i> |

| | | |
|-------------------------|--------------|--------------|
| BOARD RESTRICTED | | |
| Paik-Nicely Development | (4,158.00) | (4,158.00) |
| DWFP Reserves | (238,086.51) | (234,232.42) |
| MSRA Reserves | (435,757.74) | (428,703.81) |
| ReMat Deposit | (27,000.00) | (27,000.00) |
| ReMat Reserves | (524,922.76) | (285,264.31) |

| | | |
|---|-----------------------|-----------------------|
| UNRESTRICTED RESERVES | | |
| Accumulation for SRF Payment | (141,664.22) | (140,779.78) |
| Accumulation for Ranney/Techite Payment | (15,052.13) | 66,304.48 |
| Principle Investment Reserves | (28,419.48) | - |
| General Fund Reserves | (1,565,160.51) | (1,275,142.06) |
| <i>Subtotal</i> | <i>(2,980,221.35)</i> | <i>(2,328,975.90)</i> |
| TOTAL NET POSITION | (6,102,047.80) | (4,685,726.13) |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
 REVENUE REPORT
 August 31, 2019

SECTION 129, PAGE NO. 2

17% Of Budget Year

A. REVENUE RETURNED TO CUSTOMERS VIA PF2

| | MTD RECEIPTS | YTD RECEIPTS | BUDGET | % OF BUDGET | PRIOR YEAR |
|--|-----------------|-----------------|------------------|----------------|----------------|
| Humboldt Bay Retail Water Revenue | 22,293 | 61,511 | 318,394 | 19% | 67,558 |
| General Revenue | | | | | |
| Interest | 0 | 232 | 30,000 | 1% | 8 |
| FCSD Contract (Maint. & Operations) | 0 | 0 | 225,000 | 0% | 79,698 |
| Power Sales (Net ReMat) | 4,591 | 16,316 | 220,000 | 7% | 13,522 |
| Tax Receipts (1% Taxes) | 0 | 0 | 825,000 | 0% | 0 |
| Miscellaneous Revenue* | 1,916 | 11,246 | 50,000 | 22% | 10,034 |
| <i>*Detail on following page</i> | | | | | |
| TOTAL PF2 REVENUE CREDITS | 28,801 | 89,306 | 1,668,394 | 5% | 170,819 |

B. DISTRICT REVENUE

| | MTD RECEIPTS | YTD RECEIPTS | BUDGET | % OF BUDGET | PRIOR YEAR |
|---|-----------------|------------------|------------------|----------------|------------------|
| Industrial Water Revenue | | | | | |
| Harbor District | 85 | 85 | 0 | 0 | 0 |
| Subtotal Industrial Water Revenue | 85 | 85 | 0 | 0 | 0 |
| Municipal Water Revenue | | | | | |
| City of Arcata | 114,736 | 222,869 | 1,321,044 | 17% | 199,168 |
| City of Blue Lake | 16,103 | 31,280 | 182,807 | 17% | 28,104 |
| City of Eureka | 527,198 | 527,198 | 3,119,229 | 17% | 475,552 |
| Fieldbrook CSD | 14,388 | 28,633 | 174,392 | 16% | 26,033 |
| Humboldt CSD | 86,050 | 173,439 | 1,072,333 | 16% | 158,713 |
| Manila CSD | 6,268 | 12,125 | 70,168 | 17% | 13,124 |
| McKinleyville CSD | 90,984 | 177,936 | 1,066,249 | 17% | 159,265 |
| Subtotal Municipal Water Revenue | 855,727 | 1,173,480 | 7,006,222 | 17% | 1,059,959 |
| TOTAL INDUSTRIAL & WHOLESALE REVENUE | 855,812 | 1,173,565 | 7,006,222 | 17% | 1,059,959 |
| Power Sales | | | | | |
| Power Sales (ReMat Revenue) | 9,950 | 29,317 | 300,000 | 10% | 22,727 |
| Interest (ReMat Revenue) | 0 | 0 | 0 | | |
| TOTAL REMAT REVENUE | 9,950 | 29,317 | 300,000 | 10% | 22,727 |
| Other Revenue and Grant Reimbursement | | | | | |
| FEMA Grant Revenue | 0 | 0 | | | |
| Quagga Grant (Pass-Through) | 1,520 | 1,520 | | | |
| Interest - Muni PF2 Retained | 0 | 0 | | | |
| Net Increase/Decrease PARS/Principle | 888 | 26,477 | | | |
| TOTAL OTHER/GRANT REVENUE | 2,408 | 27,997 | | | |
| GRAND TOTAL ALL REVENUE | 896,970 | 1,320,184 | 8,974,616 | 15% | 1,253,505 |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
 MISCELLANEOUS REVENUE - DETAIL REPORT
 August 31, 2019

B. MISCELLANEOUS RECEIPTS (RETURNED TO CUSTOMERS VIA PF2)

| | MTD RECEIPTS | YTD RECEIPTS |
|--------------------------------------|-----------------|-----------------|
| Miscellaneous Revenue | | |
| ACWA/JPIA HR LaBounty Safety Award | - | - |
| ACWA/JPIA Insurance Claim | - | - |
| ACWA/JPIA Retrospective Premium Adj. | - | - |
| ACWA/JPIA Wellness Grant | - | 896 |
| Dividend - Principal Life | - | 288 |
| Fees - Park Use | - | 50 |
| Fees - Right of Way | - | - |
| FEMA - January 2017 Storm Damage | - | - |
| Insurance - Special Event Liability | - | - |
| Memorandum of Assistance - MCSD | - | - |
| Rebate - CALCard | - | - |
| Refund - Diesel Fuel Tax | - | - |
| Refunds - Hum. County Appeal (01/18) | - | 2,263 |
| Refunds - Miscellaneous | 112 | 112 |
| Reimb. - Copies & Postage | 39 | 107 |
| Reimb. - Gas | 54 | 54 |
| Reimb. - Telephone | - | - |
| Rent - Parking Lot | 25 | 50 |
| Retirees' Health Ins./COBRA Reimb. | 1,247 | 6,886 |
| Sale - Scrap Materials/Metals | - | - |
| Sale - Surplus Equipment | - | - |
| UB - Bad Debt Recovery | - | - |
| UB - Hydrant Rental Deposit | - | - |
| UB - Mainline Connection Charge | - | - |
| UB - Meter Installations | - | - |
| UB - Retail Connection Charge | - | - |
| UB - Water Processing Fees | 120 | 120 |
| | | |
| Ruth Area | | |
| 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 | 320 | 320 |
| Sale - Merchantable Timber | - | - |
| Sale - Surplus Gravel | - | - |
| | | |
| TOTAL MISCELLANEOUS REVENUE | 1,916 | 11,246 |

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

17% Of Budget Year

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

| | Month-to-Date | Year-to-Date | Prior Year | Budget | % of Budget |
|-------------------------------|-------------------|-------------------|-------------------|------------------|-------------|
| Compensation | | | | | |
| Wages - Regular | 162,022.71 | 320,439.76 | 334,015.72 | | |
| Wages - Sick | 3,116.10 | 5,775.90 | | | |
| Wages - Vacation | 14,399.52 | 36,299.46 | | | |
| <i>Subtotal</i> | 179,538.33 | 362,515.12 | 334,015.72 | 2,310,391 | 16% |
| Wages - Overtime | 1,053.82 | 3,734.46 | 7,839.35 | | |
| Wages - Holiday (Worked) | - | 1,434.73 | 489.28 | | |
| <i>Subtotal</i> | 1,053.82 | 5,169.19 | 8,328.63 | 30,000 | 17% |
| Wages - Part-Time | 6,878.19 | 10,634.17 | 14,482.48 | 74,329 | 14% |
| Wages - Shift Diff | 844.96 | 1,648.76 | 1,616.44 | 11,000 | 15% |
| Wages - Standby | 7,006.40 | 14,345.43 | 13,342.82 | 81,000 | 18% |
| Director Compensation | 2,000.00 | 4,000.00 | 3,280.00 | 26,000 | 15% |
| Secretarial Fees | 262.50 | 525.00 | 525.00 | 3,200 | 16% |
| Payroll Tax Expenses | 15,272.58 | 30,384.66 | 27,559.11 | 189,744 | 16% |
| <i>Subtotal</i> | 32,264.63 | 61,538.02 | 60,805.85 | 385,273 | 16% |
| Employee Benefits | | | | | |
| Health, Life, & LTD Insurance | 55,328.48 | 111,059.89 | 106,176.59 | 734,849 | 15% |
| Air Medical Insurance | 1,820.00 | 1,820.00 | - | 2,145 | 85% |
| Retiree Medical Insurance | 11,405.30 | 22,810.60 | 34,148.99 | 95,849 | 24% |
| Employee Dental Insurance | 2,771.68 | 5,543.36 | 8,061.89 | 39,399 | 14% |
| Employee Vision Insurance | 612.48 | 1,224.96 | 1,800.32 | 7,350 | 17% |
| Employee EAP | 77.55 | 155.10 | 225.60 | 1,116 | 14% |
| 457b District Contribution | 2,600.00 | 5,250.00 | 5,200.00 | 30,600 | 17% |
| CalPERS Expenses | 28,712.68 | 232,421.65 | 224,431.86 | 371,137 | 63% |
| Workers Comp Insurance | 6,521.66 | 33,055.98 | - | 83,101 | 40% |
| <i>Subtotal</i> | 109,849.83 | 413,341.54 | 380,045.25 | 1,365,546 | 30% |
| TOTAL S.E.B | 322,706.61 | 842,563.87 | 783,195.45 | 4,091,210 | 21% |

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

SECTION 2a PAGE NO. 5

August 31, 2019

17% Of Budget Year

SERVICE & SUPPLY EXPENDITURES (S & S)

| | Month-to-Date | Year-to-Date | Prior Year | Budget | % of Budget |
|-------------------------------------|------------------|------------------|------------------|----------------|-------------|
| Operations & Maintenance | | | | | |
| Auto Maintenance | 2,760.19 | 5,842.61 | 5,811.25 | 40,000 | 15% |
| Engineering | 7,118.75 | 7,118.75 | 12,738.27 | 75,000 | 9% |
| Lab Expenses | 1,065.00 | 1,140.00 | 940.54 | 13,000 | 9% |
| Maintenance & Repairs | | | | | |
| General | 6,241.64 | 9,157.17 | 7,642.87 | 58,000 | 16% |
| TRF | 1,626.41 | 2,795.03 | 3,133.87 | 15,000 | 19% |
| <i>Subtotal</i> | <i>7,868.05</i> | <i>11,952.20</i> | <i>10,776.74</i> | <i>73,000</i> | <i>16%</i> |
| Materials & Supplies | | | | | |
| General | 3,565.21 | 9,164.75 | 8,098.79 | 30,000 | 31% |
| TRF | - | 1,140.71 | 123.69 | 40,000 | 3% |
| <i>Subtotal</i> | <i>3,565.21</i> | <i>10,305.46</i> | <i>8,222.48</i> | <i>70,000</i> | <i>15%</i> |
| Radio Maintenance | 504.48 | 1,028.76 | 3,979.20 | 10,500 | 10% |
| Ruth Lake License | 1,500.00 | 1,500.00 | 1,500.00 | 1,500 | 100% |
| Safety Equip./Training | | | | | |
| General | 1,689.75 | 3,599.97 | 1,055.01 | 22,000 | 16% |
| TRF | 303.00 | 438.00 | 437.70 | 2,000 | 22% |
| <i>Subtotal</i> | <i>1,992.75</i> | <i>4,037.97</i> | <i>1,492.71</i> | <i>24,000</i> | <i>17%</i> |
| Tools & Equipment | 707.36 | 722.52 | 2,507.83 | 3,000 | 24% |
| USGS Meter Station | - | - | - | 8,200 | 0% |
| <i>Operations Subtotal</i> | <i>27,081.79</i> | <i>43,648.27</i> | <i>47,969.02</i> | <i>318,200</i> | <i>14%</i> |
| General & Administration | | | | | |
| Accounting Services | - | - | - | 18,000 | 0% |
| Bad Debt Expense | - | - | - | - | 0 |
| Dues & Subscriptions | - | 1,695.37 | 978.94 | 26,000 | 7% |
| General Manager Training | 1,372.16 | 1,372.16 | 197.44 | 3,000 | 46% |
| IT & Software Maintenance | 1,406.48 | 3,712.96 | 4,987.57 | 29,000 | 13% |
| Insurance | - | 29,374.70 | - | 105,000 | 28% |
| Internet | 516.30 | 1,305.75 | - | 11,000 | 12% |
| Legal Services | 3,010.50 | 6,844.00 | 1,953.00 | 35,000 | 20% |
| Miscellaneous | 291.52 | 748.19 | 3,034.18 | 11,500 | 7% |
| Office Building Maintenance | 789.18 | 2,079.01 | 2,624.82 | 16,000 | 13% |
| Office Expense | 9,411.61 | 12,507.69 | 4,374.79 | 40,500 | 31% |
| Professional Services | 1,584.80 | 2,572.30 | 32.52 | 20,000 | 13% |
| Property Tax | - | - | - | 1,100 | 0% |

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

SECTION 6a, PAGE NO. 6

17% Of Budget Year

| SERVICE & SUPPLY EXPENDITURES (con't) | | | | | |
|--|------------------|------------------|------------------|----------------|-------------|
| | Month-to-Date | Year-to-Date | Prior Year | Budget | % of Budget |
| Regulatory Agency Fees | - | 1,946.83 | 4,450.36 | 139,000 | 1% |
| Ruth Lake Programs | - | - | \$0.00 | 5,000 | 0% |
| Safety Apparel | (210.00) | (369.00) | - | 3,000 | -12% |
| Technical Training | 781.81 | 781.81 | 848.99 | 14,500 | 5% |
| Telephone | 5,123.67 | 9,578.28 | 9,730.54 | 50,000 | 19% |
| Travel & Conference | - | - | 602.37 | 25,000 | 0% |
| Gen. & Admin. Subtotal | 24,078.03 | 74,150.05 | 33,815.52 | 552,600 | 13% |

Power

| | | | | | |
|-------------------------------|------------------|-------------------|-------------------|----------------|------------|
| Essex - PG & E | 63,079.71 | 119,504.73 | \$110,468.52 | | |
| 2Mw Generator Fuel | - | - | \$0.00 | | |
| Subtotal Essex Pumping | 63,079.71 | 119,504.73 | 110,468.52 | | |
| All other PG & E | 5,012.26 | 13,436.00 | \$10,726.03 | | |
| Subtotal All Power | 68,091.97 | 132,940.73 | 121,194.55 | 680,800 | 20% |

| | | | | | |
|---|-------------------|-------------------|-------------------|------------------|------------|
| Total Service and Supplies incl. Power | 119,251.79 | 250,739.05 | 202,979.09 | 1,551,600 | 16% |
|---|-------------------|-------------------|-------------------|------------------|------------|

