



Ranney Collector 1 & 1A Lateral Project

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

Board of Directors Meeting

October 2016



Lateral Screens

Minutes



Minutes for Meeting of Board of Directors

September 8, 2016, 9:00

A. ROLL CALL

Director Rupp conducted the roll call. Directors Laird, Latt, Rupp and Woo were present. Director Hecathorn was absent. General Manager Paul Helliker, Superintendent Dale Davidsen, Business Manager John Friedenbach and Board Secretary Sherrie Sobol were present. John Winzler and Pat Kaspari of GHD were present for a portion of the meeting.

B. FLAG SALUTE

Director Laird led the flag salute.

C. ACCEPT AGENDA

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

D. MINUTES

Director Woo requested a clarification in the minutes of August 11 in the Water Resource Planning instream flow section. On motion by Director Rupp, seconded by Director Woo, the Board voted 4-0 to approve the minutes of August 8, 2016 Special Meeting and the August 11, 2016 Regular Meeting as amended.

E. PUBLIC COMMENT

No public comment was received.

F. CONSENT AGENDA

Director Rupp pulled the article on the Dunes Climate Ready Grant Update. He stated he read the article and inquired if the grant was successful so far as it was difficult to tell from the newsletter. Mr. Helliker stated as it relates to the District's concerns, our infrastructure, it is. Director Laird elaborated and stated the project is to determine how climate change will impact the coastal dunes and test the adaptation with various vegetation. It is an ongoing five-year study. The District is participating so they will study the cross sections of the dunes where we have our infrastructure that has been exposed in the past.

On motion by Director Rupp, seconded by Director Latt, the Board voted 4-0 to approve the Consent Agenda.

G. CORRESPONDENCE

1. Letter from District supporting AB 2243 (Wood) Medical Cannabis: Taxation

Mr. Helliker stated he would discuss the letter in more detail during the cannabis discussion in Continuing Business.

2. Letter from District to FEMA re: Surge Tower

Mr. Friedenbach shared the letter to CalOES responding to questions they had regarding the surge tower. One of the items they are requesting is a soil survey since they have concerns regarding possible lead in the soil. This additional item will increase costs by about \$175,000. He did note that the District was able to provide a revised cost estimate to include additional costs for requested items.

3. Letter from District to Samoa Peninsula Fire District re: Hydrant Maintenance

Mr. Friedenbach explained that the JPIA will be conducting a survey regarding the status of hydrants. In their notice, they highly encouraged us to review hydrant inspection and maintenance agreements. The District has an "Agreement Regarding Responsibilities for Public Fire Protection System in Fairhaven and Southern Part of Samoa Peninsula" dated December



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2014. The agreement is in effect until December 31, 2024, unless otherwise extended. The agreement clearly states the Samoa Peninsula Fire District is responsible for required maintenance and testing of all Water District fire hydrants and any fire suppression facilities related to the hydrants within the jurisdiction of the Fire District. The District sent the Samoa Peninsula Fire District a letter noting this and requested documentation of hydrant maintenance during the past twelve months. Mr. Friedenbach noted a similar letter is being sent to the Fieldbrook Volunteer Fire Department.

4. Letter from FERC re: 2016 Dam Safety Inspection Follow Up

Mr. Helliker discussed the letter from FERC regarding the Dam Safety inspection earlier this year. The inspector, Mr. Lee was recently assigned by FERC to our project and inspected the R.W. Matthews for the first time. The post inspection letter states there were “no dam safety concerns” and “there were no follow-up action items arising from the inspection.” Mr. Helliker commended Mr. Davidsen and his staff on a job well done.

H. CONTINUING BUSINESS

1. Water Conservation Regulations

Mr. Helliker discussed three topics under water conservation: the stress test results, implementation of Executive Order B-37-16, and legislation regarding excessive water use. The State Water Resources Control Board (SWRCB) modified their emergency conservation regulations to require agencies to either continue the mandated reductions imposed on them in 2015 or perform a “stress test” to determine if their water supplies would not meet demand level, assuming three additional years of precipitation and runoff similar to 2013-2015, and demand levels that would be an average of 2013 and 2014. Mr. Helliker shared the results of the stress tests and noted the majority of agencies showed they had enough water to meet demand in the third year of a hypothetical drought. For the District, our conservation level is - 139%. This means the District has 139% more water than we need. He noted that no north coast water agency faces any shortage of water supply.

Governor Brown issued Executive Order B-37-16 on May 9, 2016. This order directed the SWRCB to revise their regulations effective through January 2017 to recognize differing water conditions across the state and prepare a proposal for further regulation after January that would mandate urban potable water use reductions if another dry year occurs. They are holding a series of public meetings through December to receive input. Mr. Helliker attended the first meeting on August 15 and shared the agenda. The order also directed the SWRCB and DWR to develop a proposal to improve Water Shortage Contingency Plans and Urban Water Management Plans (UWMP), including analyzing five dry years instead of three as currently required. It also directed that common, statewide standards for contingency plans be proposed. A public meeting was held on this as well and Mr. Helliker shared the agenda for the meeting. He stated the SWRCB and DWR also stated their desire to be able to impose statewide mandatory reductions in case of an emergency. These approaches were widely criticized by water agencies. The water agencies also insisted that any state role should be limited to reviewing plans to ensure they are complete and effective. Mr. Helliker noted the District has a robust water shortage contingency plan. He is putting together a proposal for discussion next week with the SWRCB and DWR.



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In response to reports of excessive water use by individual homeowners in various areas during the drought the past few years, the Governor signed SB 814. The bill requires water agencies to have an Ordinance and implement fines for excessive water users. Mr. Helliker noted this will not likely be needed in our area.

2. Water Resource Planning

Local Sales

Mr. Helliker stated staff and GHD had additional conversations with the grant management team in Sacramento. The team had not yet read the latest update to the proposal, but were not optimistic that our grant proposal would rate highly on their criteria. They did inform the District that a loan would be feasible if we wished to consider it. Mr. Helliker stated a meeting is scheduled next week with our partners in the grant proposal and the option will be discussed. Mr. Helliker also stated he has reached out to the general manager of the Westhaven CSD several times and has not received a response.

Transport

Mr. Helliker shared that Terry Spragg is working with the Santa Clara Valley Water District (SCVWD) to do a delivery demonstration of water from Humboldt County to the Bay Area. The SCVWD is responding to a concept proposed by Mr. Spragg, and requested any information we have on costs associated with marine transport. SCVWD is pursuing a recycled water program, which would include transmission pipelines for raw water originating near the Bay, which could potentially be the location to which water could be transported from Humboldt County. The Board had a lengthy discussion and reiterated that if they transport water, it will be to a public agency, not an individual. Mr. Helliker reconfirmed it is the SCVWD asking the question, not an individual.

Mr. Helliker stated the Advisory Committee is scheduled to meet later this month and they are currently down two members, one from the economic development area and one from labor. Mr. Rob Holmlund, the Community Development Director for the City of Eureka is very interested. John Frahm of the Labor Council expressed interest in having a representative on the AC and said he would present a name after their board meeting this month. On motion by Director Rupp, seconded by Director Woo, the Board voted 3-0 (Director Laird abstained) to approve Mr. Holmlund as the new economic development AC member and approve the Labor Council's representative of their choice.

3. Cannabis activities

Mr. Helliker provided an update on legislative, regulatory and District actions related to cannabis. The District provided a letter of support for Assemblymember Wood's bill AB 2243, the Medical Cannabis Tax Law, however, the bill did not pass this year. The bill would have established taxes on plants and flowers to be used to fund environmental cleanup and regulatory enforcement. Proposition 64, the "Adult Use of Marijuana Act of 2016" is on the ballot this November. This initiative would establish a complete regulatory scheme for the production and distribution of marijuana and associated products, including taxes to fund the



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program. The tax would be an excise tax, set at 15% of retail sales.

Mr. Helliker was notified by the North Coast Regional Water Board that they will be issuing enforcement letters to property owners who have not enrolled in their waste discharge requirements program. Part of the effort will also include verification of water rights and inspection of the water collection and use activities at the site. The board will be targeting the Mad River watershed and expect to issue over two hundred enforcement letters within the next couple of months.

Mr. Helliker and Director Woo attended an informational meeting sponsored by SWRCB on Cannabis Cultivation and Water Rights held locally in Eureka. The SWRCB is encouraging growers to take water in the winter months when rivers are not fully appropriated.

Last month, the Board discussed a landowner illegally drawing water from Ruth Lake. Staff was directed to send a legal notice requesting the landowner stop the illegal withdrawals. Mr. Helliker shared the letter drafted by the District's legal counsel. The letter was sent via certified mail and posted on the landowner's gate as well. Mr. Helliker and Mr. Davidsen discussed additional access points where illegal water withdrawals have been known to occur. The plan is to prohibit access to the locations by placing large boulders there.

4. District Mission Statement and Goals

Last month the Board updated the Mission Statement and discussed District goals. Mr. Helliker provided a sample format for goals, strategies and objectives. The Board concurred on the format. Director Rupp suggested that when the goals, strategies and objectives are finalized, they could be used for District performance metrics to see how we are doing on achieving goals. Director Laird suggested posting the information on the District website so the public can see the District's progress. Mr. Helliker stated he will continue to refine the goals, strategies and objectives and bring them back for review.

5. Dental and Vision Coverage for Board members

Mr. Friedenbach provided a quick recap of the participation requirements and provided an overview of plan summaries for the dental and vision plans currently offered by the District. He shared what the Municipal Customers are doing regarding dental and vision coverage for their board or council members. If the Board approves the insurance coverage, it will become effective December 1 as there is a 60-day notice requirement. Director Rupp stated the cost to cover the Directors represents 2/10 of one percent of the personnel budget. On motion by Director Rupp, seconded by Director Latt, the Board voted 4-0 to approve dental and vision coverage for the Directors.

6. Ordinance 16 and Contract Changes

Mr. Helliker provided an update on the potential modifications to Ordinance 16 and contract changes. Staff is preparing draft language to address three areas: 1) renewal/revision to the contract term to establish a new 20-year term, 2) an updated peak rate allocation to address Manila CSD's situation given the loss of the Sierra Pacific mill, and 3) revision to the limitation on capital expenditures to include a reference to a five-year cycle for update and discussion of the District's CIP. He and Mr. Friedenbach also met with Ms. Rische to discuss issues to address. She suggested the District ensure the ordinance and contracts allow for easy addition of a new municipal customer and any new industrial customer including allocation costs. Mr. Helliker



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stated this will all be discussed at the Muni Meeting later this month. He also offered to speak to any of the councils or boards regarding any changes.

I. **NEW BUSINESS**

1. **Ruth Lake Lease Lot 26B**

The District received a request from the owners of Ruth Lake Lease Lot 26B for approval for the installation of a twelve foot by thirty-five foot metal carport over their existing trailer. The elevation of the lease lot is 2,665.5 feet. The District's set back policy states that no structure shall be placed at an elevation less than 2,675, without approval from both District Boards. The Board had a lengthy discussion on the matter. Director Laird stated the set back policy is in place for a reason and did not feel compelled to make an exception. Director Rupp asked Mr. Davidsen for his thoughts on the request since the set back policy is in place to ensure that in a flood event the risk is minimized to the greatest extent possible of blocking the spillway by floating debris causing an overtopping of the dam. Mr. Davidsen replied that if the structure was secured with concrete footings and cable, he did not see an issue. On motion by Director Rupp, seconded by Director Woo, the Board voted 3-1 to approve the request on the condition that the structure is anchored down with concrete footings and includes cross bracing (cabling) to prevent it from floating or collapse if a high water event were to occur. Director Woo requested that staff convey to the Ruth Lake CSD Board that this was not a decision made lightly and involved thoughtful discussion.

2. **Closed Session**

Due to time constraints, closed session did not occur and will be placed on the October agenda.

J. **REPORTS (from Staff)**

1. **Engineering**

a) **Ranney Collector 1 Lateral Replacement Project (partially funded by Prop 84 NCIRWMP grant)**

Mr. Kaspari reported the first lateral is going in. The contractor did hit some barriers that caused deflection of the new lateral but they have a new tool that will hopefully break up any rocks in the way. They hope to have the screens and second lateral going in next week.

Change Order #4 is to install an alternative port assembly. It makes sense to do it now since they are already coring and installing ports for two laterals. Mr. Kaspari stated this would increase the budget by \$8,000 to the new amount of \$1,912,809. He recommended approval of the change order. On motion by Director Woo, seconded by Director Rupp, the Board voted 4-0 to approve Change Order #4.

Pay request #2 was received and Mr. Kaspari stated he reviewed it and recommends approval. On motion by Director Rupp, seconded by Director Woo, the Board voted 4-0 to approve Pay Request #2 for \$326,728.10 less retainage of \$16,336.41 for \$310,391.70.

Mr. Kaspari discussed the option of the contractor extending the laterals. He stated if the contractor can get additional footage in the laterals it would be beneficial. The additional costs would be approximately \$65,000 but the main factor is time. Work in the river must be completed by October 15th. Mr. Helliker stated the advantage to doing it now, time permitted, is that the equipment is already there. Mr. Friedenbach noted the costs would exceed the budget, however, the DWFP reserves could be used. The Board discussed the option and concurred to try and get additional footage if Mr. Kaspari feels this would be the most effective option.



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b) Blue Lake-FG CSD Water Line Replacement over Mad River (funded by Prop 84 NCIRWMP grant and FEMA Hazard Mitigation Grant)
Mr. Kaspari shared that the Cultural Resource Officer looked at some additional areas (due to horizontal drilling) and the report should be back soon. County and DWR staff will be coming out to look at Prop 84 projects. For the District, this includes the Blue Lake Water Line Replacement and the Collector 1 project.

c) Mad River Cross Sections
Mr. Kaspari stated this is an annual survey and discussed the eight sections. He stated in general, there are no major changes to the cross sections that are of major concern.

d) Essex Control Facilities Plan
Mr. Kaspari shared the cover page, table of contents and the conclusions and recommendation of the report. The report looked at expansion of the Essex Control Building, SCADA upgrades, 12-kV Switchgear upgrades and relocation and an EOC center at the TRF. The SCADA is in the process of being upgraded. He recommended expansion of the Essex Control Center and adding the EOC to the Capital Improvement Plan and pursuing grants for the projects.

2. Financial

a) Financial Report
Director Rupp provided the August 2016 financial report. He also stated that President Hecathorn reviewed the bills. On motion by Director Rupp, seconded by Director Latt, the Board voted 4-0 to approve the August financial report and vendor detail report in the amount of \$181,192.63.

b) Surplus Equipment
Mr. Friedenbach stated the District has equipment that is no longer needed. Staff proposes the following items be declared surplus: (2) Office PC's, (1) Yellow chemical storage cabinet – 36”w x 18”D x 72” T, (1) Centrifuge, 24” diameter x 16” Deep, (1) Batch tank, 19” diameter x 36” Tall, (1) Mixing tank, 24” diameter x 28” Tall, (1) Partition, 65” H x 60” W, (1) Corner desk, 30” H x 78”W x 24” D, and (4) Smith Blair repair couplers – formerly for Techite pipe repairs.

On motion by Director Rupp, seconded by Director Woo, the Board voted 4-0 to declare the listed items as surplus.

3. Operations

Mr. Davidsen provided the September Operational Report. Interviews for the new Maintenance Worker position were conducted August 9th and the new employee started on September 1. Staff attended training on Sampling and Revised Total Coliform Rule in Crescent City. Mr. Davidsen met with Mr. Newell at Ruth regarding dead, dying and diseased trees. He will get in touch with a forester regarding harvesting of the trees. They also looked at sites where water theft is occurring. Mr. Scott Wood from JPIA conducted his annual inspection of Essex. There were no issues brought up.

K. DIRECTOR REPORTS & DISCUSSION

1. General

Letter from Elections office re: Certificates in lieu of election

Per a letter from the Humboldt County Elections Office, Directors Hecathorn, Latt and Woo did



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not have any challengers so there will be no election and their terms are extended until 2020.

2. **ACWA – JPIA**

Director Rupp attended the Liability Program Committee meeting. He shared that there will be no increase in the liability insurance rate on October 1st. The next meeting is on October 31st.

3. **ACWA**

Mr. Helliker shared the August ACWA Update on Priority Issues.

He reported that on September 24th the Region 1 Board will decide on 2 new Board members. He is one of the nominees.

Director Rupp stated he has a Finance Committee conference call in a few minutes. The topic of discussion will be dues. District dues have increased by over \$1,000 in the past three years. Even with the increase, he believes the money is well spent given all the services provided by ACWA. He then excused himself from the meeting to participate in the call.

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

Director Woo reported out on RCEA. She stated RCEA continues to be very busy, especially with the CCA, however, Board attendance is not consistent.

Mr. Helliker attended the RREDC meeting and shared that Angie Lottes, a biomass program coordinator was the guest speaker. He stated that Humboldt County is fortunate to have biomass plants that have weathered the industry changes.

ADJOURNMENT

The meeting adjourned at 2:23 p.m.

Attest:

Barbara Hecathorn, President

J. Bruce Rupp, Secretary/Treasurer

Consent

Dee Dee Simpson

From: info@shakeout.org
Sent: Monday, October 03, 2016 3:10 PM
To: Dee Dee Simpson
Subject: California ShakeOut: Thank you for renewing your registration



Dear Dee Dee,

Thank you for renewing your registration for The Great California ShakeOut!

Here are some tools and tips to help you plan and promote the best drill possible:

- 1) See the [Resources](#) page for **drill broadcasts**, web graphics, earthquake safety guides, and drill manuals.
- 2) Spread the word on Facebook, Twitter, and other social media platforms with **#ShakeOut!** And follow us too:
 - Facebook: [Facebook.com/greatshakeout](https://www.facebook.com/greatshakeout)
 - Twitter: [@ShakeOut](https://twitter.com/ShakeOut)
 - Instagram: [GreatShakeOut](https://www.instagram.com/GreatShakeOut)
 - YouTube: [youtube.com/greatshakeout](https://www.youtube.com/greatshakeout)
- 3) Learn from and share the [Earthquake Safety Video Series](#) with co-workers, family, and friends!

If at any time you need to update your information, please go to <http://www.shakeout.org/california/login/> and enter your e-mail address and your password.

If you have other questions about your registration, or the ShakeOut in general, please e-mail info@shakeout.org.

What to do during an Earthquake:



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Correspondence



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BOARD OF DIRECTORS

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GENERAL MANAGER

PAUL HELLIKER

September 12, 2016

Sandra Smith
Employee Benefits Manager
ACWA JPIA
PO Box 619082
Roseville, CA 95561-9082

RE: Dental and Vision Insurance

Hello,

At our Board meeting on September 8, 2016, the Directors authorized dental and vision insurance coverage for them as a class of employees. I understand there is a 60-day notice period which would make their insurance effective December 1, 2016.

Please provide any forms and paperwork necessary to begin their dental and vision coverage.

Thank you,

A handwritten signature in black ink that reads "Paul Helliker".

Paul Helliker
General Manager

Continuing Business

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

To: Board of Directors
From: Paul Helliker
Date: October 13, 2016
Subject: Water Conservation Regulations

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Conservation Reporting

Attached are a variety of articles about the August data that **was** released by the State Water Board at their meeting on October 4. Water agencies reported a savings of 18% in August, compared to August, 2013. As the articles show, this was a lower conservation level than agencies achieved in August, 2015. However, more than 80% of water agencies have demonstrated that they have adequate water to meet demand for the next three years, pursuant to the "stress test," and rainfall in Northern California was 116% of normal in 2015-16, so it is not surprising that drought response has dropped. Despite the dire comments from Water Board members and some staff, other staff called August's results "remarkable" (i.e., very good). The discussion was poorly-informed, as it centered on comparing 2016 reductions to 2015, and completely ignored the relevant comparison, which is between stress test targets and usage levels compared to the average of demand in 2013-14. ACWA responded with its statement (attached), and is developing this comparison, for use in correcting the record.

Also attached is the first page of the summary report, which shows the 12 agencies that did not meet their conservation targets in August. HBMWD and Arcata are both there, as our use was greater that month than in 2013. We are not in violation of our conservation standards, which were defined by the stress test regulations to be -139%. However, State Water Board staff have arbitrarily assigned a "0" target to all Humboldt Bay agencies (and all agencies whose stress test conservation targets were **less** than 0), and consider us to be in violation.

Executive Order B-37-16 Implementation**Urban Advisory Group**

The Urban Advisory Group met on September 19-20 and the agenda is attached. The discussion focused on updates to water shortage contingency plans, more stringent long-term use reductions and water leak programs. Each topic has been the subject of other workgroup meetings, as described below. The next meeting of the Urban Advisory Group is on October 20. The draft report from DWR and SWRCB staff is projected to be released on November 4. The deadline for a final report to the Governor (which will likely include the elements of proposed legislation) is January 10, 2017.

Water Shortage Contingency Plans

State staff have proposed that water shortage contingency plans start to include the following, beginning in the 2020 urban water management plan cycle:

1. Annual supply and demand assessment
2. Conditions that trigger stages of action (currently required)
3. Response actions to be taken in any stage (currently required)
4. Communications plan

5. Discussion of implementation authority
6. Discussion of financial impacts of implementing the WSCP (currently required)
7. Process for reporting results
8. Customer compliance and enforcement mechanisms/customer exemption process
9. Review and improvement process

DWR and Board staff proposed that the annual report also include a 5-year drought outlook, with future actions specified to address projected conditions. Water agency representatives objected strenuously to this proposal, due to the lack of relevance of the hypothetical drought to current year actions to address a water shortage, as well as potential legal complications. We recommended that the five year drought analysis be part of the UWMP, as it is now (currently a three-year analysis is required).

Water Use Efficiency

State staff have insisted that the Executive Order only allows the use of method 2 in SB x7-7, and are proposing the following new standards:

- Indoor – 55 gallons per capita per day
- Outdoor – irrigable area times the landscape evapotranspiration rate in effect at the time it was installed
- Commercial, Industrial, Institutional – same standards as outdoor for landscape component, work with trade groups to define standards for individual industrial classifications

Most water agencies want to continue to be able to use methods 1 and 3 (% reduction from baseline and % reduction from hydrologic region target), and are insisting that the proposal include those as well - with method 1 being composed of a 30% reduction by 2025 and 35% by 2030 and method 3 continuing to be 5% below the regional target, which will be updated in 2018 and 2025. Method 2 requires significant time and expense both to develop data on irrigable area for each parcel in a service territory, and to maintain and update the complete database, to address specific conditions at any account (such as more residents than average, large animals, swamp coolers, etc.)

Leak Reduction

The leak reduction program defined in SB 555 is included in the proposal. This program will establish stringent audit requirements, and the State Water Board will adopt leak reduction targets in 2019.

Weaker water conservation numbers prompt fears that California is going back to its old bad habits



Sprinklers water the front lawn of a house on Zelzah Avenue in Encino earlier this year. (Michael Owen Baker / For The Times)

By **Matt Stevens**

OCTOBER 5, 2016, 2:30 PM

Californians' water conservation slipped for the third consecutive month in August, prompting new alarm from regulators about whether relaxed water restrictions may be causing residents to revert to old habits as the state enters its sixth year of severe drought.

The trend raises new questions about Californians' willingness to continue austere conservation after spending the last two years dramatically reducing their water use by ripping out lawns, installing water-sipping appliances and shortening their showers.

ADVERTISING



Conservation numbers varied widely across the state, with some places actually saving more water compared with 2015 levels. But other communities are turning the spigot back on, and state data show that several of the worst offenders are the affluent cities that previously have been criticized for heavy consumption.

Regulators on Wednesday singled out Malibu as one example of a city returning to profligate water use. The water district that serves the city saw its water-savings drop from 20.4% in August 2015 to just 7.9% in August 2016. The 22,000 residents served by the district used about 300 gallons per person per day, according to state data. By contrast, Los Angeles residents used an average of only 84 gallons per day in August.

The Santa Fe Irrigation District, which serves upscale pockets of northern San Diego County, including Rancho Santa Fe, saw its residents use about 525 gallons per person per day. The district had ramped up conservation efforts after being tagged as one of the state's heaviest water users and had managed to save 36.6% in August 2015. But this August, the savings fell to 14%.

Beverly Hills, long a target of regulators' scorn, actually increased its water savings in August by about two percentage points compared with the same month in 2015.

"Everybody liked to pick on Beverly Hills in the beginning, but Beverly Hills is using less than half of what Malibu is," State Water Resources Control Board Chairwoman Felicia Marcus said.

Statewide, people in cities and towns cut their water use by just 17.7% in August, compared with the same month in 2013, state board staff members said. That's a dip from August 2015, when Californians reduced their consumption by 27%, beating the target of a 25% reduction set by Gov. Jerry Brown.

"We're at yellow alert," Marcus said. "I'm not ready to go to red alert until we see the details."

Regulators lifted mandatory conservation for the vast majority of the state's water suppliers beginning in June. That month, water savings fell sharply to 21.5%, and conservation has continued to flag each month since.

Water board members have defended their decision to ease the rules, saying that while a 25% statewide reduction in urban water use was necessary for a time, it could not continue indefinitely. They cite significant rains and snow in Northern California, which replenished some reservoirs, as helping reduce the need for conservation.

But faced with lower conservation numbers, officials on Wednesday acknowledged that easing the restrictions may have contributed to increased water consumption.

“There are some communities back over 500 gallons [per person] per day,” Marcus said. “I’m not going to say, ‘What’s the story there?’ But that’s a question. ... Did they stop messaging, or what’s happening?”

Mark Gold, UCLA’s associate vice chancellor for environment and sustainability, called the August numbers “completely predictable.”

“This is what we’ve come to expect when there are strong messages from Sacramento that the crisis isn’t as bad as we thought it was,” Gold said. “People, on their own, in a voluntary way, don’t do as much to conserve.”

California is broken down into 10 so-called hydrologic regions, and in every one, residents used more water per person per day in August 2016 than they did during the same month in 2015.

On average, Southern Californians used about 104 gallons per person per day, about 10 gallons more than they had the year prior, making them the fourth-lowest users among the 10 regions.

In April 2015, Brown ordered a 25% statewide reduction in urban water use, which the board tried to achieve by assigning conservation “standards” to each of the state’s urban suppliers. Some were told to slash their usage by as much as 36%; others could cut as little as 4% and remain in compliance.

The suppliers were required to hit their targets beginning in June 2015. In the 15 months since, Californians have cumulatively cut their consumption by about 23%, state officials said. They have saved almost 660 billion gallons of water over that period — enough to provide water for 10 million residents for a year.

Some water officials were more optimistic than others about the August conservation numbers. Rob Hunter, general manager of the Municipal Water District of Orange County, noted that this August was two degrees warmer than August 2013, the baseline against which water savings was measured. So an 18% statewide reduction is something “we should be congratulating people for, not castigating people for,” he said.

“That’s an incredible achievement,” Hunter said. “There was some concern there would be zero conservation, that everybody would start using more,” he added. “That’s not happening.”

But water board staff members also said conservation efforts tend to start sliding around this time of year, as the temperatures cool and water use dips. As urban Californians use less water, there is less savings to be had, officials say.

When the water year ended last week, forecasters and water officials warned that it will be hard to predict whether this winter will bring the rain and snow the state so desperately needs. And if a sixth year of drought is on the horizon, regulators have warned that they could return to mandatory conservation.

“While last year’s rain and snow brought a respite for urban California, we are still in drought, and we can’t know what this winter will bring,” Marcus said in a statement released later Wednesday. “What we do know is that climate change will continue to make our water years even more unpredictable, so we need to retain our conservation habits for the long term, rain or shine, drought or no drought.”

matt.stevens@latimes.com

Twitter: @ByMattStevens

ALSO

Medical marijuana community split over legalization of pot

Power lines and poles to be replaced throughout Cleveland National Forest

Why did this retired teacher get a \$12,836 bill from the Department of Water and Power?

UPDATES:

2:30 p.m.: This article was updated with additional details.

12:10 p.m.: This article was updated with additional context and details about specific water districts.

This article was originally published at 10:50 a.m.

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This article is related to: Jerry Brown, Droughts and Heat Waves

10/5/16 *Sacramento Bee*

With standards relaxed, water use on the rise throughout California



Low-water landscape guru Roberta Walker, author of numerous books on drought-proof gardens, transformed this Land Park resident into a water-wise oasis on Wednesday, July 27, 2016 in Sacramento, Calif. **Randy Pench** rpench@sacbee.com

BY RYAN SABALOW, DALE KASLER AND PHILLIP REESE

rsabalow@sacbee.com



Californians continued to backslide on water conservation during the hottest summer on record, worrying regulators and frustrating environmentalists critical of a new policy enacted this spring that allows most urban water districts to avoid mandatory cuts in water use.

On Wednesday, the State Water Resources Control Board announced that conservation in urban California in August was still below the baseline year of 2013 – but by a far smaller percentage than in August 2015. In August 2015, Californians saved 27 percent compared with 2013. This year, that savings rate fell to less than 18 percent.

Put another way, statewide water consumption rose by about 10 percent in August compared with 2015. It was the third straight month that water usage increased compared with a year earlier.

In total, California's water use this summer rose by 11 percent from 2015 during the three hottest months of the year, when water use is traditionally highest. All 23 large water agencies in the Sacramento region saw water use increase by even greater amounts.

Water board chair Felicia Marcus said the results are reason for concern as the state enters what could well be a sixth year of drought. But she said it's not clear that the state's relaxed conservation standards have backfired.

"It's a mixed picture," she said. "We wanted to be candid about the fact that we're concerned, and we want to know what this means. Still, nearly 18 percent is a lot of water being saved. ... You could say, 'Well done. You're still saving.'"

In May, the water board [retreated from the mandatory](#) statewide urban conservation program it had adopted in 2015 by order of Gov. Jerry Brown. Last year, more than 400 urban water suppliers were ordered to cut usage by an average of 25 percent compared with 2013.

After a relatively wet spring in Northern California – and months of water districts complaining that the one-size-fits-all approach was unfair and cutting into their revenue – the water board said districts didn't have to set any conservation standards if they could certify they have enough water to last three dry years. The vast majority of the state's urban water districts said they could meet that threshold.

Environmentalists say they aren't surprised by the conservation backslide, given the looser standards. They argue that the water board should have learned its lesson in 2014, when the governor asked for a voluntary 20 percent reduction in water use and districts were unable to hit the target.

"We know that voluntary (conservation) doesn't work," said Tracy Quinn of the Natural Resources Defense Council.

Tim Quinn, executive director of the Association of California Water Agencies, said the uptick in use does not mean districts have abandoned conservation efforts.

"It reflects a change in the overall approach and the fact that local communities are emphasizing water supply reliability and efficiency as a way of life, which is different from emergency conservation," he said in a written statement. "The goals of drought preparedness and efficiency are more important – and more meaningful in the long run – than one-size-fits-all monthly targets set by the state."

Several cities in the Sacramento region saw large spikes in water use. The city of Folsom increased water use by 32 percent this summer compared to 2015. The

Sacramento County Water Agency increased use by 36 percent. The San Juan Water District, which includes Granite Bay and nearby communities, increased use by 48 percent.

Nine of the 25 water districts that saw the largest increases in water use across California are in the Sacramento region: San Juan, the Sacramento County Water Agency, Folsom, Lincoln, Roseville, Citrus Heights, West Sacramento, Elk Grove and the Fair Oaks Water District.

San Juan, Folsom, Fair Oaks and Citrus Heights were also among the 25 districts statewide that used the most water per person in August.

San Juan district General Manager Shauna Lorance said she nonetheless was pleased with the results, noting that customers met a voluntary 10 percent reduction that the board of directors asked for earlier this summer.

“Our customers are still doing what they should be doing,” she said.

Folsom’s water resources director, Marcus Yasutake, said the city isn’t worried that conservation slipped to 7 percent in August, from 31 percent a year earlier. The city turned in strong savings while under the state mandate, he said. But he noted that the rules have changed, permitting cities to use more water if they can prove they have access to adequate supplies.

Forecasters say it’s not yet clear whether the coming winter will ease California’s drought. They say there’s nearly as much chance that California will experience average precipitation as there is for another dry winter akin to 2015 [when Brown stood on a patch of bare grass](#) where several feet of Sierra snow should have been and declared a drought emergency.

Marcus, the water board chair, said that in January, once the board has a better sense of the water-supply picture, regulators will revisit the possibility of mandatory rationing.

“We’re prepared to come back if we need to,” she said. “It’s too early to say.”

Ryan Sabalow: [916-321-1264](tel:916-321-1264), [@ryansabalow](https://twitter.com/ryansabalow)

Read more here: <http://www.sacbee.com/news/state/california/water-and-drought/article106155332.html#storylink=cpy>

California Water Board Fears Water-Saving Has Been Abandoned

BY SCOTT SMITH AND ELLEN KNICKMEYER, ASSOCIATED PRESS

FRESNO, Calif. — Oct 5, 2016, 7:36 PM ET



FILE - In this Tuesday, Aug. 2, 2016 file photo, people walk along a path of yellowing grass at West Haven Park in Garden Grove, Calif. Regulators say water conservation continues to slip in drought-stricken California after officials lifted mandatory cutbacks. Max Gomberg, a senior climate scientist for the State Water Resources Control Board, said officials on Wednesday, Oct. 5, 2016, will release the figures for how well Californians cutback their water use in August. (AP Photo/Amy Taxin, File)[more](#) [+](#)

Californians conserved about a third less water in August than a year earlier, state regulators announced Wednesday, evidence that the decision to ease up on conservation mandates caused some to revert to old habits.

"We're at yellow alert," said Felicia Marcus, chairwoman of the state Water Resources Control Board, as the board released August figures showing conservation by cities and towns dropping.

Water regulators would be looking closely at the causes for the increased water use, Marcus said. "I'm not ready to go to red alert until we figure it out."

[California](#) is heading into a possible sixth consecutive year of [drought](#) with uncertainty of what this coming winter — the rainy season in the state — will do to ease the historic dry spell, officials said.

Last winter, a near-average amount of rain and snow fell in Northern California, prompting officials to relax conservation efforts statewide by turning over control to local water districts.

That may have been a mistake, said Tracy Quinn, a Southern-California based water expert with the Natural Resources Defense Council.

Ever since, Quinn said Wednesday, she notices more Californians have gone back to running water sprinklers full tilt, and hears friends and family expressing uncertainty whether the state is even in drought anymore.

"It's very clear that, at least in this drought, voluntary conservation hasn't been successful," Quinn said. "What got us the savings we need is mandatory conservation throughout the state."

Overall, California cities and towns saved less than 18 percent on water in August, compared to the period before Gov. [Jerry Brown](#) declared a drought emergency. The amount saved was down 36 percent from August 2015, when urban Californians were under Brown's order to cut water use by 25 percent.

Water districts on the south coast were among the highest water users, state officials reported Wednesday.

Poor performing districts include La Habra in Orange County, Casitas Municipal Water District in Ventura County, Lake Lee Water District in Riverside County and Norwalk, a city of just over 100,000 residents in Los Angeles County.

In Norwalk, city official Adriana Figueroa cited a record-keeping error by the local water supplier, and said the city still has all its drought-time water use restrictions in force.

Representatives for the other districts did not immediately respond to requests for comment by The Associated Press.

At least seven water districts used more water in August than before the drought, officials reported.

Officials highlighted 114 water districts, however, for saving more than 20 percent in August than before the drought. They include Sacramento, Alameda County Water District and San Gabriel Valley Water Company.

Some communities are doing a good job of conserving, but some aren't, said Max Gomberg, a senior climate scientist for the state water board, adding that in January regulators will consider returning to state-mandated water restrictions.

"We never know what the winter's going to bring," Gomberg said.

——Knickmeyer reported from San Francisco.



NEWS RELEASE

910 K STREET, STE 100 • SACRAMENTO, CA 95814
916.441.4545 • FAX 916.441.7893 • www.acwa.com

Oct. 5, 2016

Contact: Lisa Lien-Mager, Director of Communications, 916/441-4545 or 530/902-3815 (cell)

Californians Show Ongoing Commitment to Water Conservation

SACRAMENTO – Association of California Water Agencies (ACWA) Executive Director Timothy Quinn issued the following statement today on Californians' ongoing water conservation efforts under the state's modified emergency conservation regulation.

"Californians continue to show their commitment to conservation. As the latest data from the State Water Resources Control Board indicates, urban residents are achieving significant levels of water conservation, even in the absence of state mandates. Cumulative statewide water savings since June 2015 are now 23.3% over 2013 levels, an impressive accomplishment by any measure.

"It's important to remember that efficiency and drought preparedness are the objectives of the 'stress test' approach adopted by the state. We should take pride in the fact that many urban water suppliers are drought-prepared and do not need to require their customers to continue extraordinary conservation measures such as putting a bucket in the shower or letting their lawns go completely brown. Even so, the vast majority are maintaining robust conservation programs and putting significant dollars and resources into rebates, water-wise house calls, and public outreach to help Californians continue to make permanent changes in the way they use water both indoors and outdoors.

"A slight dip in monthly conservation numbers was predicted as local agencies adjusted their local conservation requirements to meet local conditions. The uptick in water use seen in August, however, does not reflect an abandonment of conservation. It reflects a change in the overall approach and the fact that local communities are emphasizing water supply reliability and efficiency as a way of life, which is different from emergency conservation.

"ACWA believes the stress test approach is the right policy. The goals of drought preparedness and efficiency are more important – and more meaningful in the long-run – than one-size-fits-all monthly targets set by the state.

###

ACWA is a statewide association of public agencies whose 430+ members are responsible for about 90% of the water delivered in California. For more information, visit www.acwa.com. ACWA also manages Save Our Water—the state's official water conservation outreach program – in partnership with the California Department of Water Resources. More information is at www.saveourwater.com.

August 2016 Supplier Conservation Compliance (by missed standard %)
389 suppliers reporting; non-filers on page 14

Data pulled September 19, 2016

Supplier Name	Hydrologic Region	State-mandated Conservation Standard		Did Supplier Self-certify?	Applicable Cumulative Savings Achieved by Supplier* (as compared to 2013)	Missed Conservation Standard By ** Order Status	Monthly Savings (as compared to 2013)		Estimated Monthly R-GPCD Aug. 2015	Total Population Served
		Previous (3/1/2016)	Current (Effective 6/1/2016)				Aug. 2015	Aug. 2015		
California City City of	South Lahontan	28%	28%	No	13.1%	14.9% C	16.8%	20.5%	148.5	14,120
Yucaipa Valley Water District	South Coast	34%	20%	Yes	7.1%	12.9%	26.4%	11.9%	260.0	45,018
Sanger City of	Tulare Lake	26%	26%	No	17.3%	8.7%	38.0%	17.2%	181.1	25,664
Adelanto City of	South Lahontan	16%	16%	No	9.3%	6.7% C	20.5%	-30.6%	125.5	29,023
Red Bluff City of	Sacramento River	33%	33%	No	27.8%	5.2%	42.4%	30.8%	202.9	14,076
Bellflower-Somerset Mutual Water Company	South Coast	20%	20%	Yes	16.4%	3.6%	19.2%	14.1%	87.7	46,300
Bakman Water Company	Tulare Lake	34%	34%	No	30.7%	3.3%	36.1%	35.9%	192.5	16,756
North Marin Water District	San Francisco Bay	24%	0%	Yes	-2.9%	2.9%	34.7%	12.9%	135.3	61,299
San Lorenzo Valley Water District	Central Coast	12%	18%	Yes	15.1%	2.9%	23.9%	12.9%	109.5	19,000
Fillmore City of	South Coast	26%	26%	No	23.4%	2.6%	22.6%	20.1%	137.7	15,222
Humboldt Bay Municipal Water District	North Coast	4%	0%	Yes	-2.1%	2.1% A	17.3%	0.4%	107.5	602
Arcata City of	North Coast	4%	0%	Yes	-0.8%	0.8%	1.6%	-4.3%	55.3	18,392
Los Banos, City of	San Joaquin River	24%	24%	No	24.4%	-0.4%	24.6%	19.9%	144.5	37,168
Atwater City of	San Joaquin River	33%	33%	No	33.6%	-0.6%	32.9%	11.4%	264.4	29,500
Pico Rivera City of	South Coast	16%	16%	No	17.2%	-1.2%	18.7%	15.9%	91.2	39,002
Tehachapi, City of	Tulare Lake	25%	25%	No	26.4%	-1.4%	19.8%	18.8%	194.8	8,923
Glendora City of	South Coast	34%	20%	Yes	21.6%	-1.6%	33.0%	20.0%	194.5	51,463
Fortuna City of	North Coast	20%	0%	Yes	1.7%	-1.7%	21.5%	9.2%	97.8	12,032
Brea City of	South Coast	24%	15%	Yes	17.2%	-2.2%	13.8%	6.5%	97.2	43,328
Turlock City of	San Joaquin River	29%	16%	Yes	18.2%	-2.2%	26.3%	15.7%	163.5	72,050
El Segundo City of	South Coast	20%	2%	Yes	4.7%	-2.7% A	-6.1%	6.4%	84.5	16,654
City of Newman Water Department	San Joaquin River	21%	21%	No	24.3%	-3.3%	23.6%	13.7%	151.3	10,668
Monterey Park City of	South Coast	20%	14%	Yes	17.3%	-3.3%	17.0%	15.8%	100.8	62,183
Daly City City of	San Francisco Bay	8%	4%	Yes	8.2%	-4.2%	7.8%	3.3%	55.7	109,139
Modesto, City of	San Joaquin River	33%	20%	Yes	24.6%	-4.6%	28.9%	21.2%	202.9	223,432
Exeter City of	Tulare Lake	34%	21%	Yes	25.6%	-4.6%	33.1%	22.8%	200.1	10,572
Covina City of	South Coast	26%	12%	Yes	16.6%	-4.6%	26.2%	16.9%	124.0	33,300
Nipomo Community Services District	Central Coast	28%	23%	Yes	28.1%	-5.1%	34.1%	28.3%	128.6	13,348
Compton City of	South Coast	8%	8%	No	13.7%	-5.7%	12.2%	13.7%	62.1	81,963

* Applicable Cumulative Savings Achieved by Supplier is used to assess compliance with conservation standard; cumulative savings for suppliers that did not self-certify are from June 2015 through August 2016; for suppliers that self-certified, cumulative savings are calculated from June 2016 through August 2016.

** A - Alternative Compliance Order; C - Conservation Order



Agenda

Water Conservation Executive Order B-37-16 (EO)
 Urban Advisory Group (UAG) Meeting
 Monday-Tuesday, September 19-20, 2016 | 10:00 A.M. – 3:00 P.M.
 Metropolitan Water District of Southern California
 Headquarters Building, Second Floor Room 456
 700 N. Alameda Street Los Angeles, CA 90012

Meeting Objectives:

1. Review Draft Framework from Project Teams:
 - a. Strengthen Local Drought Resilience
 - b. Eliminate Water Waste
 - c. Use Water More Wisely
2. Discuss considerations for January 10, 2017 Report

Listen-Only Webinar:

Day 1:

Attendee - muted

United States (Toll-free): 1 877 309 2071

Access Code: 416-692-515

Registration URL: <https://attendee.gotowebinar.com/register/2627231734398184707>

Webinar ID: 281-596-035

Day 2:

Attendee - muted

United States (Toll-free): 1 866 952 8437

Access Code: 688-844-668

Registration URL: <https://attendee.gotowebinar.com/register/8184609902898989571>

Meeting Materials: (Will be posted at: <http://www.water.ca.gov/calendar/index.cfm?meeting=26321>)

DAY One, September 19, 2016

Time	Item	Presenter
9:30a	Sign-in and Refreshments	All
10:00a	Welcome, Introductions, and Agenda Review	Stephanie Lucero, Center for Collaborative Policy (CCP) - facilitator
10:15a	Project Update <ul style="list-style-type: none"> • Overview of January 10, 2017 Report • Review project timeline 	EO State Agencies

Time	Item	Presenter
10:45a	EO-Directive, Strengthen Local Drought Resilience - Water Shortage Contingency Plans <ul style="list-style-type: none"> Review Workshop Feedback Review current framework and recommendations Reporting, Compliance and Monitoring Framework 	Kent Frame, Department of Water Resources (DWR)
	<ul style="list-style-type: none"> Discussion and Questions 	UAG Public
12:15p	Lunch	
1:15p	EO-Directive, Strengthen Local Drought Resilience – County Drought Planning <ul style="list-style-type: none"> Review Annual Assessment Process Review current framework and timeline Reporting, Compliance and Monitoring Framework 	Kent Frame, DWR
	<ul style="list-style-type: none"> Discussion and Questions 	UAG Public
2:15p	EO Directive, Eliminate Water Waste <ul style="list-style-type: none"> Review Current Framework Reporting, Compliance and Monitoring Framework 	Vicki Lake, DWR Max Gomberg, SWRCB
	<ul style="list-style-type: none"> Discussion and Questions 	UAG Public
2:45p	Summary and Review Day 2 Agenda	
3:00pm	Adjourn for the Day 1	

DAY Two, September 20, 2016

Time	Item	Presenter
9:30a	Sign-in and Refreshments	All
10:00a	Welcome and Agenda Review	Stephanie Lucero, CCP - facilitator
10:15a	EO Directive – Use Water More Wisely <ul style="list-style-type: none"> Review Targets Workshop Feedback Review Current Framework 	Erik Ekdahl, State Water Resources Control Board (SWRCB) Peter Brostrom, DWR
	<ul style="list-style-type: none"> Discussion and Questions 	UAG Public
12:15p	Lunch	
1:15p	EO Directive – Use Water More Wisely <ul style="list-style-type: none"> Review Implementation and Timeline. Reporting, Compliance, and Monitoring Framework 	Erik Ekdahl, SWRCB Peter Brostrom, DWR
	<ul style="list-style-type: none"> Discussion and Questions 	UAG Public
2:15p	January 10, 2017 Report Components <ul style="list-style-type: none"> Discussion and Questions 	EO State Agencies UAG Public
2:45p	Summary and Next Steps	
3:00p	Adjourn for the day	

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

To: Board of Directors

From: Paul Helliker

Date: October 13, 2016

Subject: Water Resource Planning (WRP) – Status Report

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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**

GHD has revised the grant proposal to focus only on going north. The Trinidad town council will be discussing soon whether or not they would be interested in serving as the grant recipient. The Trinidad Rancheria is not an organization that is eligible to receive grant funding (as they are not a water supply provider).

b) **Transport**

We have requested any update that Santa Clara Valley Water District may have on their discussions with Terry Spragg.

c) **Instream Flow Dedication**

The Advisory Committee requested a graphic which would display the water flowrates that would be available for dedication at Essex to various uses. It is attached.

2) **Advisory Committee**

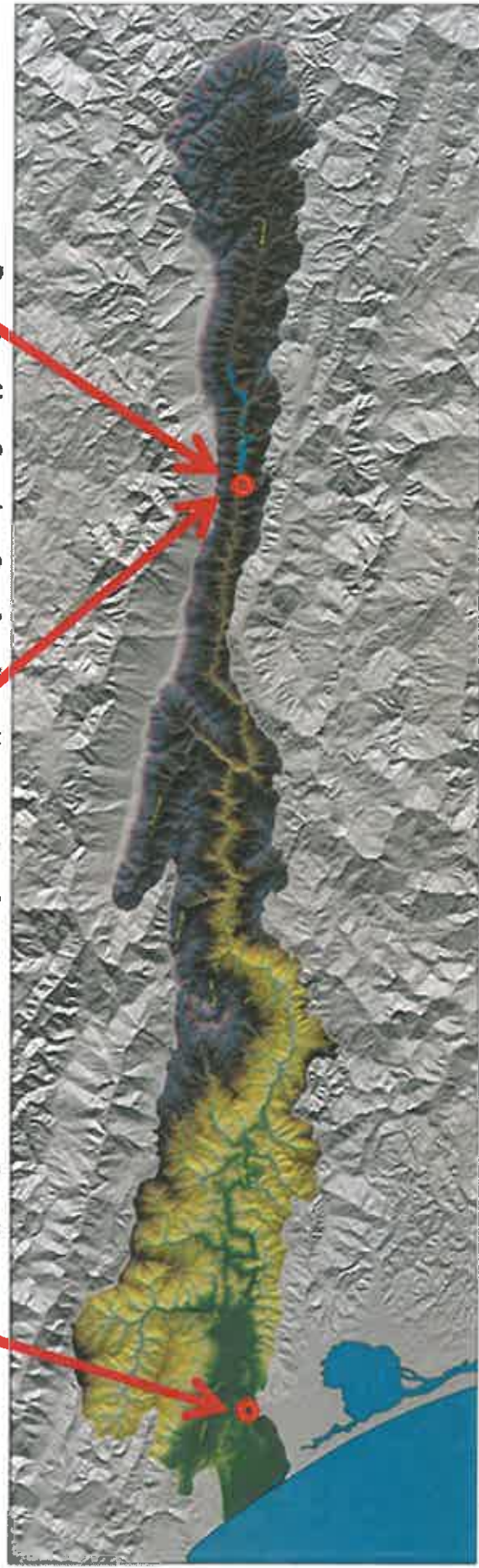
The Advisory Committee met on September 20. Board representatives Rupp and Woo will provide a synopsis of the discussion.