PROJECTS, FIXED ASSETS & CONSULTING SERVICES

| | Month-to-Date | Year-to-Date | Budget | % of Budget |
|--|---------------|--------------|------------|-------------|
| | 122,989.00 | 284,095.00 | 11,347,003 | 3% |

| | | | | | |
|-----------------------------|-------------------|---------------------|-------------------|-------------------|-----------|
| GRAND TOTAL EXPENSES | 564,947.40 | 1,377,397.92 | 986,174.54 | 16,989,813 | 8% |
|-----------------------------|-------------------|---------------------|-------------------|-------------------|-----------|

| | | | | | |
|-------------------------|---|---|---|-----------|----|
| Debt Service - SRF Loan | - | - | - | (547,337) | 0% |
|-------------------------|---|---|---|-----------|----|

| | | | | | |
|------------------------|-----------|---|---|-----------|----|
| Debt Service - US Bank | 81,094.05 | - | - | (162,200) | 0% |
|------------------------|-----------|---|---|-----------|----|

TOTAL EXPENSES WITH DEBT SERVICE

| | | | | | |
|--|-------------------|---------------------|-------------------|-------------------|--|
| | 648,272.55 | 1,383,408.36 | 986,174.54 | 16,280,276 | |
|--|-------------------|---------------------|-------------------|-------------------|--|

OTHER EXPENSES

| | | | | | |
|---------------------------|----------|----------|----------|--|--|
| ReMat Consultant Expenses | 2,231.10 | 6,010.44 | 1,485.12 | | |
|---------------------------|----------|----------|----------|--|--|

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
PROJECT PROGRESS REPORT
August 31, 2019

17% Of Budget Year

A. CAPITAL PROJECTS

| | MTD EXPENSES | YTD TOTAL | BUDGET | % OF BUDGET |
|---|-----------------|---------------|------------------|----------------|
| 12kV Grant (Grant Funded) 2018/19 | 62,146 | 62,196 | 1,825,250 | 3% |
| <i>(FEMA Grant and Advanced Charges)</i> | | | | |
| Chlorine Scrubber Grant | 0 | 0 | 1,340,000 | 0% |
| <i>(FEMA Grant and Advanced Charges)</i> | | | | |
| TRF Emergency Generator Grant | 0 | 0 | 1,925,000 | 0% |
| <i>(FEMA Grant, Adv. Charges, and Current Muni Charges)</i> | | | | |
| Collector 2 Rehabilitation Grant | 0 | 0 | 1,225,000 | 0% |
| <i>(NCRP Prop1 Grant, Adv. Charges, and Current Muni Charges)</i> | | | | |
| 3x Tank Seismic Retro Grant | 0 | 0 | 2,830,000 | 0% |
| <i>(FEMA Grant, Adv. Charges, and Current Muni Charges)</i> | | | | |
| TRF Line Shed 5 | 0 | 0 | 28,250 | 0% |
| Ruth Residence Roof | 6,003 | 6,003 | 30,000 | 20% |
| TOTAL CAPITAL PROJECTS | 68,148 | 68,198 | 9,203,500 | 1% |

B. FIXED ASSET PROJECTS

| | MTD EXPENSES | YTD TOTAL | BUDGET | % OF BUDGET |
|---|-----------------|--------------|---------|----------------|
| Essex - Admin Computers | 2,099 | 2,099 | 4,750 | 44% |
| Customer Service Vehicle (Unit 3) | 0 | 0 | 60,750 | 0% |
| SCBA Upgrade and Additional Equip | 0 | 0 | 19,750 | 0% |
| Laptop SCADA Software Upgrade | 0 | 0 | 4,500 | 0% |
| Replacement of UPS's (Phase 2) | 0 | 0 | 28,000 | 0% |
| Fleet Maintenance Equipment | 2,365 | 2,365 | 3,500 | 68% |
| Electrical Voltage Tools and Safety Equip | 0 | 0 | 3,250 | 0% |
| Traffic Control Equipment | 0 | 0 | 4,000 | 0% |
| Vegetation Management Equipment | 0 | 0 | 4,250 | 0% |
| Portable Radio Replacements | 0 | 0 | 4,750 | 0% |
| Meter Reader Handheld Unit | 0 | 0 | 4,500 | 0% |
| Job Boxes | 1,826 | 1,826 | 2,250 | 81% |
| Pipe Tapping Machine | 0 | 0 | 3,750 | 0% |
| 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

17% Of Budget Year

August 31, 2019

B. FIXED ASSET PROJECTS (con't)

| | MTD EXPENSES | YTD TOTAL | BUDGET | % OF BUDGET |
|-------------------------------------|-----------------|--------------|----------------|----------------|
| N-Poly Pump Skid Replacement | 0 | 0 | 12,250 | 0% |
| <i>(Treatment Facility Project)</i> | | | | |
| TRF Radio System Cabinet | 0 | 0 | 8,500 | 0% |
| <i>(Treatment Facility Project)</i> | | | | |
| Air Actuated Chemical Transfer Pump | 0 | 0 | 2,250 | 0% |
| <i>(Treatment Facility Project)</i> | | | | |
| Eureka - Administrative Computers | 0 | 0 | 6,250 | 0% |
| File Cabinet Replacement | 0 | 0 | 2,000 | 0% |
| Eureka Office ADA Upgrades | 6 | 6 | 20,000 | 0% |
| Ruth SCADA Software Upgrade | 0 | 0 | 4,750 | 0% |
| TOTAL FIXED ASSET PROJECTS | 6,297 | 6,297 | 334,593 | 2% |

C. MAINTENANCE PROJECTS

| | MTD EXPENSES | YTD TOTAL | BUDGET | % OF BUDGET |
|---|-----------------|--------------|--------|----------------|
| Pipeline Maintenance | 0 | 0 | 12,750 | 0% |
| 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 | 0 | 4,200 | 18,000 | 23% |
| Generator Services | 0 | 0 | 3,500 | 0% |
| TRF Generator Service | 0 | 0 | 500 | 0% |
| Hazard & Diseased Tree Removal | 0 | 0 | 5,000 | 0% |
| Cathodic Protection | 0 | 0 | 6,500 | 0% |
| Maintenance Emergency Repairs | 0 | 0 | 50,000 | 0% |
| Fleet Paint Repairs | 0 | 0 | 5,000 | 0% |
| Lab Instrument Calibration (Particle Counter) | 936 | 936 | 1,250 | 75% |
| Chlorine Solution Line Replacement | 0 | 0 | 10,500 | 0% |
| Paint Buildings at Winzler Control Center | 131 | 131 | 2,250 | 6% |
| Chlorine Booster Pump Rebuild Kits | 0 | 0 | 8,000 | 0% |
| Fleet Emergency Safety Beacons (Phase 2) | 0 | 0 | 2,000 | 0% |
| 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 | 0 | 0 | 10,250 | 0% |
| <i>(Treatment Facility Project)</i> | | | | |
| TRF Water Quality Instrumentation Inventory | 0 | 0 | 15,000 | 0% |
| <i>(Treatment Facility Project)</i> | | | | |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

PROJECT PROGRESS REPORT - PAGE 3 OF 6

17% Of Budget Year

August 31, 2019

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 Bunger Valve Inspection | 0 | 0 | 1,110 | 0% |
| Ruth LTO Insurance | 0 | 0 | 5,000 | 0% |
| Ruth Log Boom Inspection | 0 | 0 | 1,000 | 0% |
| Hydro Plant Synchronizer Tuning | 0 | 0 | 5,250 | 0% |
| Hydro Crane Rail and Lighting | 0 | 0 | 5,000 | 0% |
| Ruth HQ Dock Decking | 6,094 | 6,094 | 13,750 | 44% |
| Ruth Dead/Dying Tree Removal | 0 | 0 | 20,000 | 0% |
| Ruth Slide Gate Hydraulic Oil | 0 | 0 | 8,000 | 0% |
| TOTAL MAINTENANCE PROJECTS | 7,161 | 11,361 | 248,610 | 5% |

D. PROFESSIONAL & CONSULTING SERVICES

| | MTD EXPENSES | YTD TOTAL | BUDGET | % OF BUDGET |
|--|-----------------|--------------|---------|----------------|
| Crane Testing/Certification | 0 | 0 | 10,000 | 0% |
| Chlorine System Maintenance | 0 | 0 | 16,750 | 0% |
| Backflow Tester Training | 0 | 0 | 3,000 | 0% |
| Hydro Plant Electrical and Maintenance Insp. | 0 | 0 | 2,050 | 0% |
| Crane Operator Re-Certification | 0 | 0 | 3,000 | 0% |
| EAP Tabletop Exercise | 452 | 452 | 12,000 | 4% |
| Essex Mad River Cross-Sectional Survey | 972 | 972 | 10,000 | 10% |
| Technical Training | 0 | 0 | 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 | 0 | 5,000 | 0% |
| Electrical Technical Training | 0 | 0 | 13,250 | 0% |
| SCADA Programming License | 0 | 0 | 12,750 | 0% |
| 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 | 3,279 | 36,535 | 612,700 | 6% |
| Annual PARS Contribution (FY20) | 0 | 50,000 | 50,000 | 100% |
| Grant Applications Assistance | 0 | 6,541 | 20,000 | 33% |

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

PROJECT PROGRESS REPORT - PAGE 4 OF 6

August 31, 2019

17% Of Budget Year

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) | 0 | 100 | 5,000 | 2% |
| FERC Chief Dam Safety Engineer | 0 | 550 | 10,000 | 6% |
| Dam Spillway Wall Monument Survey | 79 | 79 | 14,000 | 1% |
| Matthews Dam Monument Survey | 1,059 | 1,059 | 9,000 | 12% |
| Left Abutment Slide Area Survey | 79 | 79 | 11,000 | 1% |
| Spillway/Dam Inspection/Reporting Assist. | 130 | 130 | 10,000 | 1% |
| GHD - Log Boom Inspection | 0 | 0 | 4,000 | 0% |
| TOTAL PROF/CONSULTING SERVICES | 6,049 | 98,496 | 1,253,800 | 7.9% |

E. INDUSTRIAL SYSTEM PROJECTS

| | MTD EXPENSES | YTD TOTAL | BUDGET | % OF BUDGET |
|---|-----------------|---------------|----------------|----------------|
| Rebuild River Weir | 238 | 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 <i>(FEMA Grant, Adv. Charges, and ReMat Funds)</i> | 10,071 | 74,480 | 0 | 0 |
| Industrial - Nordic | 113 | 113 | 0 | 0 |
| TOTAL INDUSTRIAL SYSTEM PROJECTS | 10,422 | 74,831 | 125,250 | 59.7% |

F. CARRY-OVER PROJECTS FROM PRIOR YEAR

| | | | | |
|--|--------|--------|---------|----|
| Collector 5 Security & Anti-Vandalism Measures | 0 | 0 | 7,500 | 0% |
| Mainline Valve Replacement FY17/18 | 956 | 956 | 50,000 | 2% |
| Ruth HQ Installation of Power Pole 2018/19 | 0 | 0 | 3,750 | 0% |
| Ruth Hydro Relay Replacement-Phase 2 | 0 | 0 | 120,000 | 0% |
| Storm Damage 2019 | 23,955 | 23,955 | 0 | 0 |

| | | | | |
|---------------------------------|---------------|---------------|----------------|------------|
| CARRYOVER PROJECTS TOTAL | 24,912 | 24,912 | 181,250 | 14% |
|---------------------------------|---------------|---------------|----------------|------------|

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

17% Of Budget Year

| | MTD EXPENSES | YTD TOTAL | BUDGET | % OF BUDGET |
|---|-----------------|----------------|-------------------|----------------|
| PROJECTS GRAND TOTAL | 122,989 | 284,095 | 11,347,003 | 3% |
| Less Projects Funded from Other Sources (Grants/Loans/Advanced Charges/Reserves) | 65,425 | 98,730 | 9,234,293 | 1% |
| Project Charges to Customers (excluding Debt Service) | 57,564 | 185,365 | 2,112,710 | 9% |
| PROJECTS W/OUT GRANT FUNDING | 57,564 | 185,365 | 1,589,053 | 12% |
| USE OF ENCUMBERED FUNDS | 43,912 | 110,237 | 200,062 | 55% |

| | |
|--|------------|
| 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
August 31, 2019**

| | MTD EXPENSES | YTD TOTAL | AMOUNT ENCUMBERED | REMAINING |
|--|-----------------|--------------|----------------------|-----------|
| A. CAPITAL PROJECTS | | | | |
| Essex Control Building Flooring Replacement | 0 | 0 | 500 | 500 |
| Collector Pump Oilers | 0 | 330 | 300 | (30) |
| B. FIXED ASSET PROJECTS | | | | |
| Collector 1 Electrical Upgrade | 17,575 | 57,693 | 88,705 | 31,012 |
| Ruth HQ Washroom Remodel | 0 | 0 | 1,000 | 1,000 |
| Ruth Hydro Oil & Paint Storage Lockers | 0 | 1,778 | 2,750 | 972 |
| Eureka - ADA Assisted Listening System | 0 | 0 | 10,000 | 10,000 |
| Fleet Servicing Equipment | | | 700 | 700 |
| C. MAINTENANCE PROJECTS | | | | |
| Hazard & Diseased Tree Removal | 0 | 7,750 | 6,500 | (1,250) |
| Lead Free Brass Inventory | 0 | 0 | 700 | 700 |
| Replace 299 Cathodic Anode Well | 8,780 | 8,780 | 16,000 | 7,220 |
| Collector 2 Arc Flash Survey and Relay Test | 2,200 | 2,200 | 3,600 | 1,400 |
| D. PROFESSIONAL & CONSULTING SERVICES | | | | |
| Eureka - ADA Compliance Consultation | 0 | 0 | 10,000 | 10,000 |
| Hydro ReMat Electrical/Maintenance Insp. | 0 | 0 | 2,000 | 2,000 |
| Technical Training | 0 | 0 | 1,600 | 1,600 |
| E. INDUSTRIAL SYSTEM PROJECTS | | | | |
| Clarifier Feasibility Study | 15,357 | 15,357 | 15,500 | 144 |
| F. CARRY-OVER PROJECTS FROM PRIOR YEAR | | | | |
| Mainline Valve Replacement | 0 | 16,349 | 38,666 | 22,317 |
| SPECIAL PROJECT ENCUMBERED FUNDS TOTAL | | | | |
| | 43,912 | 110,237 | 198,521 | 88,284 |
| MAINTENANCE & REPAIRS | | | 86 | 86 |
| SAFETY EQUIP & TRAINING | | | 1,030 | 1,030 |
| TRF SAFETY EQUIP & TRAINING | | | 145 | 145 |
| OFFICE SUPPLIES | | | 280 | 280 |
| ALL ENCUMBERED FUNDS TOTAL | | | | |
| | 43,912 | 110,237 | 200,062 | 89,825 |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
Report dates: 8/1/2019-8/31/2019Page: 1
Sep 11, 2019 05:02PM