HBMWD hydro water right:
 Amount that can be beneficially used, not to exceed 1,000 cfs (646 MGD) diversion and 120,000 AFA (107 MGD) by storage from 10/1 to 4/30

HBMWD storage water right:
 48,030 AFA (43 MGD) to storage, to be collected between 10/1 and 4/30

HBMWD diversion water right:
 116 cfs (75 MGD) direct diversion, and not to exceed 84,000 AFA

M a d R i v e r W a t e r s h e d



Mad River fully appropriated from mouth upstream (including tributaries) from 06/01-10/31 (per SWRCB Water Rights Order 98-08)

Potential Allocation of HBMWD Water Rights: Diversions at Essex



Total Available Diversion Rights at Essex: 75 MGD

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

To: Board of Directors
From: Paul Helliker
Date: October 13, 2016
Subject: Cannabis Update

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Regulatory Agencies

The Regional Water Quality Control Board staff have developed a scope for an aerial survey of the Mad River watershed which would provide them with the current and specific parcels on which cannabis production (and other agricultural activity) is happening. They will use the new aerial photography as evidence for any enforcement actions they will take after they send out orders to property owners who have not enrolled in their permitting program and taken actions necessary to prevent runoff or water diversions during the summer. As soon as the Board staff determine when they plan to do their survey, and what financial assistance they need, we will contribute to the project. The total cost is expected to be approximately \$15,000.

HBMWD Actions

The growers on the Brett Iles property (uphill from HBMWD property on the west side of Ruth Lake) appear to have harvested their crop. They removed the water line, but left the pump in the lake, which we are retrieving. They also left a wide range of other detritus on the property, which we have reported to Supervisor John Fenley and the Trinity County Environmental Health Department. The photos below are from Brendan Lynch, a CDFW officer who responded to a complaint about the site. The Health Department will issue a cleanup order to the property owner. We had also reported the situation to the Sheriff's Department, at the time when we were planning to remove the water line and pump, but the perpetrators disappeared before Deputies could act.



HUMBOLDT BAY MUNICIPAL WATER DISTRICT

To: Board of Directors

From: Paul Helliker

Date: October 13, 2016

Subject: Update on potential modifications to Ordinance 16 and Contract for Supply of Water with Municipal Customers

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We have prepared draft language for the following four items, and discussed the first three with our municipal customers at our monthly meeting on September 14. The fourth is an addition we are proposing, to address an item on which we have achieved conceptual agreement with our municipal customers.:

- Renewal/revision of the contract term, to establish a new 20-year term
- An updated calculation of the peak rate allocation (to address Manila's situation)
- Revision of the limitation on capital expenditures – to reference a five year cycle for update and discussion of the District's Capital Improvement Plan
- Direction of the incremental revenue from the ReMAT contract into a fund to pay for capital expenses

I will be attending the following meetings of the Boards/Councils of our municipal customers, to brief them directly on the proposal:

HCSD – October 11

Filedbrook – October 25

McKCSD – November 2

The other organizations are scheduling this item on an upcoming agenda. The goal is to allow the HBMWD Board to adopt revisions to Ordinance 16 and Municipal Water Customer contracts at the December or January meeting.

Resolution No. 2016-12**Resolution of the Humboldt Bay Municipal Water District Board of Directors Authorizing the General Manager to Issue a Certificate of Acceptance for Easement Deed-Notice of Location to be Recorded by Axel Properties LLC in Humboldt County**

WHEREAS, Axel Properties LLC is proposing a new development along West End Road in Arcata at the former Wayne Bare Trucking site and;

WHEREAS, the District has a pipeline running through the property and has a floating easement over the property and;

WHEREAS, the owner would like to record a "Notice of Location" for the existing right-of-way versus having a floating easement and;

WHEREAS, on August 11, 2016, the Board of Directors authorized the Notice of Survey and if approved, the Notice of Location at the property owner's expense;

WHEREAS, this Easement Deed-Notice of Location does not supercede or extinguish the other rights of the Humboldt Bay Municipal Water District created in the original Grant of Right of Way, but only designates the location of the 30-foot right of way.

NOW, THEREFORE, BE IT RESOLVED; that the Board of Directors of Humboldt Bay Municipal Water District hereby finds, determines and declares as follows:

1. The above recitals are true and correct.
2. The General Manager is authorized to issue a Certificate of Acceptance for Easement Deed-Notice of Location to be recorded by Axel Properties LLC in Humboldt County.

Adopted and approved this 13th day of October 2016 by the following roll call vote:

AYES:

NOES:

ABSENT:

Attest:

Barbara Hecathorn, President

J. Bruce Rupp, Secretary/Treasurer

New Business



Humboldt Bay Municipal Water District Hexavalent Chromium Information

October 5, 2016

Monitoring Data

Pursuant to the Unregulated Contaminant Monitoring Rule, the Humboldt Bay Municipal Water District (HBMWD) has monitored the presence of Hexavalent Chromium (Chromium 6+) in its water supplies. The results ranged from 0.18-0.23 micrograms per liter (ug/l) or parts per billion. These results are significantly lower than the regulatory requirement of 10 ug/l, as defined by the maximum contaminant level, described below. Chromium is a naturally-occurring element in soil in California's Coastal Range, and is generally present in low concentrations in rivers, lakes and groundwater.

See the attached Consumer Confidence Report for 2015 from HBMWD, which provides water quality monitoring data and regulatory requirements for a variety of compounds, including hexavalent chromium. This report is also available on HBMWD's website at:

<http://www.hbmwd.com/consumer-confidence-report-2e99780>

Maximum Contaminant Level

California has established a maximum contaminant level (MCL) for hexavalent chromium of 10 ug/l. Public water systems (including HBMWD) are required to provide water supplies to their customers which do not exceed this regulatory level.

See the attached fact sheet from the State Water Resources Control Board (the agency charged with developing and enforcing MCLs) about hexavalent chromium. This fact sheet is also available at the following link:

http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/chromium6/chromium_fact_sheet_2015_final.pdf

Public Health Goal

As part of the process of developing MCLs, the California Office of Environmental Health Hazard Assessment develops public health goals (PHGs), which are non-mandatory advisory levels of de minimus risk that are usually based on animal toxicology studies. The State Water Resources Control Board uses PHGs, in conjunction with human exposure data, information about the presence of the compound in water, the treatability of the compound and other factors, to establish MCLs. The PHG for hexavalent chromium is 0.02 ug/l.

10/6/16 letter sent to Times Standard, NC Journal & Mad River Union

Dear Editor,

Chromium (VI), also known as "hexavalent chromium", was recently reported in routine drinking water monitoring in samples from the Humboldt Bay Municipal Water District. People are understandably concerned, and we hope to provide some background and context that might allay some of their fears. We take water quality and the public's trust very, very seriously, and we wish to continue earning the public's high regard.

The State of California has set a regulatory limit—also called the Maximum Contaminant Level, MCL—of 10 parts per billion for drinking water. All water providers must hold to this limit. HBMWD's recent samples ranged from 0.18 to 0.23 ppb.

However, the Public Health Goal for chromium VI (0.02 ppb) is much lower than both the California regulatory limit and HBMWD's recent samples. The goal is exactly that: a goal, which at this time cannot be feasibly attained. The PHG is based on the science of health risk assessment, which relies on all relevant scientific data, including animal exposure data and simulation (computer) models. Based on nine studies and the health risk assessment, scientists and the State of California set the PHG.

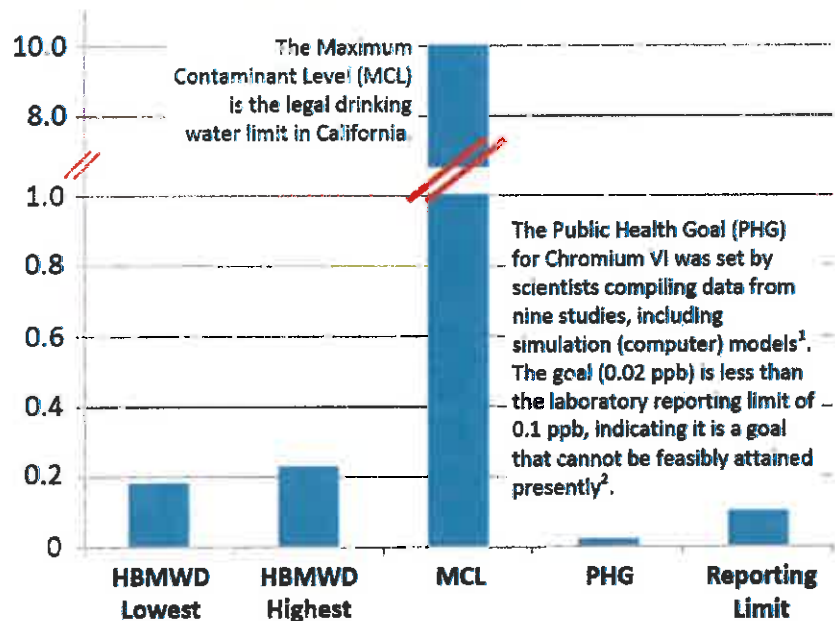
We note that the laboratory reporting limit in a study specifically investigating chromium VI water contamination was 0.1 ppb, which is also higher than the PHG. This is one clue to the feasibility difference between the MCL and the PHG. In a world with unlimited funds, even if we built a treatment plant that could filter chromium IV, we could not reliably measure if we are meeting the PHG.

Although we regret that some of our customers may have been alarmed by recent online blogging, we welcome public interest in water and water quality. The HBMWD meets on the second Thursday of every month, and the public is always encouraged to attend. Our website is another source of water information (www.hbmwd.com).

Sheri Woo, PE

Director, HBMWD

Chromium VI concentration in parts per billion (ppb)



1. Paustenbach et al. 2003. Human health risk and exposure assessment of chromium (VI) in tap water. J. Toxicol Environ Health 2003 Jul 25;66(14): 1295-339 <https://www.ncbi.nlm.nih.gov/pubmed/12851114>
2. Izbicki and Groover, 2016. A plan for study of natural and man-made hexavalent chromium, Cr(VI) in groundwater near a mapped plume, Hinkley, California January 2016. U.S. Geological Survey. <https://pubs.er.usgs.gov/publication/ofr20161004>

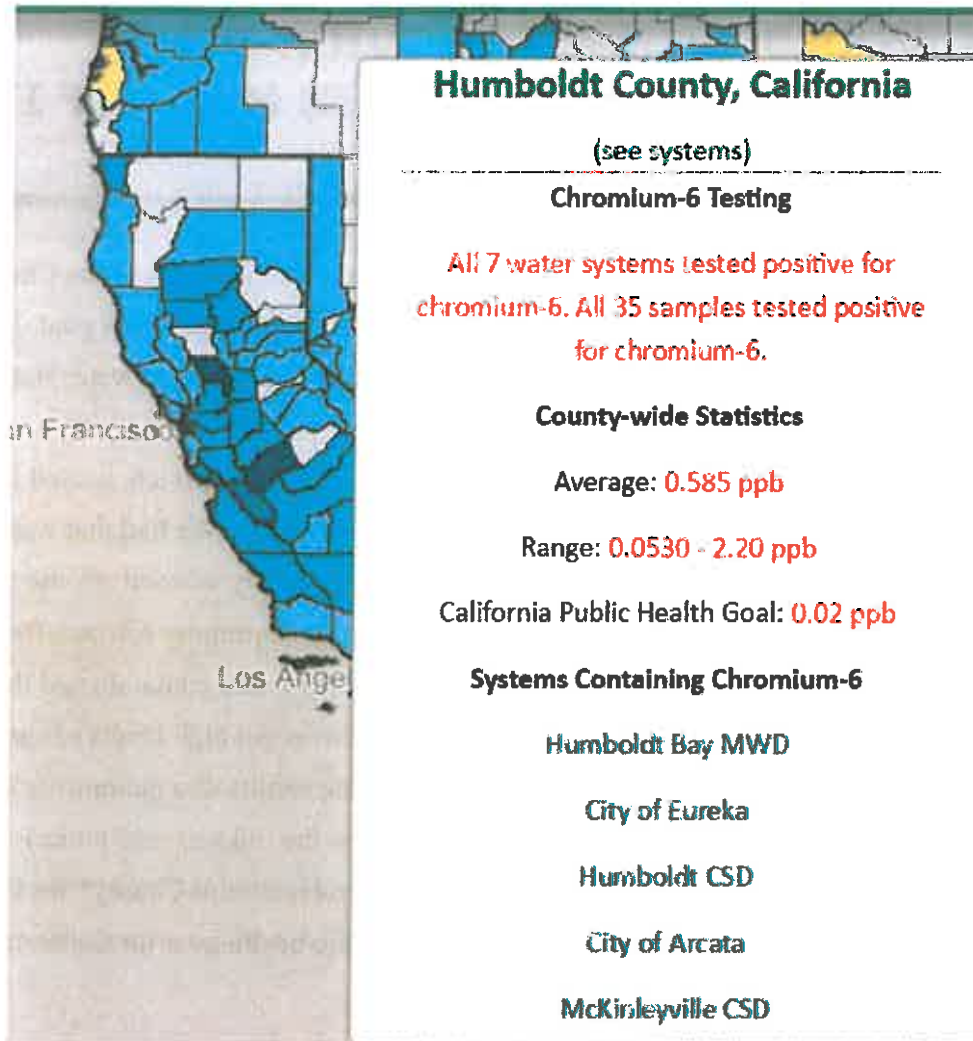
WHAT WOULD ERIN BROCKOVICH SAY? HUMBOLDT HAS CHROMIUM 6 IN MUCH OF ITS MAJOR WATER SOURCES

October 3, 2016 [Kym Kemp](#) 37 comments

According to a [new and well regarded study](#), water in Humboldt County contains Chromium 6, [a known cancer causing chemical](#), in levels exceeding California's public health goal. Local water managers, however, point out that all the water tested exceeds current legal water standards for that chemical.

In the video clip above from a movie based on a true story, Erin Brockovich, played by Julia Roberts, tells an attorney for PG&E about to drink a glass of water, "We had that water brought in special for you folks. It came from a well in [Hinkley](#)." The visibly worried attorney slowly sets down the glass. The water in Hinkley contained high levels of Chromium 6 which Brockovich and her group contended had leaked from a plant near their town and contaminated their drinking water. As a result, Brockovich argued that residents of the town got high levels of cancer.

Last month, The Environmental Working Group released the results of a nationwide study of water systems. ([PBS](#) and [CNN](#) reported on the study. Follow the links to read more.) According to an interactive map produced by the group, water tested in Humboldt County* for Chromium 6 are far over the .02 parts per billion recommended in a public health goal for California. (See screenshot below.)



The seven tested water systems in Humboldt County exceed California's recommended levels according to this [screenshot from a study by the Environmental Working Group](#).

~~The highest Chromium 6 results are from the Humboldt CSD. Chromium 6 appears at over 2 parts per billion (ppb) in several water sources there. The water from the wells in Hinkley, the town that Erin Brockovich fought to help, were 1.19 ppb with spikes occasionally far over 3 ppb. [Note: According to an article in the Scientific American and to another article in Wikipedia, there was 580 ppb Chromium 6 in the Hinkley water. We've been unable to reconcile the two vastly differing numbers.]~~

Some of our local wells tests show high Chromium 6 levels. For instance, the chemical occurs in the Humboldt CSD's South Bay Well at 110 times the recommended maximum recommended limits. The lowest level in any of the water sources tested is one for the City of Arcata which is "only" .05 ppb (parts per billion) or 2.5 times the maximum level.

Nationally, there is no limit on the amount of the chemical that can occur in drinking water. California, however, in 2014, set a standard of 10 parts per billion which all local water falls safely under. But many scientists and health researchers want the standard amount allowed lowered to .02 parts per billion. That's one five hundredth of the current standard and much of Humboldt's water tested in the study does not meet that goal.

According to Paul Hilliker, General Manager of Humboldt Bay Municipal Water District, the public health goal is really "not relevant to whether the water is safe." He explained, "[The State Water Resources Control Board, that sets the \[current legal\] standard](#), they factor in many things. It is a full scale analysis."

Hilliker points out that current Chromium 6 standard for testing is what local water districts are required to meet. The public health goal is "merely a number that is put together that looks at potential health effects mostly from animal studies." This study, according to Hilliker, doesn't adequately look at "the risk for human beings."

He points out that [Chromium 6 occurs naturally](#). Hilliker said that the Humboldt County wells producing most of water in the tests come from so deep that they could not be affected by industrial waste.

According to the manager of the Humboldt CSD, David Hull, the water which tested the highest came from wells that were not currently being used to provide drinking water to local residents.

In addition, Hilliker said that drinking bottled water would not be a good way to avoid Chromium 6. "Bottled water does not have to go through the rigorous testing we do," he said. "If you buy water in plastic water bottles, you get all those plastic components leaching into the water."

There are, however, filters that can be purchased that do remove Chromium 6. In fact, PG&E is using ion exchange water treatment filters to address the drinking water in Hinkley. These, however, are difficult for private consumers to get and use. But reverse osmosis filters which have been certified to remove Chromium 6 can be found in local stores.

The Environmental Working Group has [information on which filters might work best](#) for your situation.

Click on the links below to see what test results in different local districts were.

[Humboldt Bay MWD](#)

[City of Eureka](#)

[Humboldt CSD](#)

[City of Arcata](#)

[McKinleyville CSD](#)

[City of Fortuna](#)

[Manila Community Services District](#)

***NOTE:** Remember the wells tested did not include private wells which are the water sources for most people in our area.



Fact Sheet

Frequently Asked Questions about Hexavalent Chromium in Drinking Water

On July 1, 2014 the State Water Resources Control Board's (State Water Board) maximum contaminant level (MCL) for Hexavalent Chromium, or Chromium-6, in drinking water took effect -- making California the first state in the nation to have an MCL for [Hexavalent Chromium](#). The MCL for Hexavalent Chromium in drinking water is 10 parts per billion (ppb).

By law, California is required to adopt drinking water standards that are no less stringent than the United States Environmental Protection Agency's federal standards. In addition, in the absence of a federal standard, California may establish its own drinking water standards. A drinking water standard, called a maximum contaminant level (MCL), establishes a limit on the concentration of a contaminant in drinking water. MCLs are typically set at concentrations of 'parts per million' (ppm) or 'parts per billion' (ppb).

Currently, there is no federal or state MCL specific to the hexavalent form of chromium. Hexavalent Chromium is regulated in drinking water through the establishment of a Total Chromium MCL (Hexavalent Chromium is one of the forms of chromium making up Total Chromium). In California, the Total Chromium MCL is 50 ppb, while the federal MCL is 100 ppb. At the time Total Chromium MCLs were established, ingested Hexavalent Chromium associated with consumption of drinking water was not considered to pose a cancer risk, as is now the case.

The State Water Board is required by California law to set an MCL for Hexavalent Chromium and to set the MCL as close to the public health goal (PHG) as possible, taking into account technical feasibility (e.g., detectability and treatment) and costs. So, although the State Water Board has been gathering data associated with Hexavalent Chromium occurrence, treatment, and costs, adoption of an MCL requires the state Office of Environmental Health Hazard Assessment (OEHHA) to establish a PHG. The Office of Environmental Health Hazard Assessment's 0.02 ppb PHG was finalized on July 27, 2011.

What is Hexavalent Chromium and why is there a public health concern?

Chromium is a heavy metal that occurs throughout the environment. The Trivalent form is a required nutrient and has very low toxicity. The hexavalent form, also commonly known as Chromium-6, is more toxic and has been known to cause cancer when inhaled. In recent scientific studies in laboratory animals, Hexavalent Chromium has also been linked to cancer when ingested.



**Where does Hexavalent Chromium come from?**

Much of the low level Hexavalent Chromium found in drinking water is naturally occurring, reflecting its presence in geological formations throughout the state. However, there are areas of contamination in California from historic industrial use, such as the manufacturing of textile dyes, wood preservation, leather tanning, and anti-corrosion coatings, where Hexavalent Chromium contaminated waste has migrated into the underlying groundwater.

How was Hexavalent Chromium regulated in drinking water before the MCL?

Hexavalent Chromium in drinking water is regulated under the Total Chromium state MCL of 50 ppb. The Total Chromium MCL was established in 1977, but includes the less-toxic Trivalent form. The other states used the total chromium federal MCL of 100 ppb to regulate Hexavalent Chromium.

What is a public health goal (PHG)?

A PHG is a level of a contaminant in drinking that does not pose a significant health risk. A PHG reflects the risk from long-term exposure to a contaminant and should not be used to estimate risks from short-term or acute exposure. PHGs are not regulatory requirements, but instead represent non-mandatory goals. Public health goals are developed by OEHHA for use by the State Water Board in establishing MCLs.

What is a State maximum contaminant level (MCL)?

State MCLs are health protective drinking water standards to be met by public water systems. MCLs take into account not only health risks from exposure to a chemical, but also factors such as detectability and treatability, as well as costs of treatment to reduce a chemical's presence in drinking water. [Health & Safety Code §116365\(a\)](#) requires the State Water Board to establish a contaminant's MCL at a level as close to its PHG as is technically and economically feasible, placing primary emphasis on the protection of public health.

How do we establish the MCL levels?

The first goal of the State Water Board is to try to establish an MCL as close as possible to the PHG. This is a complex task as there are many factors to consider. Therefore, the State Water Board must create several possible MCLs to help estimate cost-benefit increases for levels of treatment. These proposed MCLs can be created by knowing:

- What different contaminant levels are found throughout water systems in California?
- What are the population sizes that are being affected/ exposed?
- What science is available to us to treat our water?
- What is the cost of the treatment to treat and monitor our water?
- What amount of health benefit is achieved at each increment?

From the list of possible MCLs, the final MCL is chosen.

**How is Hexavalent Chromium currently regulated in drinking water?**

On July 1, 2014, California adopted the first drinking water standard for chromium 6 in the nation. The MCL for Hexavalent Chromium in drinking water is 10 ppb. At this time, the rest of the United States continues to use the Total Chromium federal MCL of 100 ppb to regulate Hexavalent Chromium.

Why is the MCL for Hexavalent Chromium more health protective than the current Total Chromium MCL?

Before July 1, 2014, Hexavalent Chromium in drinking water was regulated under the State's Total Chromium MCL of 50 ppb, which includes both Trivalent and Hexavalent Chromium. The less soluble Trivalent form is a required nutrient with very low toxicity, while the more soluble Hexavalent form may pose a risk of cancer when ingested. The new MCL provides public health protection specific to the more toxic Hexavalent form of Chromium.

If my drinking water has Hexavalent Chromium above the PHG, is there a risk to my health?

A drinking water sample with a detection of Hexavalent Chromium above the PHG of 0.02 ppb does not necessarily represent a public health concern. The PHG is based on a cancer risk of no more than one case of cancer per one million people. The PHG tries to account for persons at three different stages in their lives by including protection factors to account for age and by applying higher rates of water consumption in their calculation.

The PHG represents the level of Hexavalent Chromium at which no adverse health effects would be anticipated over an entire lifetime of exposure to the most sensitive population. So, a PHG is not a boundary line between a "safe" and "dangerous" level of a chemical, and drinking water is frequently demonstrated as safe to drink even if it contains chemicals at levels exceeding their PHGs. OEHHA provides additional information on potential health risks and its PHG on its [website](#).

Now that California has the only MCL in the nation for Hexavalent Chromium, is the State Water Board done?

Some water systems are still being challenged by the Chromium-6 drinking water standard. Senate Bill [SB 385](#) was signed into law to authorize the State Water Board to grant a limited period of time for affected water systems to work toward achieving compliance without being deemed in violation as long as strict safeguards are met. In addition, the State Water Board reviews every MCL at least once every five years to take into consideration new available technologies and potential health/cost benefits.

(This FAQ sheet was last updated on Sept. 25, 2015)

Gov. Jerry Brown recently signed several news bills into law that impact California water. We take a look at six of these, which include measures aimed at providing help for failing water agencies, cutting down on excessive water use and making the most of stormwater.

WRITTEN BY Tara Lohan

PUBLISHED ON Oct. 4, 2016

READ TIME Approx. 4 minutes



San Joaquin river water flows through the Friant-Kern canal as it winds through orange orchards near Orange Cove, California. A new law signed by Gov. Jerry Brown could bring more irrigation water to users of the canal. Marcio Jose Sanchez, AP

THE END OF September meant both the end of the 2016 water year and a deadline for signing new legislation. In the past few weeks California Gov. Jerry Brown has signed a bevy of new bills into law, many of them addressing drought or water issues in the state.

Some affect water indirectly. Senate Bill (SB) 859, which establishes a Healthy Soils Program, is written to help build quality agricultural soil to increase carbon sequestration, but healthy soils also help retain more water. SB 1414 aims to help increase energy efficiency, which can also help save water.

Below are six other bills that address drought and water issues head on:

Senate Bill 552: Help for Failing Water Agencies

The vast majority of California's water agencies deliver a safe and reliable supply of water, but some are failing to make the grade. SB552, written by Sen. Lois Wolk, allows the State Water Resources Control Board to bring in an outside contractor to help struggling water agencies meet water standards.

“This bill will allow the Board to order a water system which is consistently failing to provide safe, clean and affordable drinking water to accept a contract administrator who will be able to immediately implement a number of measures to help ratepayers, and also to create a long-term sustainability plan for the system,” said attorney Deborah Ores of the Community Water Center.

Senate Bill 1263: Banning Small Water Agencies

This bill by Sen. Bob Wieckowski is another intended to protect drinking water. But it takes a different approach. Smaller water agencies tend to be more likely, because of limited resources, not to meet reliability or quality regulations, so to protect public health SB1263 would ban the creation of new, small water districts.

“It aims to guarantee the safety and reliability of drinking water statewide by encouraging new developments to tie into existing water districts rather than create their own,” Michael Levitin wrote for Water Deeply. “The measure would especially help low-income communities that cannot afford to pay for improved water quality, and could specifically impact Central Valley cities such as Merced, Bakersfield, Fresno and the rural regions around them that have seen innumerable small water agencies sprout up in recent decades to keep pace with population growth.”

Senate Bill 814: Curbing Excessive Water Use

Water guzzlers beware. SB 814, written by Sen. Jerry Hill, would require urban water agencies to define and discourage excessive water use during state-designated drought emergencies that require water restrictions. Agencies could use a rate structure or an excessive-use ordinance that would come with fines and possible drought-shaming.

“This legislation ensures that every urban retail water supplier has a tool to curb excessive water use by customers,” said Hill. “Households that guzzle water – while their neighbors and most other Californians abide by mandatory reductions – will no longer be able to hide and persist in their excess.”

Assembly Bill 1755: Water Data

One of the biggest things to come out of California’s ongoing drought is a focus on better collection and sharing of water data. Assembly member Bill Dodd’s Assembly Bill 1755 takes a step in that direction with the creation of a platform to share water data.

According to the bill's text, it would “create, operate and maintain a statewide integrated water data platform that, among other things, would integrate existing water and ecological data information from multiple databases and provide data on completed water transfers and exchanges.”

The integration of data would include information from the State Water Project and federal Central Valley project; streamflow conditions from the United States Geological Survey; fish abundance from California's Department of Fish and Wildlife, as well as the U.S. Fish and Wildlife Service, the Forest Service and the National Oceanic and Atmospheric Administration; and information on water transfers and exchanges.

Assembly Bill 935: Irrigation Water for Users Friant-Kern Canal

Assembly member Rudy Salas' bill, AB 935, may help move 15,000–30,000 acre-feet (18.5–37 million cubic meters) of water a year to nine irrigation districts that compose the South Valley Water Association in the San Joaquin Valley.

The bill “authorizes \$7 million in state money to build pumps to move water north to about Terra Bella via reverse flow pump-back facilities still to be built,” the Fresno Bee reported. “Water would be pumped out of the lower San Joaquin River and into the California Aqueduct on the west side of the San Joaquin Valley, transported south to the Cross Valley Canal, then east to the Friant-Kern Canal.”

It's not a done deal yet as money would need to be appropriated in next year's budget.

Assembly B 2594: Capturing Stormwater

Assembly member Rich Gordon's AB 2594 helps move stormwater from nuisance to resource. The new law lets water agencies collect stormwater and then make the most of it – including reusing it, recharging groundwater with it, selling it or using it to boost water quality.

“For too long, clean, crisp storm water has been viewed as a problem. In reality, stormwater is a gift – a solution to drought,” said Gordon in a statement about his bill. “AB 2594 allows those that capture stormwater to use it.”

Engineering

Humboldt Bay Municipal Water District
 Collector 1 & 1A Rehabilitation Project
 September 28, 2016
 Layne Invoice #38759-43
 PAYMENT REQUEST #3

INVOICE TO:
 Humboldt Bay Municipal Water District
 828 Seventh Street; PO Box 95
 Eureka, California 95502-0095

Mailing Address:
 Layne Christensen Company
 P.O. Box 877801
 Dallas, Texas 75287-7801

**Wire Transfer/
 ACH INFO:**
 Bank PNC Bank, N.A.
 ABA 031 207 607
 Swift PNCCUS33
 Account Name Layne Christensen
 Account Number 8026317547

From:
 Layne Christensen Company, Inc.
 6360 Huntley Rd.
 Columbus, Ohio 43229
 Phone: (614) 888-6263
 E-mail: Mike.Hartman@layne.com

Shipping Address:
 (Courier, UPS, FedEx)
 PNC Bank, N.A.
 C/O Layne Christensen Company
 Lockbox #677801
 1200 East Campbell, Suite 108
 Richardson, Texas 75081

Item	ORIGINAL CONTRACT		THIS PERIOD		PREVIOUS PERIODS		TOTAL	
	Quantity	Unit Cost	Total Cost	%	AMOUNT	%	AMOUNT	COMPLETED
Mobilization & Demobilization	1 LS	160,000.00	160,000.00	0%	\$ -	65%	\$ 104,000.00	\$ 104,000.00
Caisson Dewatering	1 LS	131,000.00	131,000.00	0%	\$ -	70%	\$ 91,700.00	\$ 91,700.00
Site set up, Well 1A	1 LS	142,000.00	142,000.00	0%	\$ -	0%	\$ -	\$ -
Site set up, Well 1	1 LS	172,500.00	172,500.00	0%	\$ -	100%	\$ 172,500.00	\$ 172,500.00
Installation of ports	5 LS	22,000.00	110,000.00	0	\$ -	2	\$ 44,000.00	\$ 44,000.00
F&I, Develop laterals	750 FT	1,350.00	1,012,500.00	190	\$ 256,500.00	190	\$ 256,500.00	\$ 256,500.00
Install SS Gate Valves	5 Ea	9,600.00	48,000.00		\$ -	0%	\$ -	\$ -
Final performance test, Well 1	1 EA	49,000.00	49,000.00		\$ -	0%	\$ -	\$ -
Initial & Final perf tests, well 1A	1 LS	75,000.00	75,000.00		\$ -	30%	\$ 22,500.00	\$ 22,500.00
Change Order #1 is reflected in the items shown above								
CO #2 added 85 days to schedule								
CO #3, chain link fence install, rent and remove	1 LS	4,809.00	4,809.00	0%	\$ -	90%	\$ 4,328.10	\$ 4,328.10
Change Order #4, install additional port in Well 1	1 LS	8,000.00	8,000.00	0	\$ -	1	\$ 8,000.00	\$ 8,000.00
Additive Bid Items								
Installation of port and 10' blank	EA	40,000.00			\$ -			
F&I, Develop laterals	LF	1,300.00			\$ -			
F&I, 12" SS gate valves, with tags	EA	17,500.00			\$ -			
Remove and Reinstall support flooring at	EA	74,000.00			\$ -			
Remove old valve stems, actuator lines, etc	Hr	650.00			\$ -			
TOTAL PROJECT COST			\$ 1,912,809.00		\$ 256,500.00		\$ 447,028.10	\$ 703,528.10
				Retainage (5%)	\$ (12,825.00)		\$ (92,351.41)	\$ (85,176.41)
					\$ 243,675.00		\$ 424,676.70	\$ 668,351.70
								\$ 424,676.70
								\$ 243,675.00

Respectfully Submitted:
 Layne Christensen, Ramsey Collector Wells

Reviewed by: Patrick Kasparig PE
 GHD Engineering

Approved: _____
 Humboldt Bay Municipal Water District



Memorandum

26 September 2016

To	Paul Helliker, Humboldt Bay Municipal Water District		
Copy to	Joe Petersen, CalOES; Marjorie Nowick, FEMA; Joan Flack, FEMA; Clayton Pang, FEMA; Pat Kaspari, GHD		
From	Amy Livingston	Tel	(707)-443-8326
Subject	Amendment to Biological Evaluation, Blue Lake Fieldbrook Glendale CSD Pipeline, Mad River Crossing, HMGP #1911-09-09	Job no.	8411162

Introduction

This report serves as an amendment to the Biological Evaluation and Wetland Study prepared by GHD in 2014 for the Humboldt Bay Municipal Water District (HBMWD) City of Blue Lake/Fieldbrook Glendale CSD Pipeline, Mad River Crossing. The Biological Evaluation (BE) and Wetland Study were previously submitted to FEMA for NEPA analysis. After the reports were submitted, GHD conducted a Feasibility Study to finalize project design. The new design involves directional drilling under the Mad River. The project details are found in the Humboldt Bay Municipal Water District, Feasibility Study, Construction of a Secondary Pipeline Across the Mad River to Supply Water to Fieldbrook and Blue Lake (GHD 2016). The new project design caused a change in the Project Study Boundary (PSB), but not a change in the project site (the general vicinity of the project). Areas of the new PSB outside of the original PSB were surveyed to identify and map any wetlands or rare plant species observed. Habitat mapping and reconnaissance level biological evaluation was performed to ascertain the presence of suitable habitat for potentially occurring special status animal species. No wetlands or special status plants were found during the survey. Two plant communities ranked as sensitive by the California Department of Fish and Wildlife (CDFW) were mapped within the new PSB.

Methods

The survey was conducted near the Blue Lake/Fieldbrook Glendale CSD Pipeline crossing located near the communities of Blue Lake and Glendale in Humboldt County, California (Figure 1). The size of the new PSB is reduced from the 2014 design. The PSB on the left bank (west side) of the river includes property owned by the Humboldt Bay Municipal Water District and the North Coast Railroad Authority. An entrance pit for the directional drilling of the new pipeline is planned just east of Warren Creek Road. The new pipeline would be placed under the Mad River and would terminate on the east side, just southwest of Glendale Drive on the property of GR Sundberg. A new section of the Sundberg property is included in the PSB parallel to Glendale Drive. The new High Density Polyethylene (HDPE) pipe would be laid out on the surface in this area and welded together. The HDPE pipe would then be pulled back through a pilot hole that was drilled from the left bank and ends at a bore pit on Sudberg property. This bore pit would be located on the western

most side of the Sundberg property, in what was formerly the staging area analyzed in the original BE.

The general environmental setting was described in the BE, therefore only a brief discussion of the onsite conditions is provided below to supplement the more detailed information. The PSB on the left bank (west side) of the river is composed of upland habitat consisting of *Acer macrophyllum* (big leaf maple) Forest Alliance and *Picea sitchensis* (Sitka spruce) Forest Alliance. Disturbed areas (dirt trails to the river) also occur within the PSB. The PSB contains an area near Warren Creek Road that will be completely cleared of vegetation (Figure 1) and a larger area farther from the road where the undergrowth will be cleared. The PSB on the east side of the river contains areas comprised of dirt and gravel that have been graded. The area is used for storage of construction equipment and materials.

Scoping for special status animals in the BE (GHD 2014), included a review of the U.S. Fish and Wildlife Service lists of endangered (E), threatened (T), proposed (P), and candidate (C) species for the project vicinity (Arcata north, Blue Lake and Korbel quads). The California Natural Diversity Database (CNDDDB) was also reviewed for records of special status animals for the project vicinity. A scoping list was compiled prior to survey efforts in 2014 and is presented in the BE. In 2016 the USFWS list of endangered, threatened, proposed, and candidate species for the USGS 7.5' minute Arcata North quadrangle where the project is located and the eight adjacent quadrangles was reviewed prior to survey. CNDDDB was also reviewed for the nine quad area prior to field surveys.

Scoping for sensitive plant species was also updated. In addition to reviewing the scoping discussed in the BE, the USFWS list of endangered, threatened, proposed, and candidate species was also reviewed for the USGS Arcata North quadrangle, and the eight adjacent quadrangles prior to the 2016 survey. An updated list of CRPR species with recorded occurrences in the project vicinity was also compiled using the California Natural Diversity Database (CNDDDB 2016) and the CNPS Inventory of Rare and Endangered Vascular Plants (CNPS 2016). Of the plant species with CRPR of List 1A, 1B, 2A, and 2B, five were determined to have a moderate probability of occurring within the PSB. These species are show in Table 1. Species with CRPR of List 3 and 4 were also including in the overall scoping but are not included in the table below.

Table 1 California Rare Plant Rank List 1 and 2 Species with Moderate Potential to Occur

Scientific Name	Common Name	Bloom Time	Habitats	Micro Habitat	Potential to Occur	CRPR/CESA /ESA
<i>Fissidens pauperculus</i>	minute pocket moss	NA	North coast coniferous forest.	Moss growing on damp soil along the coast. In dry streambeds and on streambanks. 10-1024 m.	Moderate	1B.2/None

<i>Cardamine angulata</i>	seaside bittercress	April-June	Lower montane coniferous forest; North Coast coniferous forest.	Wet areas, streambanks. 90-155 m.	Moderate	2B.1/None
<i>Iliamna latibracteata</i>	California globe mallow	June-August	North Coast coniferous forest, chaparral, lower montane coniferous forest, riparian scrub (streambanks).	Seepage areas in silty clay loam. 60-2000 m.	Moderate	1B.2/None
<i>Packera bolanderi</i> var. <i>bolanderi</i>	seacoast ragwort	April-May	Coastal scrub, north coast coniferous forest.	Sometimes along roadsides. 30-915 m.	Moderate	2B.2/None
<i>Piperia candida</i>	white-flowered rein orchid	May-Sept.	North coast coniferous forest, lower montane coniferous forest, broadleaf upland forest.	Sometimes on serpentine. Forest duff, mossy banks, rock outcrops, and muskeg. 45-1615 m.	Moderate	1B.2/None

Botanical surveys to determine the presence of special-status plant species (listed as rare, threatened, endangered, or candidate for rare, threatened, or endangered species under the State or Federal Endangered Species Acts, CNPS, or species of local importance) were conducted on July 28, 2016 and August 23, 2016. The surveys were intuitively controlled and focused on quality habitats for rare and

sensitive species following the guidelines outlined by CDFW (CDFW 2009). Plants were identified to the lowest taxonomic level (genus or species) necessary for rare plant identification.

Sensitive habitats were mapped using the on-line *Manual of California Vegetation* (CNPS 2016). This classification system is described in the BE. The CDFW provides oversight of habitats listed as sensitive in the California Natural Diversity Database (CNDDDB), based on global and state rarity ranking by USGS quadrangle. Details are described in the BE. Sensitive plant communities are regulated at the state level and are not federally protected.

A wetland study (Blue Lake/ Fieldbrook-Glendale CSD Pipeline Mad River Crossing, Wetland Delineation) was completed by GHD in 2014 as part of the initial biological studies. The study did not find any USACE three-parameter wetlands. An open water feature classified as a riverine lower perennial unconsolidated bottom occurred on the west side of the river; however, this feature is no longer within the PSB.

No avian or amphibian surveys were conducted. No protocol level surveys were conducted for special-status animal species. Intuitive meandering walks across the site were used to assess the potential of suitable habitat for special status animal species, and the potential for presence was based on the habitat assessment and the CNDDDB search.

Results

No rare or sensitive plant species were found within the PSB. Botanical surveys were conducted late in the floristic season, (on July 28 on the left bank of the river and August 23 for the right bank). The PSB on the right bank is partially developed and disturbed, and no quality habitat was present for rare or sensitive plant species. Although the rare plant survey occurred late in the floristic season, the timing aligned with the flowering period for two of the four CRPR List 1 and 2 vascular plant species that had a moderate probability of occurring. The PSB on the left bank is small and the area was surveyed at a high intensity, so rare or sensitive plants would likely have been observed if present.

No wetlands were present within the PSB. A culvert on the east side of Warren Creek Road has caused some erosion within the left bank PSB and created a small drainage. There is a second culvert on the drainage downslope of the road. The drainage appears to be fed by water from the road and possibly from the private driveways above the road and is not a natural feature.

The left bank PSB contains two plant communities, *Acer macrophyllum* (big leaf maple) Forest Alliance and *Picea sitchensis* (Sitka spruce) Forest Alliance that are considered sensitive by the CDFW (Figure 2). These communities were mapped on July 28, 2016. The new PSB does not include the riparian habitat *Alnus rubra* Forest Alliance on either side of the river that was mapped in the BE in 2014.

The PSB directly below Warren Creek Road contains 4,661 square feet of Sitka spruce forest Alliance. Sitka spruce has more than 50% of the total relative canopy in this area. The shrub and herbaceous layers are well developed and diverse, and are predominantly composed of native species. The non-native shrub cotoneaster (*Cotoneaster sp.*) occurs in areas closer to Warren Creek Road.

The big leaf maple forest Alliance accounts for 11,454 square feet of the PSB downslope of the Sitka spruce forest. Big leaf maple comprises more than 25% of the relative canopy cover and occurs with scattered Sitka spruce, red alder (*Alnus rubra*), California bay (*Umbellularia californica*) and Douglas-fir (*Pseudotsuga menziesii*). The shrub layer in the plant community is also well developed and contains a variety of native shrubs. The herbaceous layer is dense and dominated by sword fern (*Polystichum munitum*).

The *Sitka spruce* Alliance falls partially within the section of the PSB where vegetation will be completely cleared. Approximately 1,605 square feet will be impacted. The big leaf maple Alliance also falls within the section that will be completely cleared. Approximately 1,158 square feet of big leaf maple forest will be impacted. Sections of both forest alliances fall within the area where undergrowth will be removed. The Sitka spruce Alliance has a state rank of S2 and the big leaf maple Alliance has a state rank of S3. All alliances with state ranks of S1-S3 are considered highly impaired by CDFW.

No sensitive plant communities were present on the right bank PSB where the land was graded, disturbed, and in some areas developed. Abundant species in disturbed areas on the right bank included several non-native species: black mustard (*Brassica nigra*), oats (*Avena* sp.), velvet grass (*Holcus lanatus*), rye grass (*Festuca perennis*), Himalyan blackberry (*Rubus armeniacus*) and red sand-spurry (*Spergularia rubra*). The native species Queen anne's lace (*Daucus carota*) and coyote brush (*Baccharis pilularis*) were also abundant in some areas.

Based on CNDDDB database review, the USFWS inventory, and local field experience, special status animal species were reviewed for the BE in 2014. Bank swallow (*Riparia riparia*), and coast cut-throat trout (*Oncorhynchus clarkii clarkii*) are presumed present in the project vicinity based on CNDDDB occurrences and BIOS mapping. In addition, the following special status animals are thought to have moderate to high potential to occur on site as discussed in the BE: the eulachon (*Thaleichthys pacificus*), the northern red-legged frog (*Rana aurora*), Coho salmon (*Oncorhynchus kisutch*), Northern California steelhead (*Oncorhynchus mykiss*), coastal chinook salmon (*Oncorhynchus tshawytscha*), longfin smelt (*Spirinchus thaleichthys*), western pond turtle (*Emys marmorata*), great blue heron (*Ardea herodias*), bald eagle (*Haliaeetus leucocephalus*), black-crowned night heron (*Nycticorax nycticorax*), Cooper's hawk (*Accipiter cooperii*), and osprey (*Pandion haliaetus*). Although not identified in database searches, the state special concern foothill yellow-legged frog also likely occurs in the Mad River and tributaries in the general project vicinity. The federally threatened yellow-billed cuckoo (*Coccyzus americanus occidentalis*) has a low probability of occurrence at the project site. These species and their status and habitat requirements are discussed in greater detail in the BE. Several of the species potentially present are federally listed (salmonids and eulachon) so depending on design details and construction methods consultation with USFWS and/or NMFS may be necessary. Most potential impacts can likely be avoided with appropriate seasonal work windows. No suitable habitat was observed for sensitive headwater stream amphibians.

Conclusions

The purpose of this survey was to identify and map plant communities, wetlands, and rare or sensitive plants. In addition, this survey is intended to evaluate the presence of suitable habitat for potentially occurring special status animal species. This survey serves as an amendment to the BE completed by GHD

in 2014. No wetlands occur in the current PSB and no rare or sensitive plants were found. Two special status plant communities are present in the PSB on the left bank.

Seasonal presence of salmonids in the Mad River is assumed. Pre-construction surveys for northern red-legged frogs, foothill yellow-legged frogs, bank swallows, raptors, and other avian species are recommended prior to construction. If work occurs within the avian nesting season (approximately March 15 to August 15) appropriate buffers may be recommended around any nests that are present. Avoidance of large trees is also recommended to the extent that it is practical.