| Vendor Name | Date Paid | Description | Amount Paid |
|--------------------------------------|------------|--|-------------|
| 101 Netlink | | | |
| 101 Netlink | 08/05/2019 | <i>Ruth Data Link/Internet</i> | 160.00 |
| Total 101 Netlink: | | | 160.00 |
| ACWA/JPIA | | | |
| ACWA/JPIA | 08/20/2019 | <i>RETIREE MEDICAL</i> | 11,353.02 |
| ACWA/JPIA | 08/20/2019 | <i>COBRA Dental</i> | 33.72 |
| ACWA/JPIA | 08/20/2019 | <i>COBRA Vision</i> | 18.56 |
| Total ACWA/JPIA: | | | 11,405.30 |
| Advanced Display & Signs | | | |
| Advanced Display & Signs | 08/29/2019 | <i>Labels for TRF Pretreat Filter Plumbing</i> | 289.45 |
| Total Advanced Display & Signs: | | | 289.45 |
| Advanced Security Systems | | | |
| Advanced Security Systems | 08/05/2019 | <i>Ruth Hydro Quarterly Alarm System Monitoring</i> | 76.50 |
| Total Advanced Security Systems: | | | 76.50 |
| AirGas NCN | | | |
| AirGas NCN | 08/15/2019 | <i>Replace shop tools</i> | 147.99 |
| AirGas NCN | 08/30/2019 | <i>Purchase Job Boxes</i> | 1,826.27 |
| Total AirGas NCN: | | | 1,974.26 |
| Alves, Inc | | | |
| Alves, Inc | 08/30/2019 | <i>Fieldbrook-Glendale CSD Pump Station Building Repairs</i> | 268.00 |
| Total Alves, Inc: | | | 268.00 |
| Arcata Stationers | | | |
| Arcata Stationers | 08/30/2019 | <i>Essex office supplies</i> | 162.42 |
| Total Arcata Stationers: | | | 162.42 |
| Asbury Environmental Services | | | |
| Asbury Environmental Services | 08/29/2019 | <i>dispose of oil waste and absorbent pads</i> | 306.01 |
| Asbury Environmental Services | 08/29/2019 | <i>dispose of oil filters</i> | 59.26 |
| Total Asbury Environmental Services: | | | 365.27 |
| AT & T | | | |
| AT & T | 08/15/2019 | <i>Eureka/Essex Landline</i> | 35.04 |
| AT & T | 08/15/2019 | <i>Arcata/Essex Land Line</i> | 35.04 |
| AT & T | 08/15/2019 | <i>Samoa/Essex Land Line</i> | 235.31 |
| AT & T | 08/15/2019 | <i>Eureka Office/Modem</i> | 229.45 |
| AT & T | 08/15/2019 | <i>Eureka Office Alarm Line</i> | 110.60 |
| AT & T | 08/15/2019 | <i>Samoa Booster Pump Station</i> | 111.53 |
| AT & T | 08/15/2019 | <i>Valve Building Samoa</i> | 229.45 |
| AT & T | 08/15/2019 | <i>Eureka office</i> | 452.30 |
| AT & T | 08/15/2019 | <i>Essex office</i> | 1,309.82 |
| AT & T | 08/15/2019 | <i>TRF</i> | 229.80 |
| AT & T | 08/15/2019 | <i>Ruth Hydro/Dataline</i> | 223.39 |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
Report dates: 8/1/2019-8/31/2019Page: 2
Sep 11, 2019 05:02PM

| Vendor Name | Date Paid | Description | Amount Paid |
|---------------------------------------|------------|--|-------------|
| Total AT & T: | | | 3,201.73 |
| AT&T Advertising Solutions | | | |
| AT&T Advertising Solutions | 08/29/2019 | white page listing | 21.00 |
| Total AT&T Advertising Solutions: | | | 21.00 |
| AT&T Long Distance | | | |
| AT&T Long Distance | 08/05/2019 | Eureka Office Long Distance | 47.43 |
| AT&T Long Distance | 08/15/2019 | Pumping & Control - Long Distance | 124.04 |
| AT&T Long Distance | 08/15/2019 | Essex Water Quality Long Distance | 12.27 |
| AT&T Long Distance | 08/15/2019 | Essex Office Long Distance | 270.12 |
| AT&T Long Distance | 08/15/2019 | Eureka Office Long Distance | 6.97 |
| AT&T Long Distance | 08/15/2019 | Ruth Hydro/Dataline Long Distance | 105.58 |
| Total AT&T Long Distance: | | | 566.41 |
| ATS Communications | | | |
| ATS Communications | 08/29/2019 | Assistance switching phone service from AT&T to Suddenlink | 597.50 |
| Total ATS Communications: | | | 597.50 |
| California Heating | | | |
| California Heating | 08/29/2019 | Fieldbrook-Glendale CSD Pump Station Building Repair | 154.00 |
| California Heating | 08/29/2019 | Fieldbrook-Glendale CSD Pump Station Building Repair | 132.00 |
| Total California Heating: | | | 286.00 |
| Chris Harris | | | |
| Chris Harris | 08/29/2019 | Wellness Grant 2019 | 36.00 |
| Total Chris Harris: | | | 36.00 |
| Citi Cards | | | |
| Citi Cards | 08/29/2019 | RLCSD Joint Board Meeting | 64.93 |
| Total Citi Cards: | | | 64.93 |
| City of Eureka | | | |
| City of Eureka | 08/05/2019 | Eureka office water/sewer | 81.76 |
| Total City of Eureka: | | | 81.76 |
| Coastal Business Systems Inc. | | | |
| Coastal Business Systems Inc. | 08/15/2019 | Eureka office copy and fax machine | 940.53 |
| Total Coastal Business Systems Inc.: | | | 940.53 |
| DB Gaya Consulting LLC | | | |
| DB Gaya Consulting LLC | 08/29/2019 | 1 MG reservoir warranty inspection of paint repairs | 1,584.80 |
| Total DB Gaya Consulting LLC: | | | 1,584.80 |
| Downey Brand Attorneys LLP | | | |
| Downey Brand Attorneys LLP | 08/29/2019 | Streambed Flow Enhancement Grant | 1,596.00 |

| Vendor Name | Date Paid | Description | Amount Paid |
|--|------------|--|-------------|
| Total Downey Brand Attorneys LLP: | | | 1,596.00 |
| Eureka Oxygen | | | |
| Eureka Oxygen | 08/15/2019 | <i>cylinder rental</i> | 116.60 |
| Total Eureka Oxygen: | | | 116.60 |
| Eureka Readymix | | | |
| Eureka Readymix | 08/29/2019 | <i>Mainline Valve Replacement Collector 4</i> | 204.47 |
| Total Eureka Readymix: | | | 204.47 |
| Eureka-Humboldt Fire Ext.,Co, Inc | | | |
| Eureka-Humboldt Fire Ext.,Co, Inc | 08/29/2019 | <i>Ruth HQ Fire Extinguisher maintenance</i> | 130.50 |
| Eureka-Humboldt Fire Ext.,Co, Inc | 08/29/2019 | <i>Ruth Hydro Fire Extinguisher maintenance</i> | 102.72 |
| Total Eureka-Humboldt Fire Ext.,Co, Inc: | | | 233.22 |
| Fastenal Company | | | |
| Fastenal Company | 08/29/2019 | <i>safety supplies</i> | 30.85 |
| Fastenal Company | 08/29/2019 | <i>Mainline Valve Replacement</i> | 7.68 |
| Fastenal Company | 08/29/2019 | <i>safety supplies</i> | 66.47 |
| Fastenal Company | 08/29/2019 | <i>safety supplies</i> | 44.40 |
| Fastenal Company | 08/29/2019 | <i>Ruth HQ dock repairs</i> | 218.35 |
| Total Fastenal Company: | | | 367.75 |
| FEDEX | | | |
| FEDEX | 08/30/2019 | <i>ship particle counter for maintenance</i> | 20.23 |
| FEDEX | 08/30/2019 | <i>Mail Collector 1 old transformer oil sample</i> | 1.07 |
| Total FEDEX: | | | 21.30 |
| Figas Construction | | | |
| Figas Construction | 08/22/2019 | <i>Surge Tower Replacement - Final Payment-Retention</i> | 3,282.50 |
| Total Figas Construction: | | | 3,282.50 |
| Fortuna Iron Corporation | | | |
| Fortuna Iron Corporation | 08/05/2019 | <i>Emergency Generator for Communications Equipment</i> | 1,004.67 |
| Fortuna Iron Corporation | 08/29/2019 | <i>Fabricate and install guard rails Collector 2 Cable Car landing</i> | 7,170.00 |
| Total Fortuna Iron Corporation: | | | 8,174.67 |
| Frontier Communications | | | |
| Frontier Communications | 08/29/2019 | <i>Ruth HQ Phone</i> | 54.73 |
| Frontier Communications | 08/29/2019 | <i>Ruth Hydro/Ruth Dataline</i> | 171.43 |
| Total Frontier Communications: | | | 226.16 |
| Genesis Computer Systems, Inc | | | |
| Genesis Computer Systems, Inc | 08/15/2019 | <i>Replace Essex Administrative Computers</i> | 2,099.49 |
| Total Genesis Computer Systems, Inc: | | | 2,099.49 |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
Report dates: 8/1/2019-8/31/2019Page: 4
Sep 11, 2019 05:02PM

| Vendor Name | Date Paid | Description | Amount Paid |
|--------------------------------|------------|--|-------------|
| GHD | | | |
| GHD | 08/30/2019 | Streamflow Enhancement - Grant | 3,104.75 |
| GHD | 08/30/2019 | 12KV Switchgear -Grant | 28,271.55 |
| GHD | 08/30/2019 | Cathodic Protection System Survey and Evaluation | 2,849.00 |
| GHD | 08/30/2019 | General Engineering - Collector 1 Electrical Upgrade | 3,020.00 |
| GHD | 08/30/2019 | General Engineering - Storm Damage Collector 2 | 92.00 |
| GHD | 08/30/2019 | General Engineering - Essex | 1,518.00 |
| GHD | 08/30/2019 | General Engineering - Ruth Dam Indundation Mapping | 2,094.25 |
| GHD | 08/30/2019 | General Engineering - Eureka | 644.00 |
| GHD | 08/30/2019 | Surge Tower Replacement | 6,788.75 |
| GHD | 08/30/2019 | General Engineering - FERC Table Top Exercise | 452.00 |
| GHD | 08/30/2019 | General Engineering - Ruth Dam Indundation Mapping | 1,024.00 |
| GHD | 08/30/2019 | General Engineering - Essex | 1,411.00 |
| GHD | 08/30/2019 | General Engineering - Eureka | 427.50 |
| GHD | 08/30/2019 | General Engineering - Rebuild River Weir | 237.50 |
| GHD | 08/30/2019 | General Engineering - Nordic PS6 Rehab | 113.00 |
| GHD | 08/30/2019 | Storm Damage 2019 - Collector 4 | 16,693.25 |
| GHD | 08/30/2019 | 12KV Switchgear Replacement Project | 33,873.95 |
| GHD | 08/30/2019 | Cathodic Protection System Survey and Evaluation | 5,931.25 |
| GHD | 08/30/2019 | Ruth Hydro Dam Spillway Monument Survey | 79.00 |
| GHD | 08/30/2019 | Ruth Hydro Dam Monument Survey | 1,059.25 |
| GHD | 08/30/2019 | Ruth Hydro Dam Left Abutment Slide Survey | 79.00 |
| GHD | 08/30/2019 | Mad River Cross Sections | 971.50 |
| Total GHD: | | | 110,734.50 |
| Harbor Freight Tools | | | |
| Harbor Freight Tools | 08/05/2019 | maintenance supplies | 16.26 |
| Harbor Freight Tools | 08/30/2019 | maintenance supplies | 33.60 |
| Harbor Freight Tools | 08/30/2019 | Mainline Valve Replacement | 65.08 |
| Harbor Freight Tools | 08/30/2019 | Mainline Valve Replacement | 30.32 |
| Harbor Freight Tools | 08/30/2019 | Ruth HQ Roof Replacement | 146.26 |
| Total Harbor Freight Tools: | | | 291.52 |
| Health Equity Inc | | | |
| Health Equity Inc | 08/15/2019 | HSA Admin Fee - 2 employees | 5.90 |
| Health Equity Inc | 08/15/2019 | HSA Admin Fee 9 employees | 26.55 |
| Total Health Equity Inc: | | | 32.45 |
| Hensel Hardware | | | |
| Hensel Hardware | 08/05/2019 | maintenance shop tools | 37.95 |
| Hensel Hardware | 08/30/2019 | maintenance supplies | 79.65 |
| Hensel Hardware | 08/30/2019 | maintenance supplies | 17.34 |
| Hensel Hardware | 08/30/2019 | Ruth HQ Roof Replacement | 185.40 |
| Hensel Hardware | 08/30/2019 | Ruth HQ Roof Replacement | 60.65 |
| Total Hensel Hardware: | | | 380.99 |
| Hensell Materials | | | |
| Hensell Materials | 08/16/2019 | Ruth Bunkhouse Maintenance | 49.92 |
| Total Hensell Materials: | | | 49.92 |
| Henwood Associates, Inc | | | |
| Henwood Associates, Inc | 08/05/2019 | Consultant Services Agreement - June 2019 | 1,115.55 |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
Report dates: 8/1/2019-8/31/2019Page: 5
Sep 11, 2019 05:02PM

| Vendor Name | Date Paid | Description | Amount Paid |
|--|------------|--|-------------|
| Total Henwood Associates, Inc: | | | 1,115.55 |
| Humboldt County Treasurer | | | |
| Humboldt County Treasurer | 08/05/2019 | Fund No 2712 Account 800870 | 17,135.71 |
| Humboldt County Treasurer | 08/30/2019 | Fund No 3876 Account 800870 | 45,611.43 |
| Total Humboldt County Treasurer: | | | 62,747.14 |
| Humboldt Fasteners | | | |
| Humboldt Fasteners | 08/30/2019 | Ruth HQ Roof Replacement | 99.27 |
| Humboldt Fasteners | 08/30/2019 | Repair maintenance shop tool | 149.18 |
| Total Humboldt Fasteners: | | | 248.45 |
| Humboldt Redwood Company, LLC | | | |
| Humboldt Redwood Company, LLC | 08/29/2019 | Mt Pierce Lease site | 254.48 |
| Total Humboldt Redwood Company, LLC: | | | 254.48 |
| Humboldt Waste Management Authority | | | |
| Humboldt Waste Management Authority | 08/30/2019 | dispose of waste materials dumped in Park 1 | 70.12 |
| Humboldt Waste Management Authority | 08/30/2019 | disposal of Ruth HQ old roof material | 126.21 |
| Humboldt Waste Management Authority | 08/30/2019 | disposal of Ruth HQ old roof material | 800.91 |
| Total Humboldt Waste Management Authority: | | | 997.24 |
| Industrial Electric | | | |
| Industrial Electric | 08/21/2019 | Collector 3 Air Compressor Repairs | 43.05 |
| Industrial Electric | 08/21/2019 | Rebuild Ruth Hydro Sump Pump | 1,744.38 |
| Industrial Electric | 08/21/2019 | TRF Standby Generator repair | 22.84 |
| Industrial Electric | 08/30/2019 | Essex Switchgear Battery Room Charger for 2 MW Generator | 30.34 |
| Industrial Electric | 08/30/2019 | Repair TRF Sludge Pump | 963.54 |
| Industrial Electric | 08/30/2019 | Fieldbrook-Glendale CSD FB Tank UPS Installation | 30.18 |
| Total Industrial Electric: | | | 2,834.33 |
| JTN Energy, LLC | | | |
| JTN Energy, LLC | 08/05/2019 | Consultant Services Agreement - June 2019 | 1,115.55 |
| Total JTN Energy, LLC: | | | 1,115.55 |
| Lighthouse Worldwide Solutions | | | |
| Lighthouse Worldwide Solutions | 08/05/2019 | Particle Counter Calibration | 936.33 |
| Total Lighthouse Worldwide Solutions: | | | 936.33 |
| Lui Ahmad | | | |
| Lui Ahmad | 08/29/2019 | Wellness Grant 2019 | 33.59 |
| Total Lui Ahmad: | | | 33.59 |
| McMaster-Carr Supply | | | |
| McMaster-Carr Supply | 08/29/2019 | Sheet Metal and Roofing tools | 344.04 |
| Total McMaster-Carr Supply: | | | 344.04 |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
Report dates: 8/1/2019-8/31/2019Page: 6
Sep 11, 2019 05:02PM

| Vendor Name | Date Paid | Description | Amount Paid |
|---|------------|--|-------------|
| Mendes Supply Company | | | |
| Mendes Supply Company | 08/29/2019 | <i>Eureka office maintenance</i> | 97.59 |
| Total Mendes Supply Company: | | | 97.59 |
| Mission Linen | | | |
| Mission Linen | 08/21/2019 | <i>Uniform Rental</i> | 149.65 |
| Mission Linen | 08/21/2019 | <i>maintenance supplies</i> | 57.51 |
| Mission Linen | 08/21/2019 | <i>Uniform Rental</i> | 87.42 |
| Mission Linen | 08/21/2019 | <i>Uniform Rental</i> | 110.31 |
| Mission Linen | 08/21/2019 | <i>Uniform Rental</i> | 199.10 |
| Mission Linen | 08/21/2019 | <i>Uniform Rental</i> | 120.14 |
| Total Mission Linen: | | | 724.13 |
| Mitchell, Brisso, Delaney & Vrieze | | | |
| Mitchell, Brisso, Delaney & Vrieze | 08/16/2019 | <i>Legal Services- July 2019</i> | 139.50 |
| Total Mitchell, Brisso, Delaney & Vrieze: | | | 139.50 |
| Munnell & Sherrill, Inc. | | | |
| Munnell & Sherrill, Inc. | 08/30/2019 | <i>safety gear</i> | 192.99 |
| Munnell & Sherrill, Inc. | 08/30/2019 | <i>safety gear</i> | 204.83 |
| Total Munnell & Sherrill, Inc.: | | | 397.82 |
| Napa Auto Parts | | | |
| Napa Auto Parts | 08/21/2019 | <i>Fleet Maintenance Equipment</i> | 2,104.83 |
| Napa Auto Parts | 08/21/2019 | <i>maintenance supplies</i> | 39.34 |
| Napa Auto Parts | 08/21/2019 | <i>Fleet Maintenance Equipment</i> | 260.39 |
| Napa Auto Parts | 08/30/2019 | <i>Unit 16 battery replacement</i> | 162.19 |
| Napa Auto Parts | 08/30/2019 | <i>Collector 4 maintenance</i> | 26.66 |
| Napa Auto Parts | 08/30/2019 | <i>Unit 5 repair</i> | 63.62 |
| Total Napa Auto Parts: | | | 2,657.03 |
| Network Management Services | | | |
| Network Management Services | 08/29/2019 | <i>Essential Care Computer Service for Eureka office</i> | 1,086.19 |
| Total Network Management Services: | | | 1,086.19 |
| North Coast Laboratories | | | |
| North Coast Laboratories | 08/05/2019 | <i>lab tests</i> | 220.00 |
| Total North Coast Laboratories: | | | 220.00 |
| Northern California Safety Consortium | | | |
| Northern California Safety Consortium | 08/05/2019 | <i>membership fee</i> | 75.00 |
| Total Northern California Safety Consortium: | | | 75.00 |
| Occupational Health Service of Mad River | | | |
| Occupational Health Service of Mad River | 08/16/2019 | <i>DMV physical</i> | 135.00 |
| Occupational Health Service of Mad River | 08/16/2019 | <i>PreEmployment physical</i> | 85.00 |
| Total Occupational Health Service of Mad River: | | | 220.00 |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
Report dates: 8/1/2019-8/31/2019Page: 7
Sep 11, 2019 05:02PM

| Vendor Name | Date Paid | Description | Amount Paid |
|-----------------------------------|------------|---|-------------|
| Pacific Gas & Electric Co. | | | |
| Pacific Gas & Electric Co. | 08/16/2019 | Ruth Bunkhouse | 127.39 |
| Pacific Gas & Electric Co. | 08/16/2019 | Eureka Office | 341.33 |
| Pacific Gas & Electric Co. | 08/16/2019 | Jackson Ranch Rectifier | 12.70 |
| Pacific Gas & Electric Co. | 08/16/2019 | 299 Rectifier | 45.01 |
| Pacific Gas & Electric Co. | 08/16/2019 | West End Road Rectifier | 55.26 |
| Pacific Gas & Electric Co. | 08/16/2019 | TRF | 2,912.32 |
| Pacific Gas & Electric Co. | 08/16/2019 | Ruth Hydro Valve Control | 25.97 |
| Pacific Gas & Electric Co. | 08/16/2019 | Ruth Hydro | 25.30 |
| Pacific Gas & Electric Co. | 08/16/2019 | Samoa Booster Pump Station | 1,438.12 |
| Pacific Gas & Electric Co. | 08/16/2019 | Samoa Dial Station | 31.86 |
| Pacific Gas & Electric Co. | 08/16/2019 | Essex Pumping July 1 - 31, 2019 | 63,076.71 |
| Total Pacific Gas & Electric Co.: | | | 68,091.97 |
| Pacific Paper Co. | | | |
| Pacific Paper Co. | 08/30/2019 | Eureka office supplies | 232.74 |
| Total Pacific Paper Co.: | | | 232.74 |
| Pacific Power Testing | | | |
| Pacific Power Testing | 08/21/2019 | Collector 2 Arc Flash Survey and Relay Test | 2,200.00 |
| Pacific Power Testing | 08/21/2019 | Collector 1 Electrical Upgrade | 3,500.00 |
| Total Pacific Power Testing: | | | 5,700.00 |
| PERS | | | |
| PERS | 08/29/2019 | GASB-68 Reports and Schedules | 700.00 |
| Total PERS: | | | 700.00 |
| Pierson Building Center | | | |
| Pierson Building Center | 08/05/2019 | Eureka office roof repair | 62.97 |
| Total Pierson Building Center: | | | 62.97 |
| Pitney Bowes | | | |
| Pitney Bowes | 08/21/2019 | refill postage | 500.00 |
| Pitney Bowes | 08/21/2019 | Mail FERC EAPs | 150.00 |
| Pitney Bowes | 08/21/2019 | Service Fee | 58.21 |
| Total Pitney Bowes: | | | 708.21 |
| PPG Architectural Coatings | | | |
| PPG Architectural Coatings | 08/05/2019 | TRF Pretreat Filter maintenance | 63.19 |
| PPG Architectural Coatings | 08/16/2019 | TRF Pretreat piping maintenance | 126.38 |
| PPG Architectural Coatings | 08/30/2019 | Winzler Control Center Painting Project | 130.92 |
| PPG Architectural Coatings | 08/30/2019 | TRF Piping maintenance | 126.38 |
| PPG Architectural Coatings | 08/30/2019 | Ruth HQ dock repair | 575.87 |
| Total PPG Architectural Coatings: | | | 1,022.74 |
| Rebecca J. Moyle | | | |
| Rebecca J. Moyle | 08/29/2019 | Wellness Grant 2019 | 36.00 |
| Total Rebecca J. Moyle: | | | 36.00 |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
Report dates: 8/1/2019-8/31/2019Page: 8
Sep 11, 2019 05:02PM

| Vendor Name | Date Paid | Description | Amount Paid |
|---|------------|---|-------------|
| Recology Arcata | | | |
| Recology Arcata | 08/16/2019 | <i>Essex Garbage Service</i> | 625.64 |
| Total Recology Arcata: | | | 625.64 |
| Recology Humboldt County | | | |
| Recology Humboldt County | 08/16/2019 | <i>Eureka office garbage/recycling service</i> | 90.72 |
| Total Recology Humboldt County: | | | 90.72 |
| Renner Petroleum | | | |
| Renner Petroleum | 08/21/2019 | <i>cardlock fuel - pumping & control</i> | 434.47 |
| Renner Petroleum | 08/21/2019 | <i>cardlock fuel - water quality</i> | 434.47 |
| Renner Petroleum | 08/21/2019 | <i>cardlock fuel - maintenance</i> | 434.47 |
| Renner Petroleum | 08/21/2019 | <i>cardlock fuel - customer service (Humboldt Bay Retail)</i> | 112.96 |
| Renner Petroleum | 08/21/2019 | <i>cardlock fuel - customer service (Fieldbrook-Glendale CSD)</i> | 321.51 |
| Total Renner Petroleum: | | | 1,737.88 |
| Ruth Lake C.S.D. | | | |
| Ruth Lake C.S.D. | 08/05/2019 | <i>Quagga Grant expense reimbursement - Pass Thru Reimburseme</i> | 1,519.40 |
| Ruth Lake C.S.D. | 08/16/2019 | <i>Ruth Lake License Fee</i> | 1,500.00 |
| Total Ruth Lake C.S.D.: | | | 3,019.40 |
| Ryan Chairez | | | |
| Ryan Chairez | 08/29/2019 | <i>expense reimbursement - supplies for Ruth spillway repair</i> | 129.57 |
| Ryan Chairez | 08/29/2019 | <i>expense reimbursement - Ruth HQ roof replacement</i> | 129.58 |
| Total Ryan Chairez: | | | 259.15 |
| Security Lock & Alarm | | | |
| Security Lock & Alarm | 08/29/2019 | <i>Fieldbrook-Glendale CSD Tank Control Building</i> | 108.45 |
| Total Security Lock & Alarm: | | | 108.45 |
| Sequoia Construction Specialties | | | |
| Sequoia Construction Specialties | 08/29/2019 | <i>Collector 1 Electrical Upgrades</i> | 11,055.00 |
| Total Sequoia Construction Specialties: | | | 11,055.00 |
| Sequoia Gas | | | |
| Sequoia Gas | 08/05/2019 | <i>Refill Ruth Bunkhouse propane</i> | 207.07 |
| Total Sequoia Gas: | | | 207.07 |
| Seth Stone | | | |
| Seth Stone | 08/16/2019 | <i>expense reimbursement for safety boots</i> | 164.99 |
| Total Seth Stone: | | | 164.99 |
| Sherrie Sobol | | | |
| Sherrie Sobol | 08/29/2019 | <i>Wellness Grant 2019</i> | 36.00 |
| Total Sherrie Sobol: | | | 36.00 |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
Report dates: 8/1/2019-8/31/2019

Page: 9
Sep 11, 2019 05:02PM

| Vendor Name | Date Paid | Description | Amount Paid |
|---|------------|--|-------------|
| Sitestar Nationwide Internet | 08/05/2019 | <i>Essex Internet</i> | 52.90 |
| Sitestar Nationwide Internet | | | |
| Total Sitestar Nationwide Internet: | | | 52.90 |
| Specialty Supply Company | | | |
| Specialty Supply Company | 08/29/2019 | <i>Mainline Valve Replacement</i> | 234.34 |
| Total Specialty Supply Company: | | | 234.34 |
| Staples | | | |
| Staples | 08/29/2019 | <i>Essex office supplies</i> | 161.28 |
| Staples | 08/29/2019 | <i>Essex office supplies</i> | 132.23 |
| Total Staples: | | | 293.51 |
| Statewide Traffic Safety & Signs | | | |
| Statewide Traffic Safety & Signs | 08/29/2019 | <i>Signage for Eureka office ADA upgrades</i> | 6.05 |
| Total Statewide Traffic Safety & Signs: | | | 6.05 |
| Sudden Link | | | |
| Sudden Link | 08/05/2019 | <i>TRF Internet</i> | 22.57 |
| Sudden Link | 08/05/2019 | <i>TRF Internet - Blue Lake SCADA Monitoring</i> | 45.14 |
| Sudden Link | 08/05/2019 | <i>TRF Internet - Fieldbrook-Glendale CSD</i> | 45.13 |
| Sudden Link | 08/16/2019 | <i>Eureka office Internet</i> | 207.45 |
| Sudden Link | 08/29/2019 | <i>Fieldbrook-Glendale CSD Internet</i> | 293.52 |
| Total Sudden Link: | | | 613.81 |
| SWRCB-DWOCP | | | |
| SWRCB-DWOCP | 08/15/2019 | <i>D4 Certification Renewal - Mario F Palmero</i> | 105.00 |
| Total SWRCB-DWOCP: | | | 105.00 |
| T.P. Tire Service, Inc | | | |
| T.P. Tire Service, Inc | 08/29/2019 | <i>Unit 16 flat repair</i> | 30.00 |
| T.P. Tire Service, Inc | 08/29/2019 | <i>Unit 13 tires</i> | 230.33 |
| Total T.P. Tire Service, Inc: | | | 260.33 |
| Thatcher Company, Inc | | | |
| Thatcher Company, Inc | 08/30/2019 | <i>replenish chlorine</i> | 3,331.22 |
| Thatcher Company, Inc | 08/30/2019 | <i>replenish chlorine - container credit</i> | 1,000.00- |
| Total Thatcher Company, Inc: | | | 2,331.22 |
| The Mill Yard | | | |
| The Mill Yard | 08/16/2019 | <i>Eureka Office Roof Repair</i> | 6.90 |
| The Mill Yard | 08/16/2019 | <i>Fieldbrook Pump Station building repairs</i> | 267.16 |
| The Mill Yard | 08/16/2019 | <i>Fieldbrook Pump Station building repairs</i> | 70.00 |
| The Mill Yard | 08/16/2019 | <i>Fieldbrook Pump Station building repairs</i> | 1.63- |
| The Mill Yard | 08/16/2019 | <i>Fieldbrook Pump Station building repairs</i> | 6.49 |
| The Mill Yard | 08/30/2019 | <i>Fieldbrook Pump Station building repairs</i> | 5.41 |
| The Mill Yard | 08/30/2019 | <i>Fieldbrook-Glendale Morris Pump Station Building Repair</i> | 221.43 |
| The Mill Yard | | <i>Fieldbrook-Glendale Morris Pump Station Building Repair</i> | .00 |
| The Mill Yard | 08/30/2019 | <i>Fieldbrook-Glendale Morris Pump Station Building Repair</i> | 37.75- |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
Report dates: 8/1/2019-8/31/2019Page: 10
Sep 11, 2019 05:02PM