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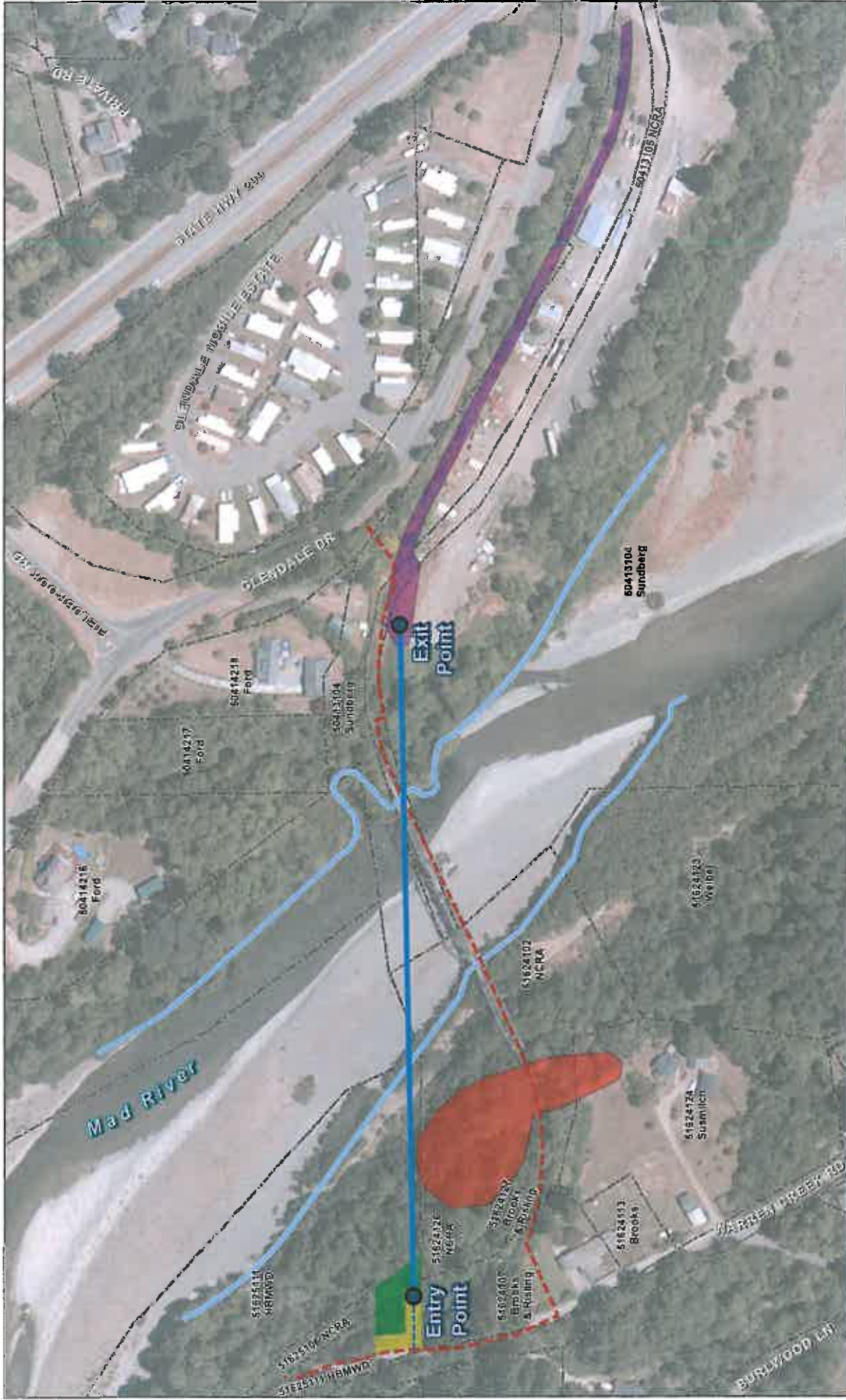
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Legend

- Cultural Site
- Work Area (Undergrowth Removal)
- Pipe Fabrication and Layout Area
- Rig and Separation Plant Area (Completely Cleared)
- Approximate Ordinary High Water Mark
- Conceptual HDD Alignment
- - - Existing 14" Water Line
- - - New Trenched Water Line
- Entry and Exit Points
- Parcels (with APN & Owner)

Map Information

Paper Size 8.5" x 11" (ANSI A)
 0 50 100 150 200 250 Feet
 Map Projection: Lambert Conformal Conic
 Horizontal Datum: North American 1983
 GCS: NAD 1983 StatePlane California I (FIPS 0401) Feet

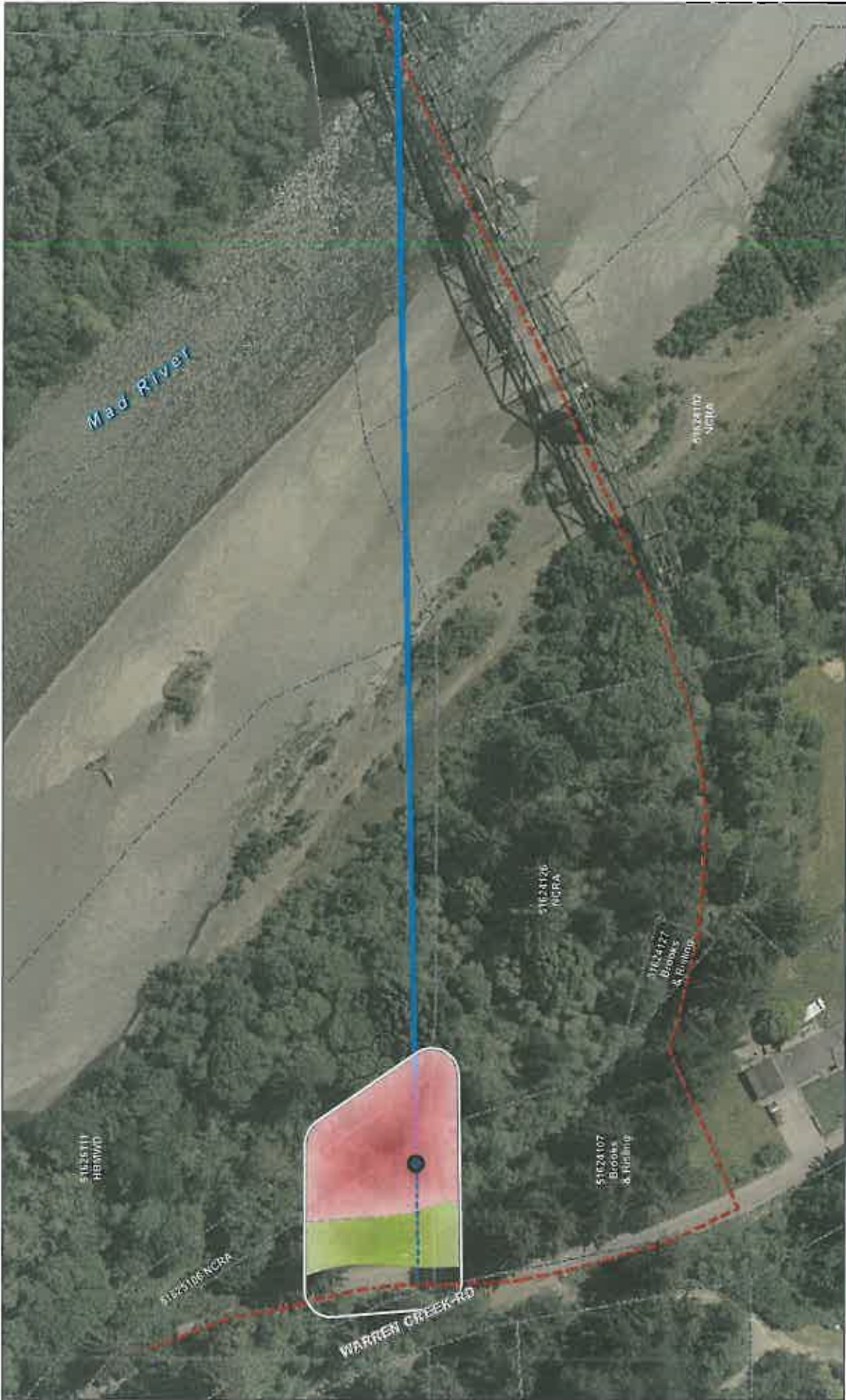
Logos

Job Information

Job Number: 841162
 Revision: A
 Date: 29 Aug 2016

Conceptual HDD Bore Plan Figure 1

718 Third Street Eureka CA 96501 USA T 707 443 8926 F 707 444 8330 E eureka@ghd.com W www.ghd.com
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HBIMWD
BLFG CSD
Pipeline Crossing

Job Number: 8411162
Revision: C
Date: 26 Aug 2016

GHD

Biological Study Site Map

Figure 2

718 Third Street Eureka CA 95501 USA T 707 443 8326 F 707 444 8330 E eureka@ghd.com W www.ghd.com

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Legend:

- Conceptual HDD Alignment
- Existing 14" Water Line
- New Trenched Water Line
- Entry and Exit Points
- Parcels (with APN & Owner)
- Study Boundary 7/22/2016
- Bigleaf Maple vegetation alliance
- Sitka spruce vegetation alliance

Scale: Paper Size 6.5" x 11" (ANSI A)
0 30 60 90 120 150 Feet
Map Projection: Lambert Conformal Conic
Datum: NAD 1983
Grid: NAD 1983 StatePlane California FIPS 5001 Feet



Photo 1. *Picea sitchensis* Forest Alliance inside left bank (west side) PSB



Photo 2. *Acer macrophyllum* Forest Alliance inside the left bank PSB



Photo 3. Eastern end of PSB on right bank (east side) of river



Photo 4. Open area on the western end of PSB on right bank of river



Humboldt Bay Municipal Water District

Main Collector Pipeline Single Point Failure

Focused Engineering Study

October 2016

Executive summary

The Humboldt Bay Municipal Water District currently has a single pipeline that conveys water from all of its potable water pump stations (Collector 1 through 4) up to the Turbidity Reduction Facility (TRF) for final treatment and storage. If this pipeline fails at a point between the Essex John Winzler Control Facilities and the TRF site, the District would have no way to provide water to its customers, who in turn provide water to approximately 80,000 people in Humboldt County. This Study assessed four alternatives for resolving this single point of failure and providing a redundant means for getting water to the TRF:

Alternative 1: Intertie with the existing City of Blue Lake/Fieldbrook-Glendale CSD waterline

Alternative 2: Installing a redundant waterline along Pipeline Road

Alternative 3: Installing a redundant waterline within the 1-MG Reservoir drain line right of way

Alternative 4: Installing a new waterline within the existing 51-inch industrial line

Section 2 gives a general description of each alternative, as well as a cost estimate and advantages/disadvantages of each alternative. A comparison of the estimated costs for each alternative is given in Table 6.

Table ES-1: Alternatives Cost Comparison

Alternative Number	Alternative Description	Total Construction/Operable Pipeline Cost
1	Connection to City of Blue Lake/FGCSD Waterline	\$337,000
2	Redundant Waterline along Pipeline Road	\$3,150,000*
3	Redundant Waterline within the 1-MG Reservoir Drain Line Right of Way	\$2,415,000
4	Redundant Waterline within the Industrial Waterline	\$4,008,000

*Note: For Alt. 2, the Total Construction Cost for a pipeline just up Pipeline Road would be approx. \$2,330,000

As discussed in Section 2.4.2, Alternative 4 would be very difficult to construct and is by far the most expensive alternative. Installing a new waterline within the existing industrial line would also make it extremely difficult for the District to perform any maintenance on the new pipeline. Because of these reasons, it is not recommended that this alternative be considered further.

Alternative 1 is by far the most cost effective option for providing a redundant means for getting water to the TRF. However, as discussed in Section 2.1.2, it is not completely certain at this time whether the California Department of Public Health (CDPH) would allow for the construction of this project, as during the wintertime, there could be unfiltered water distributed to the City of Blue Lake and Fieldbrook/Glendale CSD. However, it is important to remember that this intertie would only be utilized during an emergency, when there was no other means of providing drinking water. This intertie also does not provide an ideal solution to the problem for three key reasons:

- i) The 16-inch Blue Lake/FGCSD line does not have as much capacity as the existing 30/33-inch water line. The 16-inch pipeline can provide approximately 3.5 Million Gallons per Day (MGD) at the same total dynamic head as 10 MGD through the 30/33-inch pipeline. The

pumps on the collectors have steep pump curves and appear to be able to pump 10MG through the 16-inch line, but at a much higher headloss and energy consumption.

- ii) If this intertie were put into use, Blue Lake/FGCSD could not be served while HBMWD was directing water to the TRF and their other customers, and vice versa.
- iii) If the existing main line were to fail catastrophically, it is possible that the event that caused failure of the main water line would also cause failure of the Blue Lake/FGCSD line. If the existing main water line was to fail with the Blue Lake/FGCSD line remaining intact, it is also possible that the discharge of a large volume of water under pressure from the main water line would ultimately wash out the roadway and cause failure of the Blue Lake/FGCSD line. In either of these two scenarios, the District would again have no way to get water to the TRF and serve their customers.

While there are shortfalls with Alternative 1, ultimately if the existing main water line were to fail, this alternative could give the District the ability to serve its customers until the main waterline was repaired. Because of the relatively low cost of this alternative and the potential for the District to pay for this alternative with its General Fund, this alternative should continue to be considered a viable alternative and pursued further.

Alternatives 2 and 3 would each provide a new completely redundant pipeline that conveyed water from Pump Stations 1 through 4 to the TRF. While these alternatives each accomplish the same goal and have similar estimated costs (with Alternative 3 being the lower cost option), there are two key differences between the two alternatives. Under Alternative 2, the new pipeline would be installed parallel to the existing main water line, within the existing right-of-way. This would present the same problem as described above for Alternative 1, in that a failure of the existing main line could mean that the new redundant line would also fail, and the District would again have no way to get to water to the TRF. This gives Alternative 3 a significant advantage over Alternative 2, since the new pipeline under Alternative 3 would not be near the existing main line, and failure of the existing main line would not affect the new line. However, the main disadvantage of Alternative 3 is that, although it could likely be located within an existing City of Eureka right-of-way for the section coming off the hill from the Turbidity Reduction Facility site, this right-of-way runs through several other parcels and extensive surveying and outreach to these landowners would be required.

Recommended Next Steps

While the single point failure issue is a problem that needs to be addressed by the District, it is not necessarily urgent to address in the next few years. The District has a maintenance program that keeps the main water line and associated valves in good working order, and there are no imminent signs of failure.

It is recommended that the District move forward with planning and pursuing funding for Alternatives 1 and 3 for solving the single point of failure problem. While Alternative 3 would be the ideal alternative to construct, it is sensible to pursue Alternative 1 as well due to the cost effectiveness of this alternative. Each of these alternatives would likely be eligible for grant funding under programs such as the Federal Emergency Management Agency's Hazard Mitigation Grant and Pre-Disaster Mitigation grant programs, and there is potential to fund one of these alternatives through other grant programs as well. If conditions change and the need for addressing this issue becomes more urgent before grant funds can be obtained, it is recommended that the District budget for paying for Alternative 1 with their General Fund revenues.

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Financial

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
Statement of Fund Balances at September 30, 2016

Account Fund Balance at Month End	AT 9-30-16	AT 9-30-15	Increase/(Decrease)
U.S. BANK ACCOUNTS			
- Commercial Account - General Fund Account	10,794.49	211,483.37	
- Money Market Account (DWR Contract for SRF Loan) ①	297,062.90	296,685.64	
- Certificate of Deposit (DWR Contract for SRF Reserve) ②	547,612.16	547,420.20	
- Prop 50 Project Account (Community Intertie Projects) ③	0.00	206,873.38	
Subtotal	<u>855,469.55</u>	<u>1,262,462.59</u>	(406,993.04)
HUMBOLDT COUNTY:			
- Investment Account	3,172,837.93	2,211,463.31	
- DWFP Reserve (In accordance with Ordinance 16) ④	467,104.13	184,155.05	
- MSRA Reserve (Municipal Supplemental Reserve Account) ⑤	418,322.64	414,784.51	
- SRF Loan Payment ⑥	48,233.67	47,791.57	
- A/B Bond Tax Account	0.00	0.00	
- 1% Tax Account ⑦	216.42	0.00	
Subtotal	<u>4,106,714.79</u>	<u>2,858,194.44</u>	1,248,520.35
L.A.I.F.	1,602.56	1,595.77	6.79
Cash on Hand	650.00	650.00	0.00
TOTAL CASH	<u>\$ 4,964,436.90</u>	<u>\$ 4,122,902.80</u>	<u>\$ 841,534.10</u>
Less: Encumbrances & Reserves (Funds Dedicated for Specific Purposes and Projects)			
RESTRICTED			
Municipal Customers PF2 Prior Year Reconciliation	(458,735.93)	(296,685.75)	
1% Tax Account ⑦	(216.42)	0.00	
Municipal Customer Advanced Charging - Ranney Collector 1 & 1A Rehabilitation	(1,393,896.40)	(850,251.25)	
Municipal Customer Advanced Charging - Ranney Collector 2 Rehabilitation	0.00	(143,181.65)	
Municipal Customer Advanced Charging - 1MG Domestic Reservoir Roof	(11,613.00)	0.00	
Municipal Customer Advanced Charging - Replace Ruth Bunkhouse	(195,000.00)	0.00	
DWR Reserve Fund for SRF Loan ②	(547,612.16)	(547,420.20)	
DWR Contract Payment for SRF Loan for DWFP (Drinking Water Filtration Plant-PF1 Charges from Muns) ①	(297,062.90)	(296,685.64)	
- Prop 50 Project Account (Community Intertie Projects) ③	0.00	(206,873.38)	
SUBTOTAL RESTRICTED RESERVES (Net Position)	<u>(2,904,136.81)</u>	<u>(2,341,097.87)</u>	<u>563,038.94</u>
UNRESTRICTED:			
Board Restricted:			
Paik-Nicely Development	(4,158.00)	(4,158.00)	
Sequoia Investments X, LLC (Hog Island Project)	1,104.75	0.00	
DWFP Reserve * ④	(467,104.13)	(184,155.05)	
MSRA Reserve (Municipal Supplemental Reserve Account) ⑤	(418,322.64)	(414,784.51)	
Unrestricted Reserves			
SRF Loan Payment ⑥	(48,233.67)	(47,791.57)	
Techite CalEMA Subgrantee Administrative Allowance	0.00	(30,004.63)	
Municipal Customer Accumulation for Debt Service for US Bank Ranney & Techite	51,404.50	51,414.75	
Project Loan Payment	(1,174,990.90)	(1,152,325.92)	
General Fund Reserve	(2,060,300.09)	(1,781,804.93)	
SUBTOTAL UNRESTRICTED RESERVES (Net Position)	<u>(2,060,300.09)</u>	<u>(1,781,804.93)</u>	<u>278,495.16</u>
Total Net Position	<u>(4,964,436.90)</u>	<u>(4,122,902.80)</u>	<u>841,534.10</u>

	SEPTEMBER RECEIPTS	YTD TOTAL AT 9-30-16	BUDGET	% OF BUDGET	YTD TOTAL AT 9-30-15
MISCELLANEOUS RECEIPTS (RETURNED TO CUSTOMERS VIA PF2)					
RETAIL WATER SALES	\$ 39,255.66	\$ 107,350.69	\$309,060	35%	\$ 84,632.21
SUBTOTAL RETAIL WATER SALES	\$ 39,255.66	\$ 107,350.69	\$309,060	35%	\$ 84,632.21
GENERAL REVENUES					
INTEREST	0.00	7,324.61	\$12,000	61%	1.13
FCSD CONTRACT FOR MAINT. & OPERATIONS	0.00	53,064.05	175,000	30%	71,781.14
POWER SALES	5,566.97	19,954.58	175,000	11%	17,681.76
MISCELLANEOUS (SEE NEXT PAGE)	\$5,163.25	\$11,720.25	50,000	23%	\$ 16,081.57
SUBTOTAL GENERAL REVENUES	\$ 10,730.22	\$ 92,063.49	\$412,000	22%	\$ 105,545.60
TAX RECEIPTS					
1% TAXES	0.00	216.42	775,000	0%	6,788.49
TOTAL PF 2 CREDIT	\$ 49,985.88	\$ 199,630.60	\$1,496,060	13%	\$ 196,966.30
WHOLESALE CONTRACT RECEIPTS					
INDUSTRIAL / HARBOR DISTRICT	\$0.00	\$ 642.77	\$50	1286%	\$0.00
TOTAL INDUSTRIAL	\$0.00	\$ 642.77	\$50	1286%	\$0.00
CITY OF ARCATA	\$ 96,649.58	\$ 281,342.83	\$1,257,114	22%	\$ 257,669.99
CITY OF EUREKA	467,383.40	679,677.99	3,001,244	23%	824,672.46
HUMBOLDT CSD	78,145.98	227,503.17	1,032,162	22%	209,095.90
MANILA CSD	6,297.42	18,357.54	82,399	22%	17,160.05
MCKINLEYVILLE CSD	78,809.42	229,242.40	1,019,529	22%	208,531.32
FLDDBROOK CSD	12,836.31	37,346.06	166,168	22%	44,500.08
BLUE LAKE	13,789.15	39,902.79	185,744	21%	42,150.65
TOTAL MUNIS	\$ 753,911.26	\$ 1,513,372.78	\$6,744,360	22%	\$ 1,603,780.45
A/B BOND TAXES	\$0.00	\$0.00	\$0	0%	\$0.00
TOTAL RECEIPTS	\$ 803,897.14	\$ 1,713,646.15	\$8,240,470	21%	\$ 1,800,746.75

MISCELLANEOUS RECEIPTS

	SEPTEMBER	YEAR TO DATE
Administrative		
<i>Parking Lot Rent</i>	\$25.00	\$75.00
<i>Employee Telephone</i>	0.00	36.39
<i>Employee Gas</i>	30.18	36.21
<i>Retirees' Reimbursement of Health Insurance Premium</i>	4,318.62	7,466.31
<i>COBRA Vision Ins & Admin Fee - Retiree</i>	18.93	56.79
<i>COBRA Dental Ins & Admin Fee - Retiree</i>	108.24	324.72
<i>Water Processing Fees</i>	0.00	60.00
<i>Hydrant Rental Deposit</i>	0.00	0.00
<i>Meter Installations</i>	0.00	0.00
<i>Retail Connection Charge</i>	0.00	0.00
<i>Mainline Connection Charge</i>	0.00	0.00
<i>Right of Way Fees</i>	0.00	0.00
<i>Special Event Liability Insurance</i>	361.50	361.50
<i>ACWA/JPIA Retrospective Premium Adjustment</i>	0.00	0.00
<i>ACWA/JPIA Insurance Claim</i>	0.00	0.00
<i>Dividend Check (Principal Life)</i>	0.00	0.00
<i>Bad Debt Recovery</i>	0.00	0.00
<i>Miscellaneous Payments for Copies &/or Postage Costs</i>	28.45	55.20
<i>Diesel Fuel Tax Refund</i>	24.18	24.18
<i>Park Use Fees</i>	50.00	75.00
<i>Sequoia Investments X, LLC - Hog Island Project</i>	0.00	0.00
<i>PG&E - CPUC Mandated Gas Credit</i>	0.00	96.47
<i>IRS -Refund of Payroll Tax Overpayment</i>	0.00	564.33
<i>EDD -Refund of Payroll Tax Overpayment</i>	33.15	33.15
Ruth Area		
<i>Use of Ruth Cabin</i>	30.00	270.00
<i>RLCSD-Water System Permit Fees</i>	0.00	2,050.00
<i>Ruth Area Water Use Permit</i>	0.00	0.00
<i>Buffer Strip Right of Way License Fee</i>	0.00	0.00
<i>Ruth Buffer Strip PG&E Right of Way Fees</i>	0.00	0.00
<i>Ruth Sale of Merchantable Timber</i>	0.00	0.00
<i>Ruth Sale of Surplus Gravel</i>	135.00	135.00
<i>Don Bridge Lease</i>	0.00	0.00
Miscellaneous		
<i>Other</i>	0.00	0.00
Total Miscellaneous Receipts	\$5,163.25	\$11,720.25
OTHER RECEIPTS or GRANTS		
<i>Prop 84 - Ranney Collector 1</i>	0.00	0.00
<i>CalEMA Blue Lake/Fieldbrook Pipeline Crossing(Note1)</i>	0.00	0.00

-4-
HUMBOLDT BAY MUNICIPAL WATER DISTRICT
TOTAL EXPENDITURES
AT SEPTEMBER 30, 2016 (3 MONTHS - 25%)

	SEPTEMBER EXPENSES	TOTAL 9/30/2016	BUDGET	% OF BUDGET	TOTAL 9/30/2015
PAYROLL:					
Regular	\$156,797.87	\$469,741.32	\$ 1,917,832	24%	\$ 467,598.25
Part-Time	2,688.50	11,240.63	53,600	21%	10,571.71
Overtime	2,276.93	4,516.91	35,000	13%	6,162.55
Standby	5,926.08	19,174.59	80,000	24%	19,305.29
Pay Differential	968.80	2,808.07	11,500	24%	2,197.60
Deferred Compensation	1,300.00	3,850.00	30,600	13%	3,775.00
Employee Assistance Plan	72.86	220.92	1,078	20%	230.22
Director Compensation	2,000.00	5,360.00	26,000	21%	5,920.00
Director - Secretary Fees	262.50	787.50	3,200	25%	787.50
Taxes/Benefits	94,756.49	437,158.09	1,437,324	30%	420,872.74
TOTAL PAYROLL	\$267,050.03	\$ 954,858.03	\$ 3,596,134	27%	\$ 937,420.86
SERVICE & SUPPLY					
O & M					
Engineering	\$4,393.00	\$10,179.75	\$ 75,000	14%	\$16,432.59
Maint., Repairs, Supplies	4,444.62	23,710.19	115,000	21%	23,446.57
TRF Maint, Repairs, Supplies	855.46	1,116.40	55,000	2%	4,513.62
Lab	855.00	1,475.00	13,000	11%	810.00
Auto Maintenance	3,469.56	7,863.48	46,000	17%	8,265.62
Radio Maintenance	507.63	1,522.89	10,500	15%	897.25
USGS Meter Station	0.00	0.00	7,800	0%	0.00
Ruth Lake License	0.00	1,500.00	1,500	100%	1,500.00
A&G					
Accounting Services	0.00	0.00	\$ 30,000	0%	0.00
Legal	448.00	1,006.00	28,000	4%	5,433.00
Professional Services	358.41	1,291.88	20,000	6%	2,092.53
Insurance	55,980.50	55,980.50	105,000	53%	71,149.00
Telephone/Internet	3,866.28	12,014.42	46,000	26%	12,126.98
Office Building Maintenance	1,444.77	3,777.42	18,000	21%	8,439.72
Office Expense	2,743.51	17,930.47	52,000	34%	12,517.36
Travel & Conference	490.24	1,284.01	25,000	5%	1,664.52
Dues & Subscriptions	0.00	564.40	15,500	4%	191.40
Technical Training	0.00	976.40	11,000	9%	1,262.45
County Tax Fee	0.00	0.00	21,000	0%	0.00
County Property Taxes	53.60	53.60	1,100	5%	53.60
LAFCO	0.00	0.00	4,500	0%	0.00
Regulatory Agency Fees	0.00	4,194.29	75,000	6%	25,225.36
Ruth Lake Programs	0.00	0.00	5,000	0%	0.00
Miscellaneous	437.00	2,647.60	11,500	23%	8,720.47
TOTAL SERVICE/SUPPLIES W/OUT POWER	\$80,367.58	\$149,088.70	\$ 792,400	19%	\$204,742.06
POWER					
Essex Pacific Gas & Electric	\$61,852.24	\$170,068.32			\$ 157,122.18
Fuel For 2 MW Generator	0.00	0.00			4,394.36
<i>Subtotal Essex Pumping</i>	<i>\$61,852.24</i>	<i>\$170,068.32</i>	<i>561,863.00</i>	<i>30%</i>	<i>\$ 161,516.54</i>
All Other Pacific Gas & Electric	4,578.53	17,620.01	78,137	23%	14,113.36
POWER EXPENSE SUBTOTAL	\$66,430.77	\$187,688.33	\$ 640,000	29%	\$ 175,629.90
TOTAL SERVICE/SUPPLIES WITH POWER	\$146,798.35	\$336,777.03	\$ 1,432,400	24%	\$380,371.96
PROJECTS, FIXED ASSETS & CONSULTING SERVICES					
	\$421,486.53	\$641,089.27	\$ 5,349,550	12%	\$ 181,124.74
TOTAL OPERATING	\$835,334.91	\$1,932,724.33	\$ 10,378,084	19%	\$ 1,498,917.56
DEBT SERVICE - SRF LOAN (1)	\$0.00	\$0.00	\$ 547,337	0%	\$273,668.48
TOTAL EXPENDITURES	\$835,334.91	\$1,932,724.33	\$ 10,925,421	18%	\$ 1,772,586.04
DEBT SERVICE - US Bank	\$0.00	\$81,094.05	\$ 162,200	50%	\$81,094.05

I. CAPITAL PROJECTS	SEPTEMBER EXPENSES	YTD TOTAL 9/30/2016	BUDGET	% OF BUDGET
A. Projects Charged to All Customers via Price Factor 2 (BWF)				
SCADA System Upgrade - Phase 2	\$0.00	\$0.00	381,100	0%
Replacement of Check Valves for 1-1, 1-2 & 1-4	33,193.60	33,193.60	30,750	108%
Replace Collector 2, Pump 2-2 Motor	0.00	0.00	55,000	0%
Replace 12Kv Switchgear Roof	0.00	0.00	2,250	0%
Mainline Valve Replacement	0.00	0.00	100,000	0%
Electrical Shop Upgrade - Phase 2	0.00	0.00	7,250	0%
1 Mg Domestic Water Reservoir Roof & Painting	13,579.00	23,387.00	602,000	4%
Replace Chlorine Booster Pumps	0.00	740.01	12,250	6%
New Valve below 1 Mg Domestic Reservoir	0.00	0.00	30,000	0%
Replace Ruth Bunkhouse	0.00	0.00	403,500	0%
Replace Ruth HQ Septic System	0.00	0.00	15,000	0%
Plan to Replace Ruth Hydro Protective Relays	0.00	0.00	15,000	0%
SUBTOTAL A:	\$46,772.60	\$57,320.61	1,654,100	3%
B. Projects Charged to Municipal Customers via Price Factor 2 (DWTF)				
TRF SCADA System Upgrade - Phase 2	0.00	0.00	100,000	0%
Raise Containment Wall Around Sodium Hypochlorite Tank	0.00	0.00	6,500	0%
SUBTOTAL B:	\$0.00	\$0.00	106,500	0%
C. Projects Funded by Other Sources (BWF)				
Blue Lake/FGCSD River Crossing Funded by Prop 84 & FEMA Grants	\$264.64	\$4,268.94	630,000	1%
Ranney Collector 1 & 1A Laterals Partially funded through Prop 84 Grant & Adv. Charges	342,985.77	503,867.68	2,140,500	24%
SUBTOTAL C:	\$343,250.41	\$508,136.62	2,770,500	18%
TOTAL CAPITAL PROJECTS:	\$390,023.01	\$565,457.23	4,531,100	12%

Annual Capital Project Limitation (per Section 7.2.5 of Ordinance 16)
Amount that can be charged to wholesale customers in a fiscal year.