| Vendor Name | Date Paid | Description | Amount Paid |
|---|------------|---|-------------|
| The Mill Yard | 08/30/2019 | Fieldbrook-Glendale Morris Pump Station Building Repair | 28.44 |
| The Mill Yard | 08/30/2019 | Pipeline Maintenance - Shoring Supplies | 118.78 |
| The Mill Yard | 08/30/2019 | Fieldbrook-Glendale Pump Station Building Roof Repair | 56.34 |
| The Mill Yard | 08/30/2019 | Fieldbrook-Glendale Pump Station Building Roof Repair | 56.86 |
| The Mill Yard | 08/30/2019 | maintenance shop tool | 28.20 |
| The Mill Yard | | Ruth HQ Roof Replacement | .00 |
| The Mill Yard | 08/30/2019 | Ruth HQ Roof Replacement | 2,034.38- |
| The Mill Yard | 08/30/2019 | Ruth HQ Roof Replacement | 2,034.38 |
| The Mill Yard | 08/30/2019 | Ruth HQ Roof Replacement | 81.21 |
| The Mill Yard | 08/30/2019 | Ruth HQ Dock Repair | 5,299.52 |
| The Mill Yard | 08/30/2019 | Ruth HQ Roof Replacement | 2,955.54 |
| The Mill Yard | 08/30/2019 | Ruth HQ Roof Replacement | 1,417.69 |
| Total The Mill Yard: | | | 10,580.59 |
| Thomas Law Group | | | |
| Thomas Law Group | 08/29/2019 | Legal Fees - July | 1,275.00 |
| Total Thomas Law Group: | | | 1,275.00 |
| Thrifty Supply | | | |
| Thrifty Supply | 08/05/2019 | Fieldbrook-Glendale CSD Meter Manifold Replacement - Whitti | 1,303.19 |
| Thrifty Supply | 08/16/2019 | TRF Hypochlorite system repair | 34.63 |
| Thrifty Supply | 08/30/2019 | Humboldt Bay Retail Service Line Leak Repair | 71.11 |
| Thrifty Supply | 08/30/2019 | Mainline Valve Replacement - Collector 4 | 182.55 |
| Thrifty Supply | 08/30/2019 | Mainline Valve Replacement - Collector 4 | 231.86 |
| Total Thrifty Supply: | | | 1,823.34 |
| Trinity County General Services | | | |
| Trinity County General Services | 08/29/2019 | Pickett Peak site lease | 250.00 |
| Total Trinity County General Services: | | | 250.00 |
| Trinity County Solid Waste | | | |
| Trinity County Solid Waste | 08/16/2019 | Ruth HQ dump fees | 21.87 |
| Trinity County Solid Waste | 08/16/2019 | Ruth Hydro dump fees | 21.88 |
| Total Trinity County Solid Waste: | | | 43.75 |
| U.S. Bank Corporate Payment System | | | |
| U.S. Bank Corporate Payment System | 08/16/2019 | CSDA GM Summit - Lodging -GM Training | 441.86 |
| U.S. Bank Corporate Payment System | 08/16/2019 | QBooks Payroll Maintenance | 726.95 |
| U.S. Bank Corporate Payment System | 08/16/2019 | CSDA GM Summit -General Manager Training | 29.90 |
| U.S. Bank Corporate Payment System | 08/16/2019 | WRP - Instream Flow Grant -Sacramento meeting | 42.34 |
| U.S. Bank Corporate Payment System | 08/16/2019 | WRP - Instream Flow Grant - Sacramento meeting | 4.00 |
| U.S. Bank Corporate Payment System | 08/16/2019 | WRP - Instream Flow Grant - Sacramento meeting | 14.00 |
| U.S. Bank Corporate Payment System | 08/16/2019 | WRP - Instream Flow Grant - Sacramento meeting | 32.64 |
| U.S. Bank Corporate Payment System | 08/16/2019 | WRP - Instream Flow Grant - Sacramento meeting | 81.38 |
| U.S. Bank Corporate Payment System | 08/16/2019 | CUEMA Leadership Summit - General Manager Training | 650.00 |
| U.S. Bank Corporate Payment System | 08/16/2019 | CUEMA Leadership Summit - General Manager Training - Lodg | 250.40 |
| U.S. Bank Corporate Payment System | 08/16/2019 | Total Coliform Rule Training | 97.27 |
| U.S. Bank Corporate Payment System | 08/16/2019 | Emergency Generator for Communications Equipment | 285.34 |
| U.S. Bank Corporate Payment System | 08/16/2019 | Collector 3 Air compressor replacement | 596.74 |
| U.S. Bank Corporate Payment System | 08/16/2019 | repair equipment trailer | 402.37 |
| U.S. Bank Corporate Payment System | 08/16/2019 | Ship Lab Equipment | 7.52 |
| U.S. Bank Corporate Payment System | 08/16/2019 | Essex office supplies | 204.07 |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
Report dates: 8/1/2019-8/31/2019Page: 11
Sep 11, 2019 05:02PM

| Vendor Name | Date Paid | Description | Amount Paid |
|--|------------|--|-------------|
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>AirMedcare Network</i> | 910.00 |
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>Eureka office supplies</i> | 137.68 |
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>Purchase Order Software - OfficeWise</i> | 39.95 |
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>Purchase Order Software - Add Users</i> | 12.46 |
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>Caselle Conference - Training</i> | 574.83 |
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>Drinking Water Regulations - Training</i> | 109.71 |
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>Essex office supplies</i> | 30.98 |
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>Essex office supplies</i> | 30.16 |
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>Essex office supplies</i> | 24.48 |
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>Scan Blue Print</i> | 7.33 |
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>Defibrillator maintenance</i> | 303.00 |
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>Defibrillator maintenance</i> | 303.00 |
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>Defibrillator maintenance</i> | 134.00 |
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>AirMedcare Network</i> | 780.00 |
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>AirMedcare Network</i> | 65.00 |
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>AirMedcare Network</i> | 65.00 |
| U.S. Bank Corporate Payment System | 08/16/2019 | <i>Add Spendwise User</i> | 13.25 |
| Total U.S. Bank Corporate Payment System: | | | 7,407.61 |
| U.S. Bank Corporate Trust Services | | | |
| U.S. Bank Corporate Trust Services | 08/29/2019 | <i>Ranney/Techite Project Loan Interest</i> | 5,145.52 |
| U.S. Bank Corporate Trust Services | 08/29/2019 | <i>Ranney/Techite Project Loan Payment</i> | 75,948.53 |
| U.S. Bank Corporate Trust Services | 08/16/2019 | <i>SRF Quarterly Account Maint Fee (Apr - June 2019)</i> | 175.00 |
| Total U.S. Bank Corporate Trust Services: | | | 81,269.05 |
| Valley Pacific Petroleum Servi, Inc | | | |
| Valley Pacific Petroleum Servi, Inc | 08/29/2019 | <i>refill Ruth Bulk Fuel</i> | 268.08 |
| Valley Pacific Petroleum Servi, Inc | 08/29/2019 | <i>refill Ruth Hydro bulk fuel</i> | 268.09 |
| Total Valley Pacific Petroleum Servi, Inc: | | | 536.17 |
| Verizon Wireless | | | |
| Verizon Wireless | 08/16/2019 | <i>General Manager</i> | 47.10 |
| Verizon Wireless | 08/16/2019 | <i>Customer Service - Humboldt Bay</i> | 14.44 |
| Verizon Wireless | 08/16/2019 | <i>Customer Service - Fieldbrook-Glendale CSD</i> | 41.09 |
| Verizon Wireless | 08/16/2019 | <i>Operations 1</i> | .22 |
| Verizon Wireless | 08/16/2019 | <i>Customer Service IPad-Humboldt Bay</i> | 28.13 |
| Verizon Wireless | 08/16/2019 | <i>Customer Service IPad - Fieldbrook-Glendale CSD</i> | 9.88 |
| Verizon Wireless | 08/16/2019 | <i>Unit 6 - Ruth Area</i> | 49.88 |
| Verizon Wireless | 08/16/2019 | <i>Unit 6 - Ruth Hydro</i> | 49.89 |
| Total Verizon Wireless: | | | 240.63 |
| Wes Green Landscaping | | | |
| Wes Green Landscaping | 08/29/2019 | <i>green waste disposal - Eureka office</i> | 44.00 |
| Wes Green Landscaping | 08/29/2019 | <i>green waste disposal - Eureka office</i> | 33.00 |
| Total Wes Green Landscaping: | | | 77.00 |
| West Yost Associates, Inc | | | |
| West Yost Associates, Inc | 08/21/2019 | <i>Nordic Aquafarm-Water Clarification System</i> | 15,356.50 |
| Total West Yost Associates, Inc: | | | 15,356.50 |

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--
Report dates: 8/1/2019-8/31/2019

Page: 12
Sep 11, 2019 05:02PM

| Vendor Name | Date Paid | Description | Amount Paid |
|---------------|-----------|-------------|-------------------|
| Grand Totals: | | | <u>442,753.09</u> |

Humboldt Bay Municipal Water District

--Monthly Overtime Report--
 Pay period dates: 8/1/2019 - 8/31/2019

Page: 1
 Sep 11, 2019 05:03PM

| Position Title | 2-01 Overtime Emp Hrs | 2-01 Overtime Emp Amt | 2-02 Doubletime Emp Hrs | 2-02 Doubletime Emp Amt |
|----------------------|-----------------------------|-----------------------------|-------------------------------|-------------------------------|
| Operations Spec | 8.00 | \$510 | .00 | \$0 |
| Elec & Ins Tech | .50 | \$27 | .00 | \$0 |
| PT Maintenance | 6.50 | \$135 | .00 | \$0 |
| Oper & Mnt Tech | 2.50 | \$125 | .00 | \$0 |
| Oper & Mnt Tech | 3.50 | \$159 | .00 | \$0 |
| Elec & Ins Tech | .50 | \$29 | .00 | \$0 |
| PT Maintenance | 6.50 | \$135 | .00 | \$0 |
| Maint Worker | 2.50 | \$69 | .00 | \$0 |
| Total ESSEX: | 30.50 | \$1,189 | .00 | \$0 |
| Grand Totals: | 30.50 | \$1,189 | .00 | \$0 |

OPERATIONS

Memo to: HBMWD Board of Directors
From: Dale Davidsen, Superintendent
Date: September 3, 2019
Subject: Essex/Ruth August 2019 Operational Report

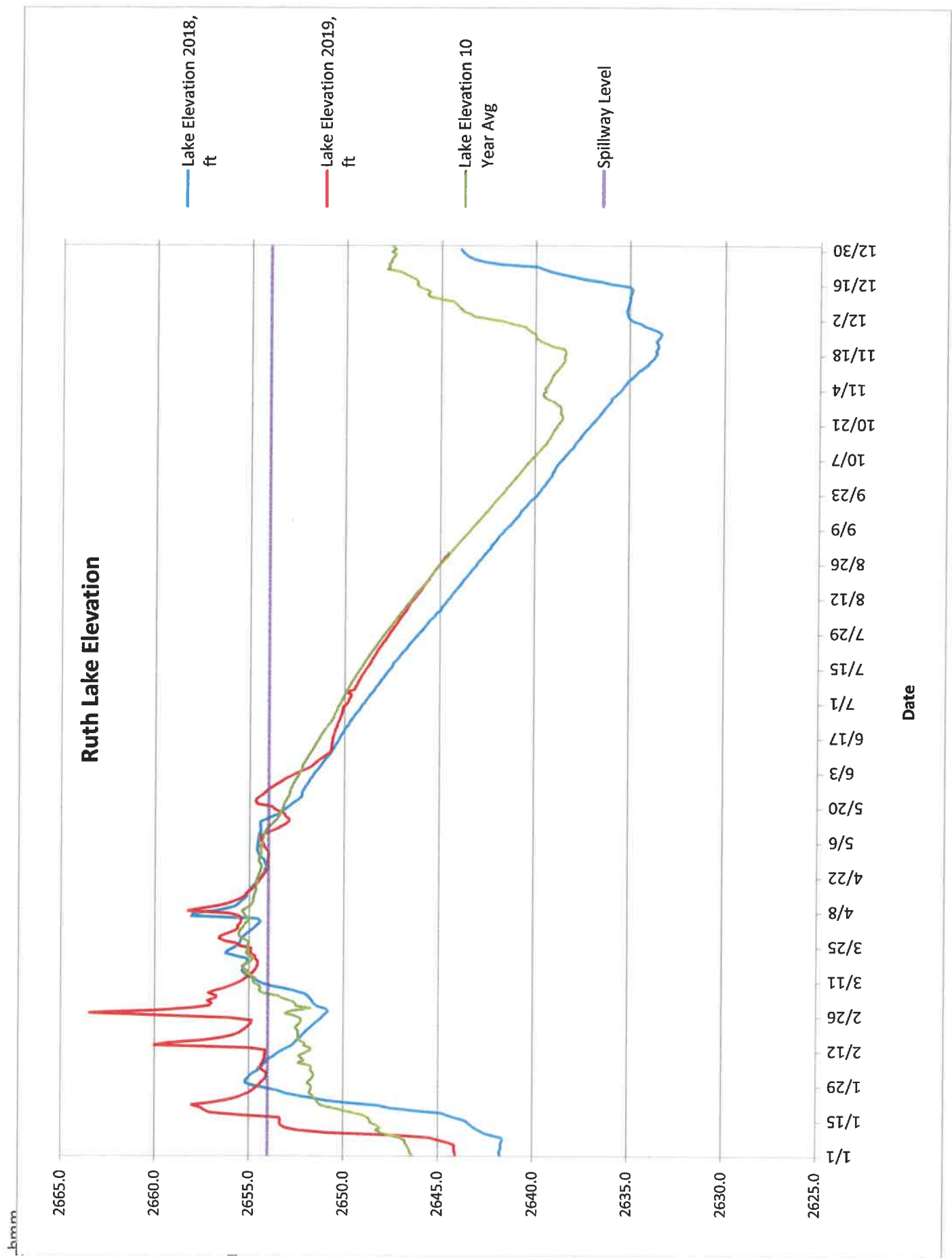
Upper Mad River, Ruth Lake, and Hydro Plant

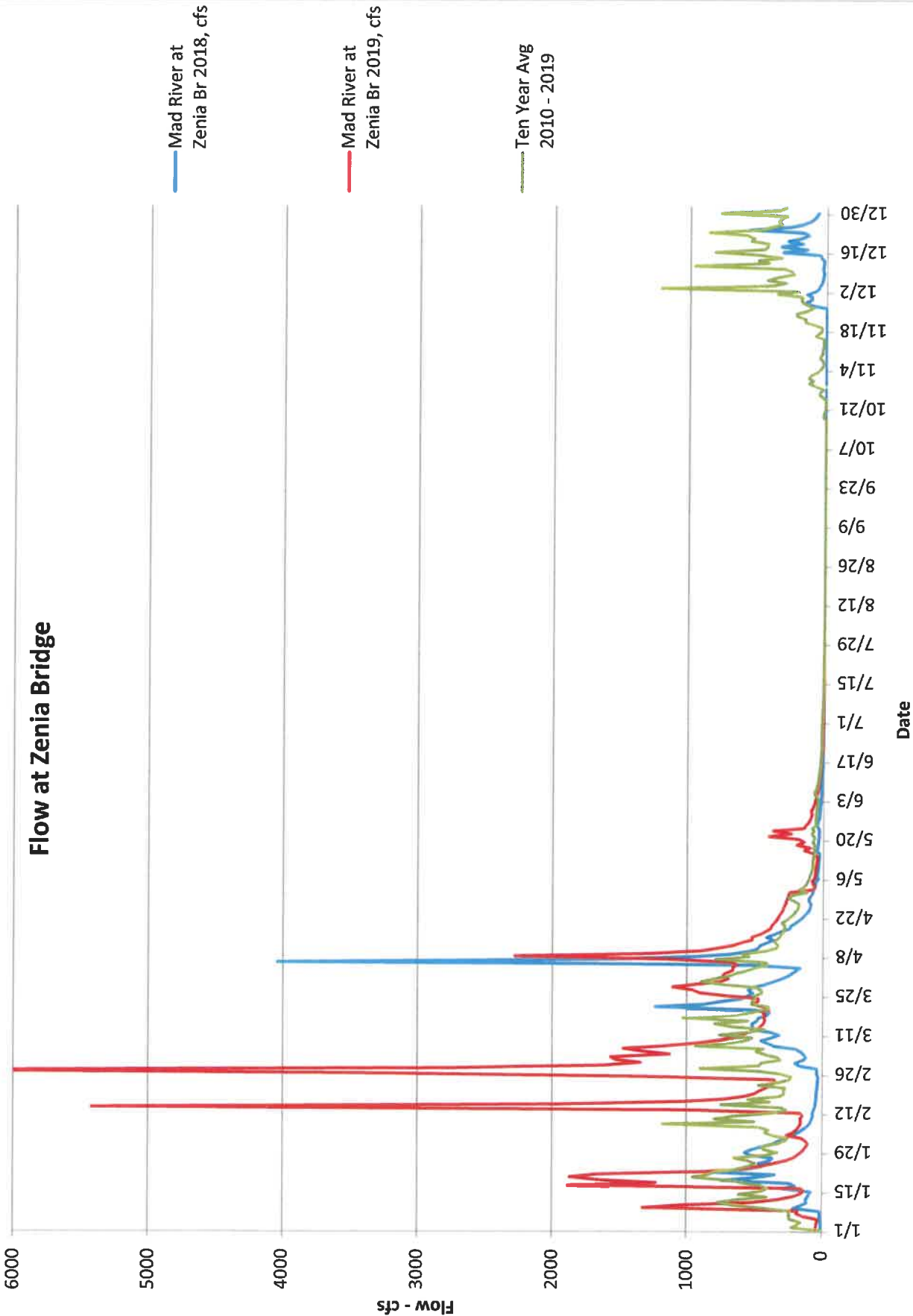
1. There was no flow at Mad River above Ruth Reservoir (Zenia Bridge) in August.
2. The conditions at Ruth Lake for the month of August were as follows:
 - a. The lake level on August 31st was 2644.57 feet which is:
 1. 2.97 feet lower than July 31st, 2019
 2. 1.99 feet higher than August 31st, 2018
 3. 0.09 feet higher than the ten year average
 4. 9.43 feet below the spillway
3. There was 0.35 inches of recorded rainfall for August 2019 at Ruth Headquarters.
4. Ruth Hydro produced 156000 KWh. The hydro plant ran all month with no outages.
5. The discharge from the lake averaged 44 cfs with a high of 46 cfs on August 22nd.

Lower Mad River, Winzler Control, and TRF

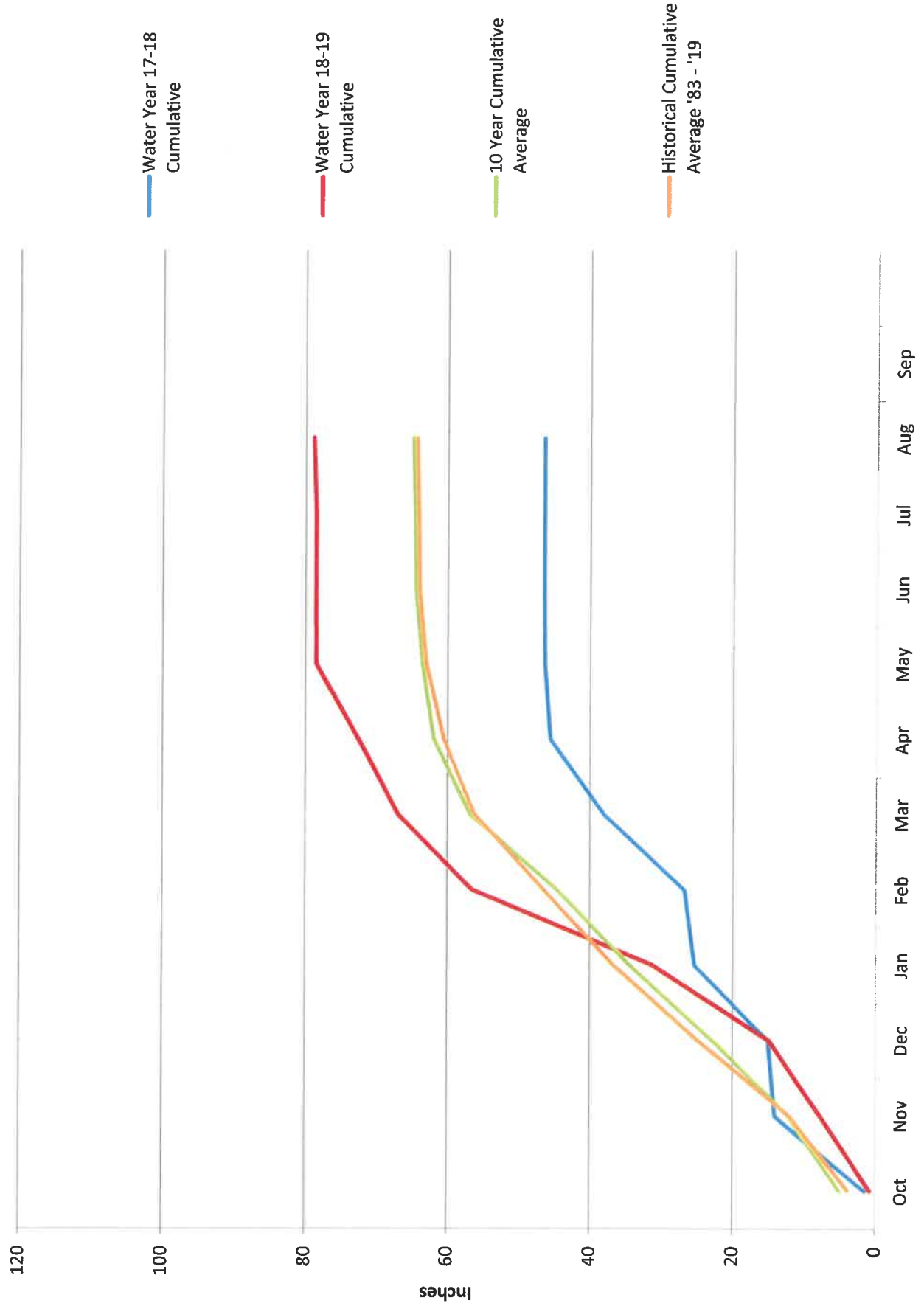
6. The river at Winzler Control Center for August had an average flow of 68 cfs. The river flow reached a high flow of 74 cfs on August 4th.
7. The domestic water conditions were as follows:
 - a. The monthly turbidity average was 0.13 NTU, which meets Public Health Secondary Standards.
 - b. As of August 31st, we pumped 300.018 million gallons at an average of 9.733 MGD.
 - c. The maximum metered daily municipal customer use was 11.259 MGD on August 17th.
8. August 6th – Maintenance inspected the Fieldbrook Reservoir.
9. August 7th – Ryan did a special walk through for the Protective Relay Upgrade Project at Ruth.
10. August 9th – Power outage at Essex from 0345 – 0815 due to equipment failure within the PG&E power grid.
11. August 12th – I attended a PG&E, Public Safety – Power Shutoff meeting.
12. August 14th – Maintenance replaced Collector 4 isolation valve.

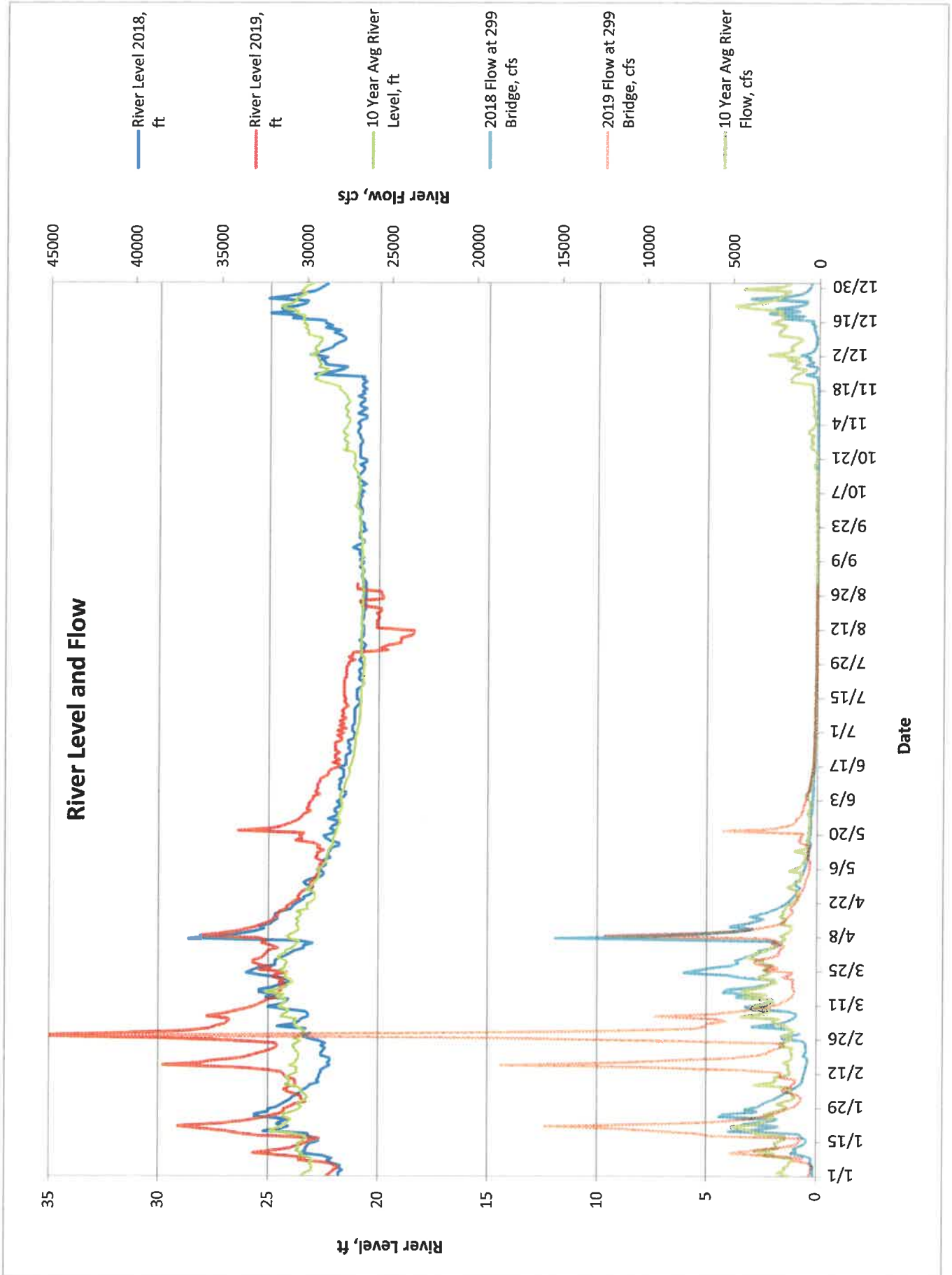
13. August 20th – 23rd – Maintenance at Ruth to start re-roof of Headquarters and demo for repairs needed on Spillway.
14. August 26th & 27th
 - a. Our State Water Resources Control Board, Engineer, Scott Gilbreath was onsite for our annual inspection.
 - b. Maintenance demo'ed the sidewalk at the Office in prep of a new ADA compliant sidewalk.
15. August 28th - One of our Maintenance Workers gave notice of September 6th being his last day working at the District.
16. August 29th – Larry started training for his new position as the Ruth Hydro operator / Ruth Representative.
17. Current and Ongoing Projects
 - a. Ruth Bunkhouse remodel – Complete and Final.
 - b. Valve replacements - Maintenance has completed installation of one new 24” valve, (Item 12 above) and is working on the next two large valve replacements and one new valve installation.
 - c. Ruth Protective Relay Upgrade Project – Contract paperwork in progress.





Ruth Rainfall - Water Year 2018-2019





NOTICE OF AWARD

TO: Electrical Reliability Services
6900 Koll Center Pkwy, Suite 415
Pleasanton, CA 94566

PROJECT:

Ruth Hydro Protective Relay Upgrade Project

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for BIDS dated August 16, 2019 and Information for BIDDERS

You are hereby notified that your BID has been accepted for the items in the amount of Fifty Nine Thousand Six Hundred Ninety Seven Dollars (\$59,697.00).

You are required by the Information for BIDDERS to execute the Agreement and furnish the required Contractor's certificates of insurance within Twenty-one calendar days from the date of this Notice is received by you.

If you fail to execute said Agreement and to furnish said INSURANCE within Twenty-one (21) days from the date of receipt of this Notice, said OWNER will be entitles to consider all your rights arising out of the OWNERS acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The Owner will be entitles to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER

Dated this 28th day of August, 2018

Owner: Humboldt Bay Municipal Water District

By Jane Friedlbaach Title General Manager

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by:

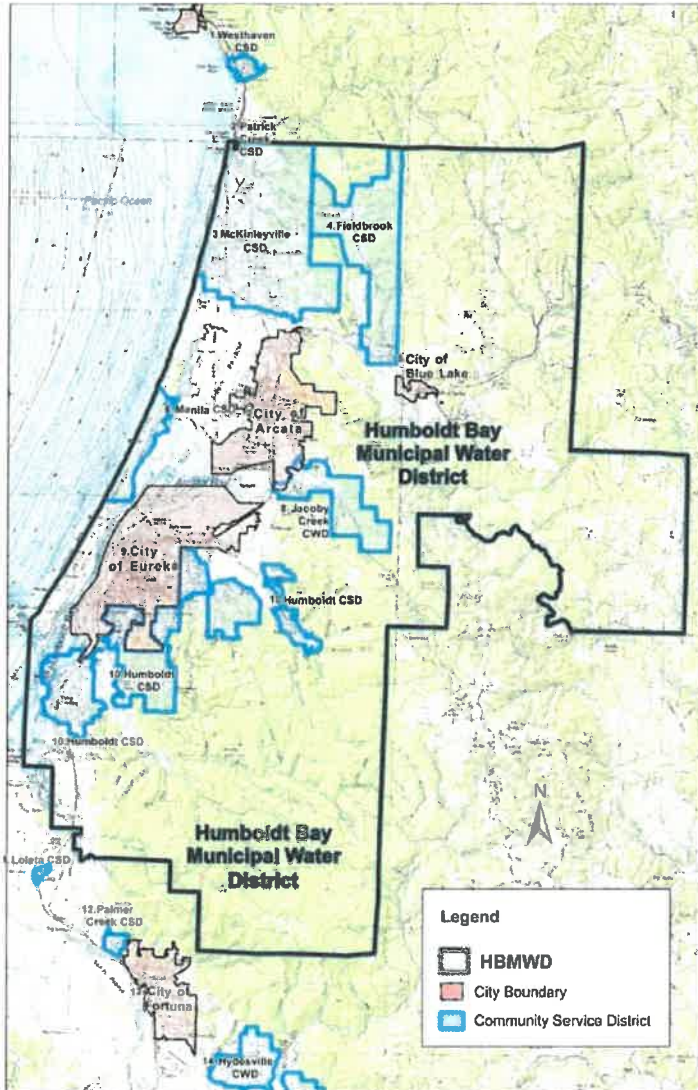
Electrical Reliability Services, Inc
(Name of Contractor)

Dated this 30th day of August, 2019.