FY2014/15 Annual Limit	\$ 1,191,703
Total charged to date	\$ 57,321
Balance Remaining	\$ 1,134,382

While the total projects expenditures are budgeted at \$5,349,550, the actual wholesale customer charges are \$2,464,600. Capital Projects C and Professional & Consulting Services C is the listing of Projects Funded by Other Sources. In addition the Ranney Collector 3 and Techite Pipeline Replacement projects have been partially funded with financing over 10 years. Only the annual debt service for these financed projects are being charged to the wholesale customers.

I. FIXED ASSETS		SEPTEMBER	YTD TOTAL	% OF
A. Projects Charged to All Customers via Price Factor 2 (BWF)		EXPENSES	9/30/2016	BUDGET
Essex - Replace Two Administrative Computers		\$0.00	\$3,222.40	4,500
Essex - Replace Two Laptop Computers -Ruggedized		0.00	0.00	6,500
Collector 3 Emergency Generator Connection		0.00	0.00	3,750
Replace Ingersoll Rand Mobile Air Compressor		0.00	0.00	22,500
Purchase Shop Manual & Diagnostic Equipment to service Heavy Fleet Vehicles		0.00	0.00	9,750
Replace Unit 15		0.00	0.00	46,250
Purchase Precision Measuring Equipment		0.00	0.00	3,500
Purchase Engine Driven Air Compressor for Unit 8		0.00	0.00	2,500
Replace Towable Portable Restroom		0.00	0.00	3,500
Replace Warren Creek Pipeline Meter Manifold		0.00	0.00	8,000
Conduit Bending Machine		0.00	0.00	8,000
Eureka - Replace Computer - Part 1		0.00	0.00	2,500
Eureka - Replace Computer - Part 2		0.00	0.00	2,500
SUBTOTAL A:		\$0.00	\$3,222.40	123,750
B. Projects Charged to Municipal Customers via Price Factor 2 (DWTF)				
TRF Spare Parts Inventory		\$0.00	\$0.00	4,000
SUBTOTAL B:		\$0.00	\$0.00	4,000
TOTAL FIXED ASSETS PROJECTS:		\$0.00	\$3,222.40	127,750

II. MAINTENANCE PROJECTS		SEPTEMBER	YTD TOTAL	% OF
A. Charged to All Customers via Price Factor 2 (BWF)		EXPENSES	9/30/2016	BUDGET
Paint Collector 3		\$4,424.54	\$4,424.54	19,250
Pipeline Maintenance		0.00	0.00	13,500
12KV Electric System Maintenance		0.00	0.00	4,000
Mainline Meter Flow Calibration		0.00	821.16	6,000
Technical Support & Software Updates to Include Control System		0.00	5,239.00	19,250
Generator Service		0.00	0.00	3,500
Hazard & Diseased Tree Removal		0.00	0.00	6,250
Catholic Protection		0.00	0.00	6,500
Maintenance Emergency Repair		0.00	0.00	50,000
Fleet Paint Repairs		0.00	0.00	5,000
AC Pipe Disposal		0.00	0.00	8,500
Replace Two Doors at Essex		0.00	0.00	5,000
Repair/Upgrade Line Shed 6		0.00	0.00	28,250
Brush Abatement at Ruth Dam		0.00	0.00	5,540
Ruth HQ Tree Removal		0.00	0.00	4,250
Ruth HQ Remodel Project		0.00	0.00	4,000
Ruth Hydro - Howell Bunger Valve Inspection		0.00	0.00	1,110
SUBTOTAL A:		\$4,424.54	\$10,484.70	189,900
B. Projects Charged to Municipal Customers via Price Factor 2 (DWTF)				
TRF - Generator Service		\$0.00	\$0.00	500
TRF Limitorque Valve Retrofit Supplies - Phase 1		0.00	0.00	15,750
SUBTOTAL B:		\$0.00	\$0.00	16,250
TOTAL MAINTENANCE PROJECTS:		\$4,424.54	\$10,484.70	206,150

III. PROFESSIONAL & CONSULTING SERVICES		SEPTEMBER	YTD TOTAL	BUDGET	% OF
A. Charged to All Customers via Price Factor 2 (BWF)		EXPENSES	9/30/2016	BUDGET	BUDGET
Collector 1 Transformer & Electrical Evaluation		\$0.00	\$0.00	5,000	0%
Collector 1 Pump & Motor Upgrades		0.00	0.00	13,000	0%
Collector 1 Lateral Evaluation Report		0.00	0.00	5,000	0%
Crane Testing/Certification		895.00	1,448.43	6,500	22%
Essex Trolley/Cable Car Inspection		2,145.50	4,406.25	10,000	44%
Essex Septic System Construction Assistance		2,939.23	2,939.23	4,000	73%
Essex Mad River Cross-Sectional Survey		1,050.50	9,761.75	10,000	98%
Mad River Watershed Regulatory Compliance		0.00	0.00	50,000	0%
Spill Prevention Control & Countermeasure Plan Updates (Ruth Marina & Essex)		2,734.75	4,945.75	6,500	76%
CIP Financial Plan Update		0.00	0.00	25,000	0%
Cathodic Protection Review/Inspection		0.00	0.00	9,500	0%
Techite Pipeline Replacement - Final Inspection & Report		191.00	6,600.75	9,000	73%
Dune Monitoring Program - Component of Coastal Conservancy Climate Ready Grant		0.00	2,000.00	2,000	100%
GIS/Facilities Information System		0.00	0.00	10,000	0%
GIS/Facilities Information System - Ruth		0.00	0.00	4,000	0%
Backflow Tester Training		0.00	0.00	3,000	0%
Control Software Training		0.00	0.00	15,000	0%
Technical Training		0.00	0.00	5,750	0%
Industrial Water Reservoir Condition Assessment		0.00	0.00	8,000	0%
Licensed Timber Operator		0.00	0.00	5,000	0%
FERC Dam Safety Surveillance & Monitoring Report(DSSMR)/FERC Dam Safety Review (Part 12)		0.00	0.00	3,000	0%
FERC Chief Dam Safety Engineer		0.00	0.00	10,000	0%
FERC Part 12 - GEI		0.00	0.00	10,000	0%
FERC Part 12 - Cardno		0.00	640.00	20,000	3%
FERC Part 12 Independent Consultant Inspection and Engineering Support - GHD		2,040.00	6,026.26	11,000	55%
Grant Applications		0.00	0.00	20,000	0%
Public Education		0.00	0.00	5,000	0%
Water Resources Planning		457.00	1,321.00	50,000	3%
SUBTOTAL A:		\$12,452.98	\$40,089.42	335,250	12%
B. Projects Charged to Municipal Customers via Price Factor 2 (DWTF)					
Chlorine System Maintenance		\$0.00	\$123.98	16,100	1%
SUBTOTAL B:		\$0.00	\$123.98	16,100	1%
C. Projects Funded by Other Sources (BWF)					
Surge Tower Replacement - CEQA, Bidding & Construction Assistance] Funded by FEMA Grant		\$0.00	\$0.00	50,000	0%
Quagga Grant/RLCSD] CA Dept of Boating & Waterways		0.00	0.00	9,150	0%
SUBTOTAL C:		\$0.00	\$0.00	59,150	0%
TOTAL PROFESSIONAL & CONSULTING SERVICES:		\$12,452.98	\$40,213.40	410,500	10%

IV. INDUSTRIAL SYSTEM PROJECTS		SEPTEMBER	YTD TOTAL	% OF
A. Charged to All Customers via Price Factor 2 (BWF)		EXPENSES	9/30/2016	BUDGET
- Maintain Water Supply to Industrial Pump Station (Pump Station 6) During Low-Flow Months		\$0.00	\$0.00	13,250 0%
SUBTOTAL A.		\$0.00	\$0.00	13,250 0%
B. Charged to Municipal Customers via PF2 (DWTF)				
SUBTOTAL B.		\$0.00	\$0.00	0 0%
TOTAL INDUSTRIAL SYSTEM PROJECTS:		\$0.00	\$0.00	13,250 0%
CARRY-OVER PROJECTS FROM 2015/16		SEPTEMBER	YTD TOTAL	% OF
I. CAPITAL PROJECTS		EXPENSES	9/30/2016	BUDGET
A. Charged to All Customers via Price Factor 2 (BWF)		\$0.00	\$110.01	5,000 2%
Replace Essex Septic System		0.00	15.51	1,700 1%
Repair/Upgrade Park Restrooms		0.00	0.00	1,500 0%
Upgrade Ethernet Radio Modems/PLC Systems at Samoa Booster Pump Station		0.00	177.53	1,500 12%
Repair Ruth HQ Master Bath/Laundry Room		0.00	0.00	4,500 0%
Ruth Hydro - Install Auto Synchronizer System		\$0.00	\$303.05	14,200 2%
SUBTOTAL A.				
B. Projects Charged to Municipal Customers via Price Factor 2 (DWTF)		\$0.00	\$585.74	1,800 33%
Remodel TRF Line Shed 5		\$0.00	\$585.74	1,800 33%
SUBTOTAL B.				
Subtotal Capital Projects		\$0.00	\$888.79	16,000 6%
I. FIXED ASSETS				
A. Charged to All Customers via Price Factor 2 (BWF)		\$0.00	\$0.00	2,000 0%
Install Signal Amplifier at Mt. Pierce		\$0.00	\$0.00	2,000 0%
SUBTOTAL A.				
B. Projects Charged to Municipal Customers via Price Factor 2 (DWTF)		\$0.00	\$0.00	0 0%
SUBTOTAL B.				
Subtotal Fixed Assets Projects		\$0.00	\$0.00	2,000 0%

CARRY-OVER PROJECTS FROM 2015/16 Continued				
II. MAINTENANCE PROJECTS				
A. Charged to All Customers via Price Factor 2 (BWF)				
Replace Eyewash/Shower Station and Drain System			800	0%
Large Business & Fire Service Meter Calibration & Maintenance	\$0.00	\$0.00	15,000	0%
Ruth Spillway Bridge Painting	0.00	0.00	5,000	0%
SUBTOTAL A.	\$0.00	\$0.00	20,800	0%
B. Projects Charged to Municipal Customers via Price Factor 2 (DWTF)				
SUBTOTAL B.	\$0.00	\$0.00	0	0%
Subtotal Maintenance Projects	\$0.00	\$0.00	20,800	0%
III. PROFESSIONAL & CONSULTING SERVICES				
A. Charged to All Customers via Price Factor 2 (BWF)				
Crane Operator Training	\$0.00	\$0.00	7,000	0%
Focused Engineering Studies	0.00	6,236.75	10,000	62%
Hydro Assessment & Analysis	14,586.00	14,586.00	5,000	292%
SUBTOTAL A.	\$14,586.00	\$20,822.75	22,000	0%
B. Projects Charged to Municipal Customers via Price Factor 2 (DWTF)				
SUBTOTAL B.	\$0.00	\$0.00	0	0%
Subtotal Professional & Consulting Projects	\$14,586.00	\$20,822.75	22,000	95%
2015/16 CARRYOVER PROJECTS TOTAL	\$14,586.00	\$21,711.54	60,800	36%
PROJECTS GRAND TOTAL:	\$421,486.53	\$641,089.27	5,349,550	12%
Less Projects Funded from Other Sources (Grants/Loans/Advanced Charges/Reserves)				
	\$343,250.41	\$508,136.62	3,047,150	17%
PF2 Project Total Charged to Customers excluding Debt Service (US Bank)				
	\$78,236.12	\$132,952.65	2,302,400	6%

Humboldt Bay Municipal Water District
 Overtime Pay
 September 2016

	54TRF		52		54		55		56		TOTAL	
	Hours	Sep 16	Hours	Sep 16	Hours	Sep 16	Hours	Sep 16	Hours	Sep 16	Hours	Sep 16
Employee Wages, Taxes and Adjustm...												
Gross Pay												
Overtime	1.5	72.53	28	1,407.40	10.5	599.81	2	96.70	2	100.49	44.00	2,276.93
Total Gross Pay	1.5	72.53	28	1,407.40	10.5	599.81	2	96.70	2	100.49	44.00	2,276.93
Adjusted Gross Pay	1.5	72.53	28	1,407.40	10.5	599.81	2	96.70	2	100.49	44.00	2,276.93
Net Pay	1.5	72.53	28	1,407.40	10.5	599.81	2	96.70	2	100.49	44.00	2,276.93
Employer Taxes and Contributions		0.00		0.00		0.00		0.00		0.00		0.00

51 - Ruth
 52 - Pumping & Control
 53 - Water Treatment
 54 - Maintenance & Operation
 55 - Customer Service
 56 - Administration
 58 - Ruth Hydro

Humboldt Bay Municipal Water District Expenses by Vendor Detail

September 2016

Memo	Amount
101Netlink	
Ruth Data Link/Internet	-160.00
Total 101Netlink	-160.00
ACWA/JPIA	
Auto & General Liability Program Renewal Oct 2016 - October 2017	-39,253.11
Auto & General Liability Program Renewal Oct 2016 - October 2017	-2,461.14
Auto & General Liability Program Renewal Oct 2016 - October 2017	-13,904.75
Special Event Liability Insurance - Disc Golf Event & Picnic	-361.50
Total ACWA/JPIA	-55,980.50
Advanced Display & Signs	
Prop 84 signs for Collector 1 & 1A Lateral Replacement	-264.64
Prop 84 signs for Blue Lake/Fieldbrook-Glendale CSD River Crossing	-264.64
Total Advanced Display & Signs	-529.28
Advanced Security Systems	
reprogram Eureka office security system	-95.00
Essex Quarterly Alarm System Monitoring	-73.50
Total Advanced Security Systems	-168.50
AirGas NCN	
streamlight flash light for Collector 2	-183.35
Total AirGas NCN	-183.35
Altec Industries, Inc	
Crane Testing/Certification	-895.00
Total Altec Industries, Inc	-895.00
Arcata Garbage	
Essex garbage	-419.79
Total Arcata Garbage	-419.79
AT & T	
Ruth HQ	-18.77
TRF	-162.17
Essex office	-67.04
Eureka office	-6.35
Ruth Hydro	-403.25
Valve Building Samoa	-88.35
Ruth HQ	
TRF	
Essex office	
Eureka office	-86.91
Ruth Hydro	
Valve Building Samoa	
Total AT & T	-832.84
AT&T	
Eureka/Essex Landline	-35.32
Arcata/Essex Landline	-35.32
Samoa/Essex Landline	-236.85
Blue Lake Meter Signal Line	-60.98
Eureka Office	-117.52
Eureka Office Alarm Line	-39.19
Samoa Booster Pump Station	-72.52
Valve Building-Samoa	-117.52
Eureka Office	-296.45
Essex Office	-610.56
TRF	-230.88
Ruth Data Line	-114.49
Total AT&T	-1,967.60
AT&T Advertising Solutions	
white page listing	-21.00
Total AT&T Advertising Solutions	-21.00

Humboldt Bay Municipal Water District
Expenses by Vendor Detail

September 2016

Memo	Amount
Bruce Brashear expense reimbursement for safety boots	-157.68
Total Bruce Brashear	-157.68
Campton Electric Supply Essex office lighting maintenance	-160.32
Total Campton Electric Supply	-160.32
Cardno, Inc FERC Part 12 Inspection Report	-1,117.50
Total Cardno, Inc	-1,117.50
City of Eureka Eureka office water/sewer	-50.76
Total City of Eureka	-50.76
Cody Bruffett auto mileage reimbursement	-242.78
Total Cody Bruffett	-242.78
Don's Rent-All, Inc Replace Essex Septic System	-76.40
Total Don's Rent-All, Inc	-76.40
Downey Brand Attorneys LLP legal assistance with Water Resources Planning - Instream Flows	-266.00
legal assistance with Water Conservation Requirements	-76.00
Total Downey Brand Attorneys LLP	-342.00
Durable Trailers, Inc restock steel inventory	-1,044.52
Total Durable Trailers, Inc	-1,044.52
Eureka Oxygen cylinder rental	-102.34
Total Eureka Oxygen	-102.34
Eureka Readymix Replace Essex Septic System	-1,631.16
Total Eureka Readymix	-1,631.16
Eureka Rubber Stamp Eureka office customer parking signs	-36.87
Total Eureka Rubber Stamp	-36.87
FEDEX return ACWA/JPIA training tapes	-7.57
Return TRF sensor for warranty repair	-8.11
supplies to ship safety testing equipment	-14.13
Total FEDEX	-29.81
Frontier Communications Ruth HQ	-53.12
Ruth Hydro/Ruth Dataline	-160.11
Total Frontier Communications	-213.23
GEI Consultants, Inc FERC Part 12 Safety Inspection	-922.50
Total GEI Consultants, Inc	-922.50

Humboldt Bay Municipal Water District Expenses by Vendor Detail

September 2016

Memo	Amount
GHD	
(70039) Techite CDP Final Observation & Reporting	-191.00
(70057) Collector 1 & 1A Lateral Replacement	-29,623.50
(70043) Essex Mad River Cross Sections Survey	-1,050.50
(70040) Spill Prevention Control & Countermeasure Plan	-2,734.75
(70042) 1 MG Reservoir Roof Replacement	-13,579.00
(70047) Trolley Car/Cable Inspection	-2,145.50
(70048) General Engineering - Essex	-3,056.00
(70048) General Engineering - Eureka	-1,337.00
(70048) General Engineering - Water Resources Planning Transport	-191.00
Total GHD	-53,908.25
Hach Company	
TRF lab supplies	-380.90
Total Hach Company	-380.90
Hamanaka Painting Company, Inc	
paint Collector 3 exterior	-4,424.54
Total Hamanaka Painting Company, Inc	-4,424.54
Hensel Hardware	
shop supplies	-46.71
TRF startup supplies	-22.80
installation of chlorine analyzer at TRF	-15.41
Total Hensel Hardware	-84.92
Hensell Materials	
Collectors 1 & 1A Lateral Replacement	-697.10
Fieldbrook-Glendale CSD Morris subdivision reservoir maintenance	-159.21
Total Hensell Materials	-856.31
Humboldt County Tax Collector	
Property Taxes 2016-17	-53.60
Total Humboldt County Tax Collector	-53.60
Humboldt Fasteners	
safety supplies	-27.18
Total Humboldt Fasteners	-27.18
Humboldt Redwood Company, LLC	
Mt Pierce Lease site	-257.63
radio power use January - June 2016	-5.77
Total Humboldt Redwood Company, LLC	-263.40
Hummel Tire & Wheel	
Unit 6 tires	-388.13
Unit 6 tires	-388.13
Total Hummel Tire & Wheel	-776.26
Keenan Supply	
Collectors 1 & 1A Lateral Replacement	-173.04
Replace Essex Septic System	-244.57
Total Keenan Supply	-417.61
Kernen Construction	
Replace Essex Septic System	-322.52
Total Kernen Construction	-322.52
Layne Christensen Company	
Collector 1 & 1A Rehabilitation Project - Progress Payment 2	-310,391.70
Total Layne Christensen Company	-310,391.70
Lisa Newell	
auto mileage reimbursement	-19.22
Total Lisa Newell	-19.22

Humboldt Bay Municipal Water District
Expenses by Vendor Detail

September 2016

Memo	Amount
McMaster-Carr Supply	
replace maintenance shop clock	-30.98
Total McMaster-Carr Supply	-30.98
Mendes Supply Company	
Essex office maintenance supplies	-99.21
Total Mendes Supply Company	-99.21
Mission Linen	
maintenance supplies	-114.19
Uniform Rental	-704.28
Total Mission Linen	-818.47
Mitchell, Brisso, Delaney & Vrieze	
Legal services August 2016	-372.00
Total Mitchell, Brisso, Delaney & Vrieze	-372.00
Napa Auto Parts	
Collector Oil filters	-16.49
Unit 1 repair	-137.46
TRF maintenance	-46.12
Total Napa Auto Parts	-200.07
Network Management Services	
EssentialCare Computer Support Service for Eureka office	-342.00
Guard-IT Security Service for Eureka office`	-139.99
Recover-IT Backup Solution	-124.99
Domain Management	-3.00
Umbrella- Security	-30.00
computer assistance	-358.41
Total Network Management Services	-998.39
North Coast Cleaning Services, Inc	
Eureka office building maintenance	-545.00
Total North Coast Cleaning Services, Inc	-545.00
North Coast Laboratories	
lab tests	-855.00
Total North Coast Laboratories	-855.00
North Valley Labor Compliance	
Collectors 1 & 1A Lateral Replacement	-900.00
Total North Valley Labor Compliance	-900.00
Northern California Safety Consortium	
monthly membership	-50.00
Total Northern California Safety Consortium	-50.00
O&M Industries	
Unit 5 step extension	-83.84
Total O&M Industries	-83.84
Occupational Health Services of Mad River	
DMV Physical	-67.50
DMV Physical	-67.50
Pre-Employment Physical	-225.00
Total Occupational Health Services of Mad River	-360.00