By Lu E. Natsu Title Vice-President

HBMWD to temporarily reduce, cut water supply for maintenance three times starting next Wednesday

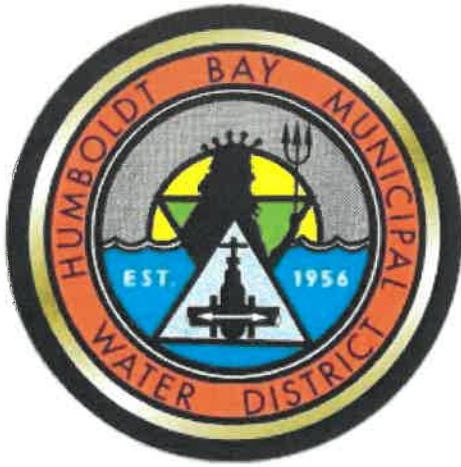
about 1 hour ago *Aug 8, 2019*



Kevin L. Hoover
Mad River Union

NORTHERN HUMBOLDT – The Humboldt Bay Municipal Water District (HBMWD) will reduce and cut Northern Humboldt's supply of Mad River water three times in the next several months to conduct maintenance on its aquifer well water collectors.

A formal announcement is expected soon. Water customers are expected to be asked to limit water use during the maintenance periods.



The **district** supplies water to residential and business customers in the cities of Arcata, Blue Lake and Eureka, plus McKinleyville and Humboldt Community Services Districts, Jacoby Creek Water District, the Manila Community Services District, the town of Samoa and others.

According to preliminary information, the first of the valve replacement projects takes place next Wednesday, Aug. 14. It involves replacement of an isolation valve on Collector No. 4, and will require reducing water gathering to a single collector from 8 a.m. to 8 p.m.

On Wednesday, Sept. 18, the HBMWD is scheduled to replace a water tank outlet valve, which will require draining the tank and the main pipeline for points southbound. During this maintenance, the water supply will be halted except to McKinleyville and Fieldbrook. Other communities will have to rely on reserve supplies, with water pressure likely temporarily reduced.

Arcata has approximately 3 million gallons of reserve water storage, McKinleyville about 5 million, and Eureka about 20 million.

The final phase of maintenance will occur on Wednesday, Sept. 25., when a tank inlet valve is replaced. This will require a total cutoff of water supplies to municipal customers. However, one million gallons is being reserved exclusively for fire protection during the maintenance effort.

The HBMWD is holding a day-long board meeting today, and officials were unavailable for comment.

MANAGEMENT



CSDA

**California Special
Districts Association**

Districts Stronger Together

By CSDA ADMIN posted 08/19/19

Congratulations to the following individuals who were recently elected to the CSDA Board in seat B for the 2020 – 2022 term!

NORTHERN NETWORK

Greg Orsini, General Manager, McKinleyville Community Services District

SIERRA NETWORK

Jerry Gilmore, Director, Truckee Sanitary District

BAY AREA NETWORK

Ryan Clausnitzer, General Manager, Alameda County Mosquito Abatement District

CENTRAL NETWORK

Lorenzo Rios, Chief Executive Officer, Clovis Veterans Memorial District

COASTAL NETWORK

Jeff Hodge, SDA, General Manager, Santa Ynez Community Services District

SOUTHERN NETWORK

Kathy Tiegs, Director, Cucamonga Valley Water District

The 18-member board consists of three directors from six networks in California. If you have any questions on the board election process, please contact Amber Phelen, Executive Assistant, at (877) 924-2721 or at amberp@csda.net



SAN BERNARDINO COUNTY
WATER CONFERENCE

To register, visit biabuild.com

August 9, 2019

7:00 - 1:00

California Water News Daily

DON'T MISS Water right license revoked by State Water Board

[Home](#) > [Industry](#) > [Kathleen Tiegs Elected to CA Special Districts Association Board of Directors for 2020-2022 Term](#)

Kathleen Tiegs Elected to CA Special Districts Association Board of Directors for 2020-2022 Term

By California Water News Daily on August 30, 2019

SHARE

TWEET

SHARE

SHARE

0 COMMENTS

Long-time Cucamonga Valley Water District (CVWD) Board Member Kathleen J. Tiegs was recently elected for the 2020-2022 term with the California Special Districts Association (CSDA) Board of Directors. CVWD strives to maintain a leadership role within industry trade groups in order to have an influence on legislative and regulatory issues.

CSDA is an advocacy association representing the needs of special districts throughout California. For 50 years, CSDA has provided cost-efficient programs and representation in the State Capitol. The association boasts a membership of over 1,000 organizations throughout California and includes a myriad of independent special districts including irrigation, water, park and recreation, cemetery, fire, police protection, library, utility, harbor, healthcare and community services districts.



"I am honored for the opportunity to serve CSDA and its members in this capacity," commented Director Tiegs. "CSDA is an essential statewide network that highlights the critical services all special districts provide to people throughout the state."

A Rancho Cucamonga resident for more than 60 years, Tiegs was elected to the CVWD Board of Directors in November 2005 and has enjoyed a distinguished career in water resource management after working for a wholesale water agency for over 30 years. She serves as the past President of the Association of California Water Agencies (ACWA) Board of Directors and Executive Committee. Director Tiegs was also appointed as the Southern California Water Coalition Chair for 2019-2020.

In addition to Tiegs's statewide representation, fellow CVWD Board Member James Reed is serving as the current president of the Association of San Bernardino County Special Districts (ASBCSD), a chapter of CSDA. Additionally, he serves as a member of the Association of California Water Agencies (ACWA) Energy Committee and he also represents CVWD on the Water Resources Institute Community Advisory Board. Reed is a recent retiree from the wastewater industry after 25 years of service.



LATEST CALIFORNIA DROUGHT NEWS

POPULAR

COMMENTS



North Coast Board Issues General Waste Discharge Requirements For Dairies

Last week, the North Coast Regional Water Quality Control...

August 22, 2019 0



Reclamation Announces 2020 Colorado River Operating Conditions

The Bureau of Reclamation recently released its Colorado River...

August 19, 2019 0



Water Right License Revoked By State Water Board

The State Water Resources Control Board (SWRCB), acting through...

August 16, 2019 0

Resolution No. 2019-10

**Resolution of the Humboldt Bay Municipal Water District Board of Directors
Acknowledging and Supporting the
3rd Annual California Water Professionals Appreciation Week**

WHEREAS, Water Professionals Appreciation Week was established in the State of California by Senate Concurrent Resolution (SCR) 80, approved by the Legislature on September 13, 2017 and chaptered on September 19, 2017; and

WHEREAS, Our District provides high quality, safe, reliable drinking water for 88,000 residents within our service area; and

WHEREAS, Our District operates 24 hours a day, seven days a week, 365 days per year; and

WHEREAS, Our employees in addition to providing high quality water have performed exceptional service responding to and resolving the following situations: Collector 2 waterline failure and cable car damage; Ruth Cabin remodel; spillway maintenance & repairs; installation of Collector 1 pumps; Surge Tower demolition; Collector 4 storm damage; and assisting with the Mad River crossing project; and

WHEREAS, Our Board of Directors wishes to communicate their appreciation and praise for all the employees who do an excellent job and ensure the safety and reliability of the facilities, infrastructure and administrative processes.

NOW THEREFORE BE IT RESOLVED that the Board of Directors of Humboldt Bay Municipal Water District expresses their appreciation and praise for our District employees during the second annual Water Professionals week: **October 5 to 13, 2019**; and,

BE IT FURTHER RESOLVED, the following employees are greatly appreciated for the excellent job they do each and every day to ensure the success of our District:

| | | | |
|----------------------------|--|-------------------------------|--|
| <i>Lui Ahmad</i> | Water Operations Specialist | <i>Chris Merz</i> | Asst. Maint. & Electrical Supervisor |
| <i>Corey Borghino</i> | Customer Service & Actg Asst. | <i>Becky Moyle</i> | Accounting & HR Specialist |
| <i>Bruce Brashear</i> | Maintenance Worker | <i>Ryan Murphy</i> | Operations & Maintenance Tech |
| <i>Ryan Chairez</i> | Maintenance Supervisor | <i>Brian Newell</i> | Hydro Plant Operator/Ruth Area Rep. |
| <i>David Corral</i> | Electrician | <i>Lisa Newell</i> | Water Works Helper/Relief Hydro Operator |
| <i>Keith Daggs</i> | Maintenance Mechanic | <i>Mario Palmero</i> | Water Operations Supervisor |
| <i>Dale Davidsen</i> | Superintendent | <i>David Perkins</i> | Relief Hydro Operator |
| <i>Ken Davis</i> | Operations & Maintenance Tech | <i>Larry Raschein</i> | Asst. Water Operations Supervisor |
| <i>Tim Farrell</i> | Operations & Maintenance Tech | <i>Russell Roberts</i> | Maintenance Mechanic |
| <i>John Friedenbach</i> | General Manager | <i>Samantha Ryan</i> | Program & Regulatory Analyst |
| <i>Chris Harris</i> | Business Manager | <i>Dee Dee Simpson- Glenn</i> | Accounting/HR Assistant |
| <i>Ian Ivey</i> | Operations & Maintenance Tech | <i>Sherrie Sobol</i> | Executive Assistant/Board Secretary |
| <i>Paul Jorgensen</i> | Electrician | <i>Seth Stone</i> | Maintenance Worker |
| <i>Jasson Klingonsmith</i> | Operations/Customer Service Specialist | <i>Bill Wardrip</i> | Operations & Maintenance Tech. |
| <i>Steve Marshall</i> | Operations & Maintenance Tech | | |

Adopted and approved this 19th day of September 2019 by the following roll call vote:



AYES:
NOES:
ABSENT:

Attest:

Sheri Woo, President

J. Bruce Rupp, Secretary/Treasurer

ACWA

OFFICIAL
REGION 1 Board Ballot

2020-2021
 TERM

CLEAR FORM



**Please return completed
 ballot by September 30, 2019**

E-mail: regionelections@acwa.com
 Mail: ACWA
 910 K Street, Suite 100
 Sacramento, CA 95814

**General Voting
 Instructions:**

1 You may either vote for the slate recommended by the Region 1 Nominating Committee or vote for individual region board members. Please mark the appropriate box to indicate your decision.

2 Please complete your agency information. The authorized representative is determined by your agency in accordance with your agency's policies and procedures.

Nominating Committee's Recommended Slate

I concur with the Region 1 Nominating Committee's recommended slate below.

CHAIR:

- **Brad Sherwood**, Community & Government Affairs Manager, Sonoma Water

VICE CHAIR:

- **Jennifer Burke**, Water Director, City of Santa Rosa

BOARD MEMBERS:

- **Tamara Alaniz**, General Manager, Brooktrails Township Community Services District
- **Alan Gardner**, General Manager, Valley of the Moon Water District
- **Dennis Mayo**, Director, McKinleyville Community Services District
- **J. Bruce Rupp**, Board Secretary/Treasurer, Humboldt Bay Municipal Water District
- **Vacant**

OR

Individual Board Candidate Nominations

I do not concur with the Region 1 Nominating Committee's recommended slate. I will vote for individual candidates below as indicated.

CANDIDATES FOR CHAIR: (CHOOSE ONE)

- Brad Sherwood**, Community & Government Affairs Manager, Sonoma Water
- Dennis Mayo**, Director, McKinleyville Community Services District

CANDIDATES FOR VICE CHAIR: (CHOOSE ONE)

- Jennifer Burke**, Water Director, City of Santa Rosa
- Brad Sherwood**, Community & Government Affairs Manager, Sonoma Water

CANDIDATES FOR BOARD MEMBERS: (MAX OF 5 CHOICES)

- Tamara Alaniz**, General Manager, Brooktrails Township Community Services District
- Jennifer Burke**, Water Director, City of Santa Rosa
- Alan Gardner**, General Manager, Valley of the Moon Water District
- Dennis Mayo**, Director, McKinleyville Community Services District
- J. Bruce Rupp**, Board Secretary/Treasurer, Humboldt Bay Municipal Water District
- Brad Sherwood**, Community & Government Affairs Manager, Sonoma Water

AGENCY NAME

AUTHORIZED REPRESENTATIVE

DATE

RREDC/RCEA



Redwood Coast Energy Authority
 633 3rd Street, Eureka, CA 95501
 Phone: (707) 269-1700 Toll-Free (800) 931-7232 Fax: (707) 269-1777
 E-mail: info@redwoodenergy.org Web: www.redwoodenergy.org

BOARD OF DIRECTORS MEETING AGENDA

Humboldt Bay Municipal Water District Office
828 7th Street, Eureka, CA 95501

August 22, 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 www.redwoodenergy.org.

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 July 25, 2019, Board Meeting.

3.2 Approve Disbursements Report.

3.3 Accept Financial Reports.

3.4 Adopt Resolution No. 2019-2, A Resolution of the Board of Directors of the Redwood Coast Energy Authority Approving the Form of and Authorizing the Execution of a Memorandum of Understanding and Authorizing Participation in the Special District Risk Management Authority's Health Benefits Program.

3.5 Adopt Resolution No. 2019-3, A Resolution of the Board of Directors of the Redwood Coast Energy Authority Adopting a Policy Concerning Closed Sessions Pursuant to Government Code Section 54956.96.

3.6 Waive Conflict of Interest in the Law Offices of Nancy Diamond's Representation of RCEA and the City of Arcata on Matters Pertaining to Their Respective Interests in the Pending PG&E Bankruptcy Proceeding.

4. REMOVED FROM CONSENT CALENDAR ITEMS

Items removed from the Consent Calendar will be heard under this section.

5. OLD BUSINESS

5.1 Comprehensive Action Plan for Energy Update (Information only)

6. NEW BUSINESS

6.1. Presentation by Craig Tucker, Natural Resources Consultant for County of Humboldt, on the Potter Valley Project (Information only)

6.2. Presentation by Naveed Paydar, Local Government Liaison to the California Public Utilities Commission (Information only)

6.3. Fiscal Year 2018-2019 4th Quarter Budget Summary (Information only)

6.4. Regulatory and Legislative Policy Manager Position Creation

Approve creation of a Regulatory and Legislative Policy Manager position.

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.

7. OLD CCE BUSINESS

7.1. Adjustment to D.G. Fairhaven Contract Renewal Schedule to Secure State-Required Resource Adequacy Values for RCEA

Direct staff to negotiate a contract amendment with DG Fairhaven extending the power purchase agreement ten months and adding provisions to require improved remote data communications needed for effective scheduling of DG Fairhaven's generating resource into the California Independent System Operator.

8. NEW CCE BUSINESS

8.1. Carbon-Free Power Procurement Alternatives

Direct staff to use the remaining carbon-free budget to purchase out-of-state (PCC2) renewables, contingent upon the availability of a viable procurement opportunity for the remainder of 2019.