Humboldt Bay Municipal Water District
Expenses by Vendor Detail

September 2016

Memo	Amount
Pacific Gas & Electric Co.	
Ruth Bunkhouse	-60.54
Eureka office	-563.95
Jackson Ranch Rectifier	-20.06
299 Rectifier	-103.59
West End Road Rectifier	-121.58
TRF	-1,918.20
Ruth Hydro Valve Control	-27.28
Ruth Hydro	-41.33
Samoa Booster Pump Station	-1,692.12
Samoa Dial Station	-24.11
Essex Pumping August 1 - 31, 2016	-61,852.24
Total Pacific Gas & Electric Co.	-66,425.00
Pacific Paper Co.	
Eureka office supplies	-103.60
Total Pacific Paper Co.	-103.60
Pape Material Handling	
safety placard for forklift	-108.75
Total Pape Material Handling	-108.75
Paul Helliker	
auto mileage reimbursement to attend DWR&SWRCB water shortage contingency plan meeting	-332.35
expense reimbursement to attend DWR/SWRCB Urban Advisory Group meeting in Los Angeles	-378.96
auto mileage reimbursement to attend DWR/SWRCB Urban Advisory Group meeting in Oakland	-297.00
expense reimbursement to attend DWR/SWRCB Urban Advisory Group meeting in Oakland	-11.00
Total Paul Helliker	-1,019.31
Pitney Bowes	
refill postage meter	-500.00
postage meter supplies	-108.74
Total Pitney Bowes	-608.74
Recology Humboldt County	
Eureka office garbage/recycling service	-82.30
Total Recology Humboldt County	-82.30
Renner Petroleum	
cardlock fuel - pumping & control	-240.34
cardlock fuel - water quality	-240.34
cardlock fuel - maintenance	-240.34
cardlock fuel - customer service	-240.34
barrel for Collector 1 oil	-75.86
Ruth HQ bulk gasoline	-264.66
Ruth Hydro bulk gasoline	-264.67
Total Renner Petroleum	-1,566.55
Shape Products	
TRF supplies	-80.12
Total Shape Products	-80.12
Sitestar Nationwide Internet	
Essex Internet	-52.90
Total Sitestar Nationwide Internet	-52.90
Springville Safety/Supply	
First Aid kit supplies	-166.86
Total Springville Safety/Supply	-166.86
Staples	
Eureka office supplies	-255.38
Total Staples	-255.38
Steven A. Marshall	
expense reimbursement for Essex office supplies	-144.59
Total Steven A. Marshall	-144.59

Humboldt Bay Municipal Water District SECTION J2 PAGE NO. 16
Expenses by Vendor Detail

September 2016

Memo	Amount
Streamline	
Website maintenance monthly membership fee	-450.00
Total Streamline	-450.00
Sudden Link	
Eureka office Internet	-204.95
Essex office Internet	-124.95
Total Sudden Link	-329.90
Telstar Instruments, Inc	
TRF supplies	-302.00
Total Telstar Instruments, Inc	-302.00
Tessco Technologies, Inc	
Manila wireless mount	-314.57
Total Tessco Technologies, Inc	-314.57
The Mill Yard	
shop supplies	-39.39
Total The Mill Yard	-39.39
Thrifty Supply	
Collector 1 & 1A Lateral Replacement	-445.88
new gauge for CT tank	-117.27
replace check valves for 1-1, 1-2 & 1-4	-33,193.60
Replace Essex Septic System	-664.58
Total Thrifty Supply	-34,421.33
Trimark Associates, Inc	
Provide equipment and assist with installation for revenue metering	-14,586.00
Total Trimark Associates, Inc	-14,586.00
Trinity County General Services	
Pickett Peak site lease	-250.00
Total Trinity County General Services	-250.00
Trinity County Solid Waste	
Ruth HQ dump fees	-9.05
Ruth Hydro dump fees	-9.05
Total Trinity County Solid Waste	-18.10
Trinity Diesel, Inc	
freight charge for warranty part	-22.72
Total Trinity Diesel, Inc	-22.72
U.S. Bank Corporate Payment System	
computer equipment	-127.82
State Water Resources Control Inspection	-54.10
safety supplies	-267.59
vehicle maintenance Units 5 & 10	-89.96
sandblasting supplies	-51.88
Collectors 1 & 1A Lateral Replacement	-489.91
office supplies	-38.72
ACWA/JPIA Insurance Inspection	-22.90
travel expense to attend CSDA Financial Management for Special District seminar	-100.28
Total U.S. Bank Corporate Payment System	-1,243.16
USA Blue Book	
lab supplies	-106.94
Total USA Blue Book	-106.94
USTI, Inc	
eBills Humboldt Bay retail	-11.84
eBills Fieldbrook-Glendale CSD	-14.80
bill cards	-133.00
Total USTI, Inc	-159.64

10/06/16

Humboldt Bay Municipal Water District
Expenses by Vendor Detail

SECTION 52, PAGE NO. 17

September 2016

Memo	Amount
Verizon Wireless	
Operations 1	-1.65
Superintendent	-92.90
Unit 3	-70.53
Electrician	-0.22
Operations 2	-1.11
Water Operations Supervisor	-47.92
Maintenance Supervisor	-43.12
Electrician	-8.61
Unit 6	-5.89
Unit 6	-5.89
Assistant Water Operations Supervisor	-51.75
Spare Operations	-0.22
Total Verizon Wireless	-329.81
Zemarc Corporation	
Ruth Hydro oil samples	-737.09
Total Zemarc Corporation	-737.09
TOTAL	-568,449.85

Operations

Memo to: HBMWD Board of Directors
From: Dale Davidsen, Superintendent
Date: October 4, 2016
Subject: Essex/Ruth September Operational Report

SECTION J3a PAGE NO. 1

Ruth Lake, Upper Mad River and Hydro Plant

1. There was no flow at Mad River above Ruth Reservoir (Zenia Bridge) during the month of September.
2. The conditions at Ruth Lake in September were as follows:
 - a. The lake level on September 30, 2016 was 2641.11 feet which is:
 1. 6.72 feet lower than July 31, 2016
 2. 0.35 feet higher than September 31, 2015
 3. 0.45 feet higher the ten year average
 4. 12.89 feet below the spillway
3. No measurable rain at Ruth Headquarters during the month of September.
4. Ruth hydro power production was 160,800 kWh during the month.
5. The high discharge flow from the lake this month was 47 cfs on September 5th and the low release flow from the lake was 45 cfs on September 1st.

Winzler Control, TRF and Lower Mad River

6. The river at Winzler Control Center reached a high recorded flow of 47 cfs and a level of 20.8 feet on September 18th. The low river flow was on September 2nd with a flow of 42 cfs and a level of 20.8 feet.
7. The domestic water conditions for September were as follows:
 - a. The monthly turbidity average was 0.12 ntu, which meets Public Health Secondary Standards.
 - b. We metered 295.448 million gallons at an average of 9.848 mgd.
 - c. The maximum metered daily municipal customer use was 10.874 mgd on September 24th.
8. September 1st
 - a. New Maintenance Worker – Bruce Brashear’s first day. Bruce is doing very well and is an asset to the Maintenance Department.
 - b. I met with Pat Kaspari, Dr. Kate Panayotou & Jessica Hall at the Ma’lel dunes to look at pipe cover and discuss methods to stabilize the dunes over the pipe.
 - c. Met with City of Blue Lake and Tim Woodward regarding progress on the Blue Lake SCADA project for the District to monitor the Blue Lake system.
9. September 7th
 - a. Hamanaka painting started painting the outside of Collector 3


- b. Altec Industries was on site to do the Dielectric testing of the boom on unit 4, Manlift.
10. September 13th – Thavisak and I attended a Water Loss TAP workshop in Redding. This was a workshop to help districts fill out the forms for reporting water loss per SB 555.
 11. September 14th – Safety meeting – Trenching and Excavation Safety.
 12. September 20th – Far west corrosion control was on site to evaluate our Cathodic Protection system.
 13. September 21st
 - a. Safety Meeting – Scaffolding and forklift man basket use training.
 - b. I met with RPF Dan Greybill, Lin Dillion and Brian regarding the dead, dying and diseased trees around Headquarters and up the lake.
 14. September 26th-28th – CERTS (Crane & Equipment Regulatory Training and Services) was on site at Essex and Ruth to inspect our cranes and rigging.
 15. September 28th
 - a. Trimark, CAISO meter installer, was on site at Ruth to do there required survey of the meter location and gather data for moving forward with the new ReMat power contract.
 - b. Henry Hunt (Layne), Craig Thompson (West Yost Associates) was on site and gave an Engineer from Sacramento and a Rep from Roscoe Moss (well screen supplier) a tour of the Collector 1-1A project.
 16. Current projects underway with District staff
 - a. TRF maintenance for October start-up
 - b. Replace Essex Septic system
 - c. Samoa Peninsula telemetry upgrade



Humboldt Bay Municipal Water District Ruth Hydro Production Report - Since June 1983

	Total Kwh Production	Production for Period Ending 8/31/2016	Average Monthly Kwh Production
On Peak	11,464,053	29,979	28,732
Part Peak	56,361,597	34,217	141,257
Off Peak	80,919,773	59,111	202,806
Super Off Peak	25,804,926	24,225	64,674
Grand Total	174,550,349	147,531	437,470
Grand Total Revenues		\$8,562,819.60	
No. of Months of Operation		399	
Average \$/Kwh		\$0.0491	

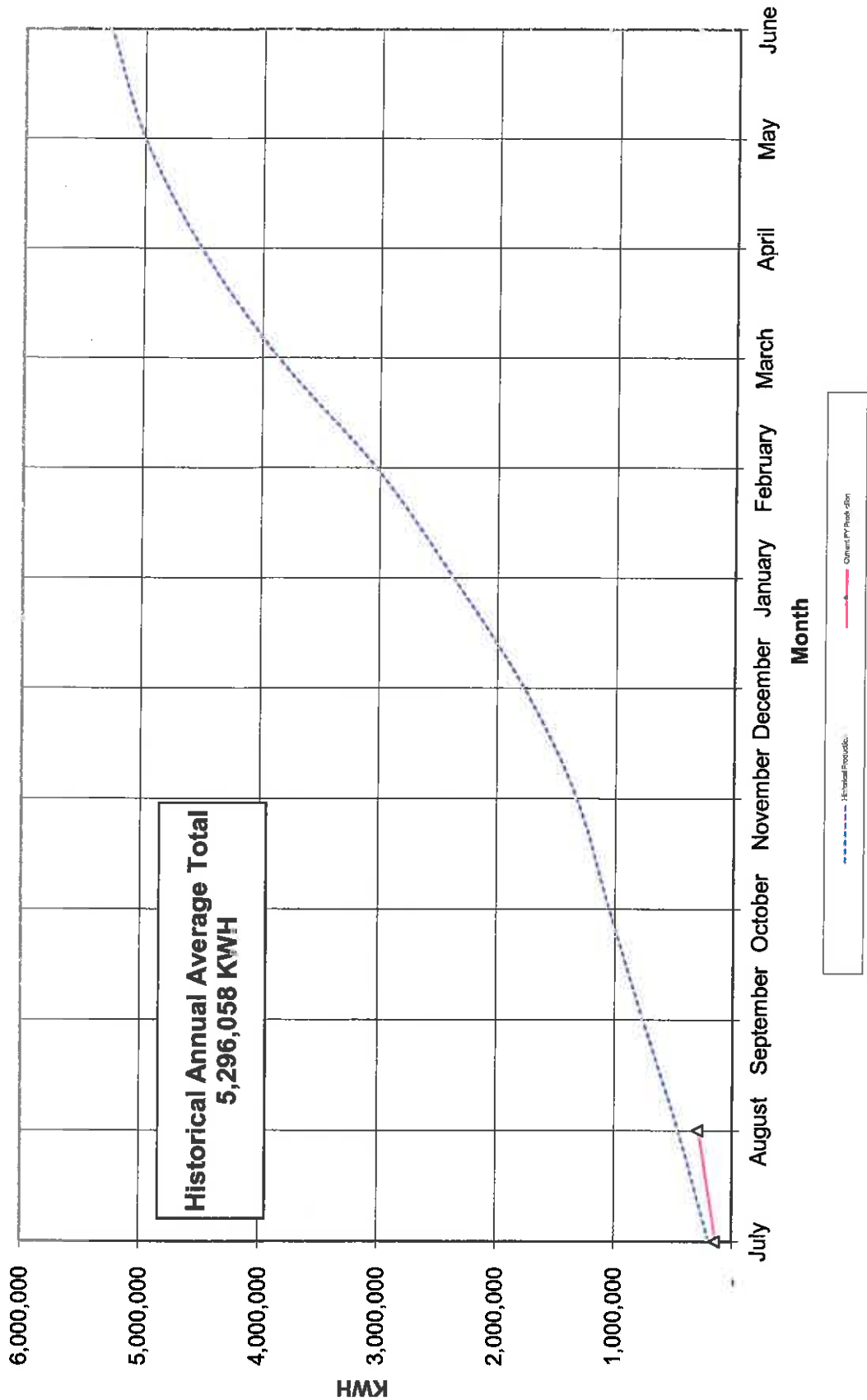
Confidential: Documents submitted under General Order 66-C, §§2.8 and PU Code §583

 Pacific Gas and Electric Company Purchase / Sales Invoice Invoice Number: 76752 Delivery Period Start: 08/01/2016 Delivery Period End: 08/31/2016 Invoice Date: 09/15/2016 Due Date: 09/30/2016 Log Number: 19H051 Account Code: 2320900 Meter Channel: LJ600B Contract Start: 04/10/1983	From: Pacific Gas and Electric Company 77 Beale Street San Francisco, CA 94105	To: HUMBOLDT BAY MWD P. O. Box 95 Eureka, CA 95501
	Contract Manager: Nancy Breckenridge Phone: 415-973-4092 Email: NJB6@pge.com	Project Name: HUMBOLDT BAY MWD Payment Method: CHECK Vendor Number: 1024538
	Settlement Analyst: Kimberly Song Phone: 415-973-5815 Fax: 415-973-9505 Email: K5SW@pge.com	Contact: Steve Marshall Phone: 707-822-2918 Fax: Email: ops@hbmwd.com

Payment Name	Quantity	Unit	Amount
Energy Payment 08/01/2016 - 08/31/2016	147.531	MWh	\$-4,495.31
As-Delivered Capacity Payment	123.307	MWh	\$-1,519.09
Net Total			\$-6,014.40

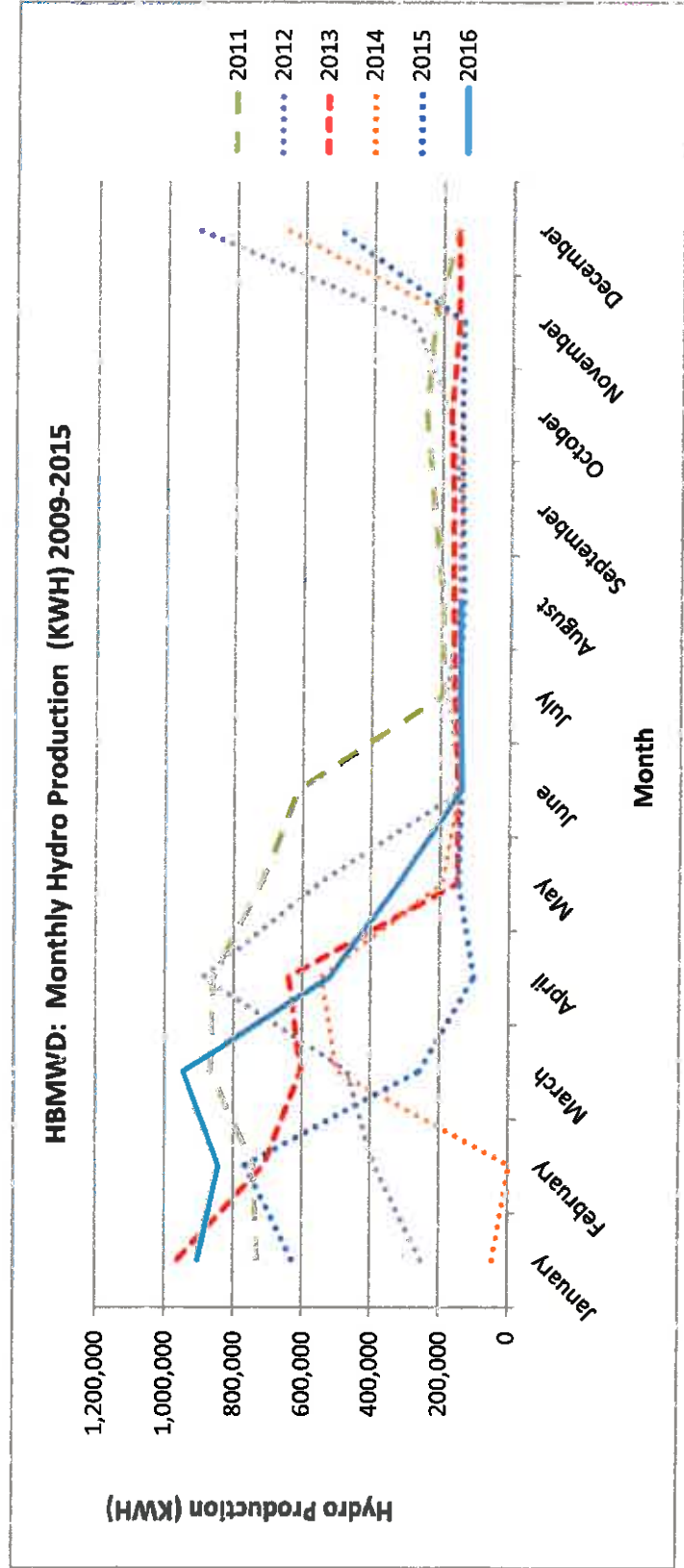
Total Amount Due to HUMBOLDT BAY MWD on Due Date: 09/30/2016	USD \$ 6,014.40
---	------------------------

**Historical vs. Actual Cumulative Production
Gosselin Hydroelectric Plant @ Ruth Lake
All Data In Kilowatt Hours**



**Humboldt Bay Municipal Water District
Monthly Hydro Electric Production (KWH) for CY2011 - 2016**

Month	2011	2012	2013	2014	2015	2016
January	731,895	255,300	962,724	47,002	632,611	907,103
February	743,385	390,898	713,055	0	769,170	848,575
March	868,396	470,351	605,327	501,812	261,555	950,250
April	862,182	892,452	642,402	545,893	106,258	523,573
May	720,776	553,888	152,795	196,968	151,803	323,636
June	613,500	138,181	152,044	147,630	143,055	142,248
July	197,448	186,027	164,775	149,503	150,599	147,564
August	196,872	151,424	168,428	148,220	140,977	147,531
September	224,463	147,850	169,768	145,020	145,468	
October	249,000	179,706	178,812	148,715	147,574	
November	226,807	282,768	157,195	148,816	145,196	
December	159,636	923,766	160,936	665,823	510,915	
Total Annual	5,794,360	4,572,611	4,228,261	2,845,402	3,305,181	3,990,480



ACWA

ACWA's 2016 FALL CONFERENCE & EXHIBITION

**BRINGING
WATER
TOGETHER**

November 29 - December 2, 2016
Anaheim, CA



BRINGING WATER TOGETHER

November 29 - December 2, 2016
Anaheim, CA

ACWA BRINGS WATER COMMUNITY TOGETHER IN ANAHEIM



Kathleen J. Tiegs
ACWA President

I'm thrilled to invite you to *"Bringing Water Together"*, ACWA's 2016 Fall Conference & Exhibition, November 29 - December 2 at the Anaheim Marriott. Come discover what unites us in this fascinating and vital world of California water, and let's bring together our seasoned leaders with the next generation of decision-makers to discuss the latest issues driving California water.

This year's conference will explore the increasing regulatory, environmental, and economic pressures that have pushed water agencies across California to find new ways to provide reliable and affordable service. With over 80 meeting and program sessions, the conference is designed to help your organization stay informed and updated on a variety of local, statewide and federal water issues and policies.

The conference also offers continuing education credits in the legal, financial, energy, and drinking water areas for professionals seeking contact hours. There will be multiple venues to network and connect with California's current and future water leaders. This conference is a "must attend" for those new to the water industry who desire a forum to gain knowledge, meet those currently in the industry and learn about professional advancement opportunities. So make sure you extend an invitation to up and coming leaders within your organization!

Don't forget to stop by the ACWA Exhibit Hall featuring vendors whose products and services offer a variety of solutions for your agency. From legal, financial and public relations, to software and energy solutions - don't miss your chance to see what's new in our industry!

So join us for *"Bringing Water Together"*, in Anaheim! I look forward to connecting with you so that we can grow and strengthen our industry together!

Warm regards,

A handwritten signature in black ink that reads "Kathleen J. Tiegs". The signature is written in a cursive style.

Kathleen J. Tiegs
ACWA President

CONFERENCE HIGHLIGHTS

WEDNESDAY OPENING BREAKFAST

Wednesday, November 30 | 8:00-9:45 AM

Unlocking the Science Behind Atmospheric Rivers



Dr. Martin Ralph, Director Center for Weather and Water Extremes, Scripps Institution of Oceanography, UC San Diego

Storms fueled by atmospheric rivers can make or break a water year in California. Dr. Martin Ralph is a leader in advancing scientific understanding of atmospheric rivers. The results of this cutting-edge research have the potential to improve short-term precipitation forecasting and operational decisions at key reservoirs to maximize water supply while maintaining public safety. Please join your colleagues for this insightful keynote presentation during the Opening Breakfast.

THURSDAY LUNCHEON

Thursday, December 1 | 11:45 AM-1:45 PM

Collaboration in Times of Changing Climate



Mary D. Nichols, Chair California Air Resources Board

Ten years after Governor Schwarzenegger signed AB 32 (Nunez), the Global Warming Solutions Act of 2006, Governor Brown has signed SB 32 (Pavley), which ends the State's climate change program and commits California to additional greenhouse gas emissions reductions. The California Air Resources Board (ARB) implements this program, including the Cap-and-Trade market with funding for projects to achieve such emission reductions.

Mary D. Nichols serves as Chair of the ARB. Governor Schwarzenegger appointed her to this position in 2007, and she continues

to serve in the position as Governor Brown's leader on climate change and clean air. Having been the USEPA Assistant Administrator of Air and Radiation during the Clinton Administration and the Secretary of the California Resources Agency during the Davis Administration, she brings broad experience to this role. Come hear Chair Nichols speak about the evolution of the State's climate change program, including cap-and-trade funding, renewable energy, and the need to collaborate on improved forest management to address the impact of frequent and severe forest fires on water quality, air quality and climate change.

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REGIONAL & STATEWIDE ISSUES

Wednesday, November 30 | 10:00-11:30 AM

Statewide Issue Forum

How Corporate California is Raising the Bar on Conservation and Sustainability

There has been tremendous focus on how individual Californians are responding to the drought. From changing out landscape to installing low-flow fixtures to taking shorter showers, individual Californians have made tremendous strides to reduce water use and change habits permanently. Corporate California is also taking major steps to improve water efficiency in its operations and processes. Companies large and small are also adopting sustainability programs to protect environmental values. This program will showcase these corporate water efficiency and sustainability initiatives.

Wednesday, November 30 | 10:00-11:30 AM

Region 8 Program

Think Global, Act Local: Why Local Projects Matter

Region 8 will host a program that will discuss the importance of local water supply reliability projects. Inconsistent State Water Project allocations and continued drought conditions have highlighted the need for local water supply reliability. This program will feature experts on a variety of water reliability projects including desalination, stormwater capture, and recycled water. The program will also include updates on water supply conditions on the Colorado River and the Owens Valley

Thursday, December 1 | 2:00-3:15 PM

Statewide Issue Forum

Emerging Framework for Long-term Urban Water Conservation Policy

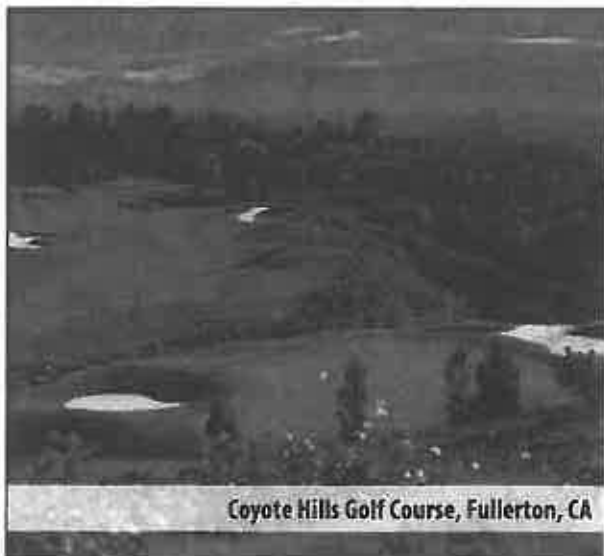
The Governor's Executive Order B-37-16 directs the Department of Water Resources and the State Water Resources Control Board to develop a "framework" for long-term urban water conservation policy that will help make water conservation "a California Way of Life". Come hear the latest details about this emerging "framework" and some perspective from a response panel representing water agencies engaged in this process.