END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS

9. STAFF REPORTS – None.

10. FUTURE AGENDA ITEMS

Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

11. CLOSED SESSION

11.1. 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.

12. RECONVENE TO OPEN SESSION

13. CLOSED SESSION REPORT

14. ADJOURNMENT

NEXT REGULAR MEETING
Thursday, September 26, 2019, 3:30 p.m.
Humboldt Bay Municipal Water District Office
828 7th Street, Eureka, CA 95501



Redwood Coast Energy Authority
 633 3rd Street, Eureka, CA 95501
 Phone: (707) 269-1700 Toll-Free (800) 931-7232 Fax: (707) 269-1777
 E-mail: info@redwoodenergy.org Web: www.redwoodenergy.org

DRAFT BOARD OF DIRECTORS MEETING MINUTES

**Humboldt Bay Municipal Water District Office
 828 7th Street, Eureka, CA 95501**

**July 25, 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 3:30 p.m. Notice of this meeting was posted on July 19, 2019. PRESENT: Vice Chair Austin Allison, Summer Daugherty, Estelle Fennell, Alternate Director Debra Garnes, Dwight Miller, Robin Smith, Chair Michael Winkler, Sheri Woo. ABSENT: Dean Glaser. STAFF PRESENT: General Counsel Nancy Diamond, Power Resources Director Richard Engel, Demand Side Management Director Lou Jacobson, Executive Director Matthew Marshall, Clerk of the Board Lori Taketa.

ORAL COMMUNICATIONS

Chair Winkler invited public comment.

Member of the public Dr. Ken Miller expressed his opposition to the Terra-Gen onshore wind project stating that RCEA is creating a sense of urgency to approve the project despite its industrial-scale local impacts and introduced fire hazards without considering options such as incentivizing distributed energy generation from solar panels on Humboldt County rooftops, which can be done at a less-costly scale to supply local energy that is not for export. Dr. Miller also proposed purchasing non-local wind from repowered, aging wind farms, reducing new site development impacts. Dr. Miller stated that RCEA has the skills to bring widespread, distributed energy production and increased home equity and resilience to Humboldt County without destroying forests and rivers.

Member of the public David Grant of Petrolia expressed opposition to the Humboldt onshore wind project, citing the negative precedent set by developing Humboldt County's forest lands and open spaces.

Member of the public Tyler Chapman of Lost Coast Energy reported that local building departments are beginning to discuss state energy code enforcement. As a Home Energy Rating System rater trained to perform energy efficiency field testing, Mr. Chapman stated that the easiest and cheapest way to lessen human climate impacts is to save energy by heating one's house or business, and not the outside air. Mr. Chapman requested that the directors see if their building departments are enforcing code compliance.

Chair Winkler closed the oral communications period.

CLOSED SESSION

Chair Winkler invited public comment on the closed session item. No one came forward to speak. Chair Winkler closed public comment.

The directors adjourned to closed session at 3:45 p.m. 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.

The directors reconvened to open session at 4:34 p.m. General Counsel Diamond reported the following action:

M/S: Miller, Allison: Authorize General Counsel Nancy Diamond and Executive Director Matthew Marshall to make decisions in PG&E bankruptcy proceedings that need to be made quickly, the impact of which shall not exceed \$100,000, provided approval has first been received by at least two of the following: Chair Michael Winkler, Vice Chair Austin Allison and Director Sheri Woo. This authority expires at the end of the calendar year.

The motion passed on a unanimous voice vote. Ayes: Allison, Daugherty, Fennell, Garnes, Miller, Smith, Winkler and Woo. Noes: None. Absent: Glaser. Abstentions: None.

CONSENT CALENDAR

- 6.1 Approve Minutes of June 27, 2019, Board Meeting.
- 6.2 Approve Disbursements Report.
- 6.3 Accept Financial Reports.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

Director Woo requested items 6.1 and 6.3 be removed from the consent calendar.

M/S: Allison, Miller: Approve consent calendar item 6.2.

The motion passed on a unanimous voice vote. Ayes: Allison, Daugherty, Fennell, Garnes, Miller, Smith, Winkler and Woo. Noes: None. Absent: Glaser. Abstentions: None.

REMOVED FROM CONSENT CALENDAR ITEMS

Director Woo commended staff for capturing the tone of the previous meeting in the minutes.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

M/S Miller, Garnes: Approve consent calendar item 6.1.

The motion passed on a unanimous voice vote. Ayes: Allison, Daugherty, Fennell, Garnes, Miller, Smith, Winkler and Woo. Noes: None. Absent: Glaser. Abstentions: None.

Responding to a request by Director Woo for an explanation of the negative net income listed in the profit and loss statement, Executive Director Marshall presented slides of seasonal net

revenue fluctuations showing dips in the agency's cash balance in the late winter and spring. Executive Director Marshall explained that RCEA's rates reflect a fixed discount on PG&E's changing rates, which were exaggerated this year due to PG&E's delayed rate change. While the Community Choice Energy program's power cost hedging strategy also exaggerates spring vs. summer profits and losses in the month-to-month statements, Mr. Marshall stated that the CCE program's cash position trendline is positive as the program moves through its startup phase, and that if RCEA's rates were not based on a discount from PG&E's rates, these anticipated cash balance fluctuations would not occur to this degree.

M/S Woo, Miller: Approve consent calendar item 6.3.

The motion passed on a unanimous voice vote. Ayes: Allison, Daugherty, Fennell, Garnes, Miller, Smith, Winkler and Woo. Noes: None. Absent: Glaser. Abstentions: None.

OLD BUSINESS

Energy Efficiency Program Administrator Application

Demand Side Management Director Jacobson reviewed staff's determination that program administrator election status, or electing to have the community choice energy program administer California Public Utilities Commission energy efficiency funding, is the best option for continuing demand side management services in 2020-2023. Director Jacobson described the proposed programs and the application's cost-effectiveness analysis. The proposed energy efficiency programs largely continue existing commercial and public agency programs, utilize data gathered over 13 years of providing efficiency programs for added effectiveness, and refer customers to third party programs through PG&E where appropriate. Additional state funding must be obtained to expand currently available CCE-funded residential efficiency programs.

Staff and the directors clarified: that fuel switching from propane, which is a non-utility resource, to electricity was not included in the energy efficiency program; that the state is considering measures that would support fuel switching from natural gas to electricity; that residents who contact RCEA technicians can access a wide array of energy efficiency programs; that RCEA maintains liability insurance for staff technicians working in homes, businesses and agencies; that customers sign agreements with contractors directly for many efficiency projects; and that there is interest in offering on-bill financing for energy efficiency upgrades for residential customers, in addition to currently offered on-bill financing for commercial customers.

Chair Winkler invited public comment.

Upon inquiry by member of the public Ellen Golla regarding whether RCEA offered a fuel-switching or heat pump program to offer an alternative to burning wood for heat, staff responded that funding for the program has been acquired through the Community Choice Energy program and that staff was developing terms and conditions.

Chair Winkler closed public comment.

M/S: Daugherty, Woo: Per Public Utilities Code 381.1 (f), approve the enclosed energy efficiency and conservation program plan and authorize the Executive Director to submit the document to the California Public Utilities Commission and to make any

edits and alterations necessary to address California Energy Efficiency Coordinating Committee (CAEECC) input and varying procedural and regulatory requirements.

The motion passed on a unanimous voice vote. Ayes: Allison, Daugherty, Fennell, Garnes, Miller, Smith, Winkler and Woo. Noes: None. Absent: Glaser. Abstentions: None.

M/S Fennell, Garnes: Change the order of the agenda to discuss Community Choice Energy business next.

The motion passed on a unanimous voice vote. Ayes: Allison, Daugherty, Fennell, Garnes, Miller, Smith, Winkler and Woo. Noes: None. Absent: Glaser. Abstentions: None.

COMMUNITY CHOICE ENERGY (CCE) BUSINESS

Chair Winkler confirmed that a quorum was present to conduct CCE business.

NEW CCE BUSINESS

Community Choice Energy Program Updates – DG Fairhaven Biomass Contract and California Community Choice Association Membership Dues

Power Resources Director Richard Engel reported that staff will request the directors to decide at their August meeting whether to renew RCEA's power purchase agreement with DG Fairhaven for a third year. An early decision would allow RCEA to start seeking another source for state-required resource adequacy purchase in a tight market and allow DG Fairhaven early notice should they need to find another electricity off taker. The directors requested a cost-benefit analysis and presentation of options to help in decision-making.

Executive Director Matthew Marshall reported that CalCCA membership dues rose significantly, reflecting increased CPUC regulatory engagement and Community Choice Aggregator representation at the state legislature. These functions are difficult for individual CCA's to perform and CalCCA presents a collective voice for locally-controlled power procurement at the state level. Issues being addressed include advocating for a favorable decision in the power charge indifference adjustment or exit fee calculations, which can have a significant impact on customer rates. RCEA is represented on the organization's board of directors and has equal voting weight despite its small size.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

M/S Fennell, Miller: Approve increase to RCEA's annual CalCCA membership dues up to \$108,960.

The motion passed on a unanimous voice vote. Ayes: Allison, Daugherty, Fennell, Garnes, Miller, Smith and Winkler. Noes: None. Absent: Glaser. Abstentions: Woo.

Director Allison leaves at 5:41 p.m.

Comprehensive Action Plan for Energy Update

Executive Director Marshall described efforts to update RCEA's Comprehensive Action Plan for Energy (CAPE) in coordination with the countywide climate action plan. Staff proposed holding two primary workshops on the CAPE update: on Thursday, August 29 focusing on outcomes of previous planning efforts and qualitative aspects of the CAPE update; and on Thursday, October 17, focusing on quantitative and timeline targets. RCEA is working with the County to shape a mid-September workshop on forests and climate change, as RCEA's purchase of biomass energy plays a small part in forest lands' relationship to climate change. Public input from these meetings will be presented to the Community Advisory Committee (CAC) in October, and the Committee's recommendations for the CAPE update will be brought to the Board in November. The updated document will inform the CCE's integrated resource plan to be submitted to the CPUC in April 2020.

Executive Director Marshall relayed the CAC's desires for holding meetings with targeted stakeholder groups, for written comment periods for the CAPE's qualitative and quantitative goals, and for ongoing education and short video segments on RCEA's work and goals.

The directors discussed the need for a professional, unaffiliated facilitator at the forest and climate change workshop to foster constructive discussion, for ads on television and public access, for at least two weeks to look over the proposed CAPE updates prior to the November Board meeting where the updates would be approved, for possibly engaging Senator McGuire's office in the update process.

Chair Winkler invited public comment.

Member of the public Wendy Ring stated that the community is interested in having input on the CAPE document as it guides RCEA's decision-making and that the RCEA resolution adopting the 100% clean and renewable electricity target stated the agency would gather public input on how to define "clean." Ms. Ring stated that one meeting was inadequate to accomplish this, and that more sessions, including meetings in different parts of the County, were needed to meet the agency's commitment.

Member of the public Dave Grant of Petrolia stated he was unfamiliar with RCEA's work and that 60-second social media video clips would reach more community members and lead to more input than television ads would.

Member of the public Ellen Golla stated that the agency was not interested in obtaining public input but was seeking to make a case for already established goals prior to executing them.

Chair Winkler closed public comment.

The directors and staff discussed use of *redwoodenergy.org* to connect the public to the draft CAPE update, instructions on submitting comment; possible video recording of the public meetings and forest workshop; and that the CAPE update drafts are included in the June 2019 Board meeting packet. The need for alternate meeting locations in southern and eastern Humboldt, for directors to solicit comments from constituents and for extensive publicity and education was discussed.

M/S Miller, Garnes: Approve the Comprehensive Action Plan for Energy public engagement plan and timeline recommended by the Community Advisory Committee.

The motion passed on a unanimous voice vote. Ayes: Daugherty, Fennell, Garnes, Miller, Smith, Winkler and Woo. Noes: None. Absent: Allison, Glaser. Abstentions: None.

Renewable Energy Power Purchase Agreement with Snow Mountain Hydro, LLC

Power Resources Director Engel reported that staff completed power purchase agreement negotiations with Snow Mountain Hydro for electricity generated on Hatchet Creek, a tributary of the Pit River. The project, which reuses water from an upstream hydro project, satisfies the stated preference for local or adjacent county power. The rates are higher than solar but are competitive with non-solar offers and hydropower generation is consistent throughout the day. The contract length satisfies the SB 350 requirement for long-term agreements.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

M/S Fennell, Miller: Approve a 15-year power purchase agreement with Snow Mountain Hydro, LLC for the full capacity of its Cove Hydro project up to 5.6 MW, and authorize RCEA's executive director to execute all applicable documents and adjust the contract terms as needed to reflect the nominal capacity, as approved by the California Independent System Operator.

The motion passed on a unanimous voice vote. Ayes: Daugherty, Fennell, Garnes, Miller, Smith, Winkler and Woo. Noes: None. Absent: Allison, Glaser. Abstentions: None.

Special District Risk Management Authority Board Election

The directors discussed supporting candidates with special district experience and the merits of the local candidate.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

M/S Fennell, Garnes: Approve the official 2019 SDRMA Board of Directors election ballot casting RCEA's vote for Bob Swan, Sandy Seifert and Jesse Claypool for a four-year term.

The motion passed: Ayes: Fennell, Garnes, Miller, Smith, Woo. Noes: Daugherty, Winkler. Absent: Allison, Glaser. Abstentions: None.

Chair Winkler adjourned the meeting at 6:33 p.m.

Respectfully submitted,

Lori Taketa
Clerk of the Board



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 Blue Lake Rancheria Tribal Government Office, 428 Chartin Road, Blue Lake CA

August 26, 2019 at 6:30 pm

AGENDA

- I. **Call to Order & Flag Salute**
- II. **Approval of Agenda and Minutes**
 - A. Approval of Agenda for August 26, 2019
 - B. Approval of Minutes of the Board of Directors Meeting July 22, 2019
- III. **Public Input for non-agenda items**
- IV. **Consent Calendar**
 - A. Acceptance of Agency-wide Financial Reports: June 30, 2019
- V. **Reports – No Action Required**
 - A. Loan Portfolio Reports: June 2019
 - B. Executive Director's Report
- VI. **Old Business**

None
- VII. **New Business**
 - A. Authorization of Members of Board of Directors as Signatory on Bank Accounts
 - B. Resolution Approving the Form of and Authorizing the Execution of a Memorandum of Understanding and Authorizing Participation in the SDRMA's Health Benefits Program
- VIII. **Program – Low-Carbon Resilience at Blue Lake Rancheria – Jana Ganion, Sustainability and Government Affairs Director, Blue Lake Rancheria (a federally recognized tribal government)**
- IX. **Member Reports**
- X. **Agenda/Program Requests for future Board of Directors Meetings**
- XI. **Adjourn**

The Redwood Region Economic Development Commission will, on request, make agendas available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in implementation thereof. Individuals who need this agenda in an alternative format or who need a disability-related modification or accommodation in order to participate in the meeting should contact the Board Secretary at (707) 445-9651. Notification 48 hours prior to the meeting will enable the Commission to make reasonable arrangements for accommodations.

**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