Wednesday, November 30 | 2:00-3:15 PM

Region 1 Issue Forum

A New Frontiers in Water Operations: Atmospheric Rivers, Subseasonal to Seasonal Predictions and Weather Forecasting Technology

Atmospheric River-driven storms can make or break a water year in the West. An interagency, cross-disciplinary team of experts is exploring the viability of utilizing forecasts of atmospheric rivers and their heavy precipitation in operational decisions at key western reservoirs that have been plagued by drought. Such forecasts could provide sufficient notice of these events to enable prudent planning and adaptable operation so that water managers would be better positioned to maximize water supply while maintaining public safety. Additionally, water decisions across the West can benefit from longer lead time information on precipitation from weeks to seasons in advance. This program will provide an overview of atmospheric rivers, subseasonal-to-seasonal precipitation prediction needs, related weather forecasting technology, and their potential benefits to the future of water management.



Coyote Hills Golf Course, Fullerton, CA



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- **Popular Tuesday Welcome Reception (5:00-6:30 PM)**
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Visit www.acwa.com for details.

**EXHIBITOR
TECHNICAL
PRESENTATIONS**

Come learn about new tools and services available to the California water community by attending one of the eight Exhibitor Technical presentations during the conference

CONFERENCE PROGRAMS

Programs are subject to change without notice.

ATTORNEYS PROGRAMS

These programs are approved by the State Bar of California for attorneys to receive general MCLE credits.

Wednesday, November 30 | 10:00-11:30 AM

Groundwater Sustainability Agency Funding Options

A discussion of possible groundwater sustainability agency (GSA) funding options, including Proposition 26, Proposition 218 and other tools being used by those currently forming GSAs. Hear about what the drafters intended possible funding options to be when writing the Sustainable Groundwater Management Act (SGMA). Get the latest update on how courts interpret the use of Proposition 218 and Proposition 26 for imposing fees and charges. Finally, learn about what current GSAs are contemplating to raise money to form GSAs and prepare groundwater sustainability plans.

Wednesday, November 30 | 2:00-3:15 PM

Drought, Conservation Pricing & the Law

Thursday, December 1 | 9:30-11:00 AM

The Pitfalls of Transfers

Thursday, December 1 | 2:00-3:15 PM

State Water Resources Control Board Curtailments

In 2015, the State Water Resources Control Board imposed curtailments against pre- and post- 1914 water rights holders. They immediately pursued enforcement actions against two districts for violating the curtailments. The enforcement hearings were halted after the prosecution team put on their case after the districts moved to dismiss. The hearings have been closed and no more evidence will be taken. We are waiting for the written ruling from the Board. This panel will educate the audience about the shortcomings in the Board's curtailment process and enforcement action.

AQUATIC RESOURCES

SUBCOMMITTEE PROGRAM

Wednesday, November 30 | 2:00-3:15 PM

LA River Restoration: How's It Going?

In 2002, the City of Los Angeles began developing a Revitalization Master Plan for the Los Angeles River, targeting 32 of the 51 miles of river that travel through urban Los Angeles for environmental restoration and creation of open space, parks, and trails. How is this joint effort between the City of Los Angeles, the County of Los Angeles, and the US Army Corps of Engineers progressing? And what potential impacts and benefits will the restoration of the LA River have on water suppliers? Come to this session to find out!

ENERGY COMMITTEE PROGRAMS

These programs may count towards the Certified Energy Manager (CEM) continuing education credit.

Wednesday, November 30 | 10:00-11:30 AM

Energy Storage Wars

When the electricity mix that powers California's grid is composed of 50% or more renewable energy sources, energy storage will be a critical component in ensuring resource adequacy and grid stability. But with the array of energy storage technologies that are now available, which are the best investments? What are the advantages of batteries, pumped storage, and other technologies? Come to this session to learn the ins and outs of various technologies, and which might be a good investment for your water agency.

Wednesday, November 30 | 3:30-4:45 PM

Energy Efficiency for Water Agencies

These days, there is a lot of focus on new technologies that water agencies can incorporate into their operations in order to generate electricity and save money on energy bills. But let's not forget about energy efficiency. California offers opportunities for water agencies to receive free system efficiency audits, and even funding for system efficiency upgrades. Come to this session to learn how these programs work, and how they can help your agency save energy and money. Learn about funding opportunities from the Department of Water Resources, California Energy Commission, and individual electric utilities that might benefit your agency.

JOIN US FOR "THE BIG REVEAL"

Wednesday, November 30
we're holding a special
unveiling for our members.
Stay tuned.

Check the ACWA web site for updated conference information >> www.acwa.com

COMMUNICATIONS COMMITTEE PROGRAM

Wednesday, November 30 | 10:00-11:30 AM

Transparency 2.0: What You Need to Know about Public Records Act Requirements in the Digital Age

With the passage of recent legislation and an uptick in Public Records Act requests, transparency in the digital age is a growing area of focus for local public water agencies. Find out what you need to know about ever-evolving Public Records Act requirements and hear best practices and case studies from your colleagues for ensuring compliance and good customer communications and service.

FINANCE PROGRAMS

CPAs may receive continuing education credit by attending these programs.

Wednesday, November 30 | 10:00-11:30 AM

Forecasting Water Demand

For a water agency, demand forecasts are the foundation assumption underpinning long-term supply, capital and financial planning. This session will explore some of the challenges agencies face in developing these forecasts. What are some of the alternative ways to develop forecasts? How often should they be updated to reflect new information? How do we reconcile forecasts used for different purposes—e.g. supply and financial planning? How to consider the recent significant reductions in demand resulting from the drought? How do agencies understand/test the impacts of being wrong?

Wednesday, November 30 | 3:30-4:45 PM

Capital Markets & Capital Financing

The recent UK Brexit vote and economic trends in the national and world economy have resulted in the Federal Reserve postponing expected rate increases. Long-term municipal interest rates are near historic lows, indicating that it would be an excellent time to borrow funds to build capital projects. Come hear from experts regarding the outlook for interest rates and ways to take advantage of currently low rates.

Thursday, December 1 | 9:30-11:00 AM

Retail Rate Development and Financial Planning Tools

What are the tools available to agencies today to support retail utility rate development and long term financial planning? How are agencies using these tools? Do these tools lend themselves to supporting required financial disclosures associated with debt issuance and administration? When selecting a new financial planning model, or seeking to upgrade an existing rate model, what factors should agencies consider?

WATER INDUSTRY TRENDS PROGRAMS

These programs may qualify for attendees to receive drinking water certification credit approved by the State Water Resources Control Board.

Wednesday, November 30 | 2:00-3:15 PM

Drinking Water Issues Update

Facing challenging operating conditions and drinking water headlines in the news, water agencies remain focused on delivering safe drinking water to their customers. Learn more about how water agencies are responding to today's challenges and are communicating safe drinking water issues in the wake of Flint, toxic algae blooms and other issues, as well as how recent legislative and regulatory developments will affect water agencies moving forward.

Thursday, December 1 | 9:30-11:00 AM

Water Storage Issues Update

The California Water Commission has developed draft regulations that will establish the "rules of the road" for allocating Proposition 1's \$2.7 billion for new storage projects. Learn more about the Commission's process, how water storage project proponents are planning for the new regulations and other key issues related to the development of new water storage in California.

Thursday, December 1 | 2:00-3:15 PM

Water Recycling Issues Update

Key recent developments related to recycled water have the potential to impact the work of water agencies to develop and enhance their recycled water supplies. Representatives from the State Water Board and water agencies implementing innovative recycling projects will update you with the latest on what's happening in Sacramento and around the state.

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Water Replenishment
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Call 916-441-4545 for more
information about sponsorship.

THURSDAY DINNER & ENTERTAINMENT

DOLLY PARTON & CONWAY TWITTY TRIBUTE

Thursday, December 1 | 7:00-9:00 PM

Join your colleagues and friends during the ACWA 2016 Fall Conference & Exhibition Thursday Night Dinner celebrating two of country music's biggest icons. Sandy Anderson - A Dolly Parton Tribute and Mike Walker - Conway Remembered, will entertain you with all of the favorites performed by these two entertainers.



Sandy Anderson traded in working 9 to 5 for singing "9 to 5" when she began her award winning tribute to Dolly Parton a decade ago. The Las Vegas-based entertainer has even performed a duet with Dolly herself - the two of them charming fans at Dollywood with a sassy version of "Anything You Can Do I Can Do Better." She has portrayed Dolly with the world famous "Legends in Concert" show at such illustrious venues as the Imperial Palace and Harrah's in Las Vegas, The Grand Palace in Branson, and the Legends Theater in Myrtle Beach, SC.

Sandy truly becomes Dolly when she performs. Her glamorous costumes and wigs create a striking visual resemblance to the Country Music icon and her singing voice is a dead-ringer for Dolly's; setting the stage for a very memorable performance. She even includes the trademark Dolly comedy routine, which begins with, "It costs a lot of money to look this cheap."



Conway Twitty had 55 #1 hits. He left millions of fans all over the world. Mike Walker brings Conway back to the stage where Conway was most adored and remembered. "Conway Remembered", reflects Conway Twitty live in concert. As a well-loved country music artist, Conway Twitty's spirit lives on through the talent of Mike Walker despite Twitty's untimely death in 1993. Mike Walker will amaze guests with his stunning vocals and renditions of beloved Twitty songs, including 'Hello Darling,' 'Slow Hand,' 'Don't Take It Away,' 'After the Fire is Gone,' 'I May Never Get to Heaven,' and many more favorites. These heartfelt lyrics are performed by Walker with the same inflection and passion that Conway Twitty expressed over 20 years ago, pouring his heart and soul into every incredible song.

Attire is casual.

Western wear is encouraged.

2016 ACWA FALL CONFERENCE CONFERENCE AGENDA

Programs are subject to change without notice.

ACWA/JPIA - MONDAY, NOV. 28

- 8:30 - 10:00 AM**
 - ACWA/JPIA Employee Benefits Committee
- 10:15 - 11:15 AM**
 - ACWA/JPIA Executive Committee
- 1:30 - 4:00 PM**
 - ACWA/JPIA Board of Directors
- 4:00 - 5:00 PM**
 - ACWA/JPIA Town Hall
- 5:00 - 6:00 PM**
 - ACWA/JPIA Reception

TUESDAY, NOV. 29

- 8:00 AM - 6:00 PM**
 - Registration
- 8:30 AM - Noon**
 - ACWA/JPIA Seminar
- 10:00 - 11:45 AM**
 - Groundwater Committee
 - Local Government Committee
- 11:00 AM - Noon**
 - Outreach Task Force
- Noon - 2:00 PM**
 - ACWA 101 & Luncheon
 - Committee Lunch Break
- 1:00 - 2:45 PM**
 - Energy Committee
 - Finance Committee
 - Scholarship & Awards Subcommittee
 - Water Management Committee
- 1:30 - 3:30 PM**
 - ACWA/JPIA Sexual Harassment Prevention for Board Members & Managers (AB 1825)
- 3:00 - 4:45 PM**
 - Communications Committee
 - Federal Affairs Committee
 - Membership Committee
 - Water Quality Committee
- 5:00 - 6:30 PM**
 - Welcome Reception in the Exhibit Hall

WEDNESDAY, NOV. 30

- 7:30 AM - 5 PM**
 - Registration
- 8:00 - 9:45 AM**
 - Opening Breakfast *(Ticket Required)*
- 9:00 AM - Noon & 1:30 - 5:00 PM**
 - Exhibit Hall
- 10:00 - 11:30 AM**
 - Attorneys Program
 - Communications Committee Program
 - Energy Committee Program
 - Exhibitor Technical Presentation
 - Finance Program
 - Region Issue Forum
 - Statewide Issue Forum
 - Water Industry Trends Program
- 11:30 - 11:45 AM**
 - Prize Drawing in the Exhibit Hall
- 11:45 AM - 1:45 PM**
 - Luncheon *(Ticket Required)*
- 2:00 - 3:15 PM**
 - Aquatic Resources Subcommittee
 - Attorneys Program
 - Exhibitor Technical Presentations
 - Region Program
 - Statewide Issue Forum
 - Water Industry Trends Program
- 3:30 - 4:45 PM**
 - Energy Committee Program
 - Exhibitor Technical Presentation
 - Finance Program
 - Local Government Committee Program
 - Statewide Issue Forum
 - Water Industry Trends program

THURSDAY, DEC. 1

- 7:30 AM - 4 PM**
 - Registration
- 8:00 AM - Noon**
 - Exhibit Hall

8:00 - 9:15 AM

- Networking Continental Breakfast *(Ticket Required)*
- 9:30 - 11:00 AM**
 - Attorneys Program
 - Exhibitor Technical Presentations
 - Finance Program
 - Joint Communications / Groundwater Program
 - Region Issue Forum
 - Statewide Issue Forum
 - Water Industry Trends Program
- 9:30 - 11:45 AM**
 - Ethics Training (AB 1234) - *Limited Seating*
- 11:00 - 11:30 AM**
 - Prize Drawings in the Exhibit Hall
- 11:45 AM - 1:45 PM**
 - Luncheon *(Ticket Required)*
- 2:00 - 3:15 PM**
 - Attorneys Program
 - Exhibitor Technical Presentations
 - Federal Issues Forum
 - Statewide Issue Forum
 - Water Industry Trends Programs
- 3:30 - 5 PM**
 - Regions 1-10 Membership Meetings
- 6:00 - 7:00 PM**
 - Outreach Reception
- 7:00 - 10:00 PM**
 - Dinner & Entertainment *(Ticket Required)*

FRIDAY, DEC. 2

- 8:00 - 9:30 AM**
 - Registration
- 8:30 - 10:00 AM**
 - ACWA's Hans Doe Past Presidents' Breakfast in Partnership with ACWA/JPIA *(Ticket Required)*

OTHER EVENTS

- TUESDAY, NOV. 29**
 - 7:00 AM - 4 PM**
 - ACWA Fall Conference Golf Tournament *(Pre-Registration Required)*
- THURSDAY, DEC. 1**
 - 6:45 - 8:30 AM**
 - San Joaquin Valley Agricultural Water Committee

RCEA, RREDC



Redwood Region
Economic Development
Commission

REDWOOD REGION ECONOMIC DEVELOPMENT COMMISSION
520 E Street Eureka • California 95501 • (707) 445-9651 • FAX (707) 445-9652
Regular Meeting of the Board of Directors
At the Prosperity Center 520 E Street, Eureka, CA
September 26, 2016 at 6:30 pm
AGENDA

- 9/26 Meeting Cancelled*
- due to lack of quorum.*
- I. **Call to Order & Flag Salute**
 - II. **Approval of Agenda and Minutes**
 - A. Approval of Agenda for September 26, 2016
 - B. Approval of Minutes of the Board of Directors for August 22, 2016
 - III. **Public Input – for non-agenda items**
 - IV. **Program – Introduction to Leila Roberts – new Director of North Coast Small Business Development Center**
 - V. **Consent Calendar**
 - A. Acceptance of Agency-wide Financial Reports: August 31, 2016
 - B. Setting a higher limit for the RCB disbursement account
 - C. Approval of modification of RLF Plan
 - VI. **Reports – No Action Required**
 - A. Loan Portfolio Reports: August 31, 2016
 - B. Executive Director's Report
 - VII. **Old Business**
 - A. Discussion of Board Prioritization/ Strategic Planning Session
 - VIII. **New Business**

None
 - IX. **Member Reports**
 - A. Humboldt Bay Harbor, Recreation & Conservation District
 - B. City of Trinidad
 - C. City of Fortuna
 - X. **Agenda/Program Requests for future Board of Directors Meetings**
 - XI. **Closed Session**

Per California Government Code Section 54957 Public Employee Performance Evaluation,
Title: Executive Director Evaluation
 - XII. **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.

MEMBER AGENCIES

City of Arcata • City of Blue Lake • City of Eureka • City of Ferndale • City of Fortuna • City of Rio Dell • City of Trinidad
County of Humboldt • Humboldt Bay Harbor, Recreation and Conservation District • Humboldt Bay Municipal Water District
Humboldt Community Services District • Manila Community Services District • McKinleyville Community Services District
Orick Community Services District • Redwoods Community College District • Hoopa Valley Tribe
Willow Creek Community Services District • Orleans Community Services District • Redway Community Services District



Redwood Coast Energy Authority

633 3rd Street, Eureka, CA 95501

Phone: (707) 269-1700 Toll-Free (800) 931-RCEA Fax: (707) 269-1777

E-mail: info@redwoodenergy.org Web: www.redwoodenergy.org

RCEA BOARD OF DIRECTORS & CITIZENS ADVISORY COMMITTEE SPECIAL JOINT MEETING & COMMUNITY WORKSHOP AGENDA

MEETING LOCATION:

Wharfinger Building
1 Marina Way, Eureka, CA 95501

September 12, 2016
Monday, 5:30 p.m.

Redwood Coast Energy Authority will accommodate those with special needs. Arrangements for people with disabilities who attend RCEA meetings can be made in advance by contacting Lexie Fischer at 269-1700 by noon the day of the meeting.

Desired Outcomes of This Workshop

By the end of this meeting, participants will have...

- An understanding of:
 - The results of the July 28 Community Workshop
 - What Community Choice Energy (CCE) is and how it will benefit them and our community
 - The Redwood Coast Energy Authority's role in this program
 - CCE Goals
 - The implementation plan
- Have provided feedback on the proposed implementation plan

Light dinner will be provided, beginning at 5pm

I. BOARD & COMMITTEE ROLL CALL – 5:30pm

II. COMMUNITY CHOICE ENERGY PROGRAM

- Introductions and meeting objectives
- Community Choice Energy Overview – background, goals
- Implementation Plan
- Next steps

III. ADJOURNMENT – 7:30pm



Redwood Coast Energy Authority

SECTION 44, PAGE NO. 3

633 3rd Street, Eureka, CA 95501

Phone: (707) 269-1700 Toll-Free (800) 931-RCEA Fax: (707) 269-1777

E-mail: info@redwoodenergy.org Web: www.redwoodenergy.org

MEETING AGENDA

Redwood Coast Energy Resource Center
633 3rd Street, Eureka, CA 95501

September 19, 2016
Monday, 3:15 p.m.

Redwood Coast Energy Authority will accommodate those with special needs. Arrangements for people with disabilities who attend RCEA meetings can be made in advance by contacting Katie Koscielak at 269-1700 by noon the day of the meeting.

I. ROLL CALL

II. REPORTS FROM MEMBER ENTITIES

III. 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 & written 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.

IV. CONSENT CALENDAR

All matters on the Consent Calendar are considered to be routine by the Board and are enacted on 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.

- A. Approve Minutes of August 15, 2016 Board Meeting.
- B. Approve attached Warrants.
- C. Accept attached Financial Reports.

V. REMOVED FROM CONSENT CALENDAR ITEMS

Items removed from the Consent Calendar will be heard under this section.

VI. NEW BUSINESS

A. Community Choice Energy (CCE)- Operational Services Contracts

Approve a contract with Noble Americas Energy Solutions LLC, including all exhibits, for Community Choice Energy Program development and launch services and authorize the Executive Director to act as Contract Administrator with responsibility and authorization to administer the agreement including authority to transmit instructions, receive information, and implement the agreement on behalf of RCEA.

B. CCE - Technical Study

Accept Final Humboldt County Community Choice Energy Technical Study.

C. CCE - September 12 Community Workshop Report

- D. CCE - Implementation Plan and Proposed Power Portfolio Strategy
Approve Guidelines for Community Energy Program Launch-period Power Portfolio Strategy and Targets.

- E. CCE - Local Utility-scale Solar Site Request for Information
Approve Issuing a Request for Information Regarding Possible Sites for Local Utility-scale Solar Energy Projects.

- F. CCE - Local Biomass Request for Offers
Approve Process Guidelines for Development of a Request for Offers for Local Biomass Power.

- G. RCEA Staff Planning and Reorganization Update

VII. ADJOURNMENT

***The next RCEA Board of Directors meeting is scheduled for
Monday, October 17, 2016 at 3:15pm***



ACWA 2016 Fall Conference & Exhibition

PRELIMINARY AGENDA

November 29–December 2, 2016 | Anaheim Marriott

ACWA/JPIA - MONDAY, NOV. 28

- 8:00 – 10:00 AM**
 - ACWA/JPIA Program
- 10:15 – 11:15 AM**
 - ACWA/JPIA Executive Committee
- 1:30 – 4:00 PM**
 - ACWA/JPIA Board of Directors
- 4:00 – 5:00 PM**
 - ACWA/JPIA Town Hall
- 5:00 – 6:00 PM**
 - ACWA/JPIA Reception

TUESDAY, NOV. 29

- 8:00 AM – 6:00 PM**
 - Registration
- 8:00 AM – 11:45 AM**
 - ACWA/JPIA: Seminars
- 10:00 – 11:45 AM**
 - Groundwater Committee
 - Local Government Committee
- 11:00 AM – Noon**
 - Outreach Task Force
- Noon – 2:00 PM**
 - ACWA 101 & Luncheon
 - Committee Lunch Break
- 1:00 – 2:45 PM**
 - Energy Committee
 - Finance Committee
 - Scholarship & Awards Subcommittee
 - Water Management Committee
- 1:30 – 3:30 PM**
 - ACWA/JPIA: Sexual Harassment Prevention for Board Members & Managers (AB 1825)
- 3:00 – 4:45 PM**
 - Communications Committee
 - Federal Affairs Committee
 - Membership Committee
 - Water Quality Committee
- 5:00 – 6:30 PM**
 - Welcome Reception in the Exhibit Hall

WEDNESDAY, NOV. 30

- 7:30 AM – 5 PM**
 - Registration
- 8:00 – 9:45 AM**
 - Opening Breakfast *(Ticket Required)*
- 9:00 AM – Noon & 1:30 – 5:00 PM**
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 - Attorneys Program
 - Communications Committee Program
 - Energy Committee Program
 - Exhibitor Technical Presentations
 - Finance Program
 - Region Issue Forum
 - Statewide Issue Forum
- 11:30 – 11:45 AM**
 - Prize Drawing in the Exhibit Hall
- 11:45 AM – 1:45 PM**
 - General Session & Luncheon *(Ticket Required)*
- 2:00 – 3:15 PM**
 - Aquatic Resources Subcommittee
 - Attorneys Program
 - Exhibitor Technical Presentation
 - Region Program
 - Statewide Issue Forum
 - Water Industry Trends Program
- 3:30 – 4:45 PM**
 - Energy Committee Program
 - Exhibitor Technical Presentation
 - Finance Program
 - Statewide Issue Forum
 - Water Industry Trends program
- 4:00 – 6:00 PM**
 - Legal Affairs Committee
- 5:00 – 7:00 PM**
 - CalDesal Hosted Mixer
 - CH2M Hosted Reception

THURSDAY, DEC. 1

- 7:30 AM – 4 PM**
 - Registration
- 8:00 AM – Noon**
 - Exhibit Hall
- 8:00 – 9:15 AM**
 - Networking Continental Breakfast *(Ticket Required)*

- 9:30 – 11:00 AM**
 - Attorneys Program
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 - Water Industry Trends Program
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- 6:00 – 7:00 PM**
 - Outreach Reception
- 7:00 – 10:00 PM**
 - Dinner & Entertainment *(Ticket Required)*

FRIDAY, DEC. 2

- 8:00 – 9:30 AM**
 - Registration
- 8:30 – 10:00 AM**
 - ACWA's Hans Doe Past Presidents' Breakfast in Partnership with ACWA/JPIA *(Ticket Required)*

OTHER EVENTS

- TUESDAY, NOV. 29**
 - 7:00 AM – 4 PM**
 - ACWA Fall Conference Golf Tournament
- THURSDAY, DEC. 1**
 - 6:45 – 8:30 AM**
 - San Joaquin Valley Agricultural Water Committee

All conference programs are subject to change.