

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

Board of Directors Meeting

August 2018



MINUTES



Minutes for Meeting of Board of Directors

July 12, 2018

A. ROLL CALL

President Woo called the meeting to order at 9:00 am. Director Rupp conducted the roll call. Directors Fuller, Latt, Rupp and Woo were present. Director Hecathorn was absent. Director Fuller left the meeting at 2:10 pm. General Manager John Friedenbach, Superintendent Dale Davidsen, Business Manager Chris Harris and Board Secretary Sherrie Sobol were present. Pat Kaspari, John Winzler and Nathan Stevens of GHD and Paul Brisso, District Legal Counsel were present for a portion of the meeting.

B. FLAG SALUTE

President Woo led the flag salute.

C. ACCEPT AGENDA

Under the Ralph M. Brown Act, a legitimate immediate need can be acted upon even though it is not on the posted agenda. The Board must determine that there is an immediate need to take action and the need arose after the agenda was posted. Under the Ralph M. Brown Act, in order to add a qualified item to the agenda, it must be publicly identified so that interested members of the public can monitor or participate in the consideration of the item in question. Also, the Board must agree by consensus to discuss the item.

Based on the above-mentioned criteria, Mr. Friedenbach stated he would like the Board to consider an addition to the agenda under Operations. Yesterday, Mr. Davidsen received a bid for the Ruth Cabin Remodel that requires Board approval and cannot wait until the August meeting. The Board agreed by consensus to add the item to the agenda. On motion by Director Rupp, seconded by Director Latt, the Board voted 4-0 to accept the agenda as modified.

D. MINUTES

Minutes of June 8, 2018 Special Board Meeting and June 14, 2018 Regular Board Meeting

On motion by Rupp, seconded by Director Fuller, the Board voted 4-0 to accept the minutes of the June 8, 2018 and June 14, 2018 Board meetings.

E. PUBLIC COMMENT

There was no public comment.

F. CONSENT AGENDA

President Woo requested Item 1 be pulled. On motion by Director Rupp, seconded by Director Fuller, the Board voted 4-0 to accept the Consent Agenda less Item 1.

Item 1 Letter from District to Ruth Lake CSD re: quagga article

President Woo stated she sent the letter to Ruth Lake CSD based on previous discussion to keep communication lines open and keep them informed on topics of mutual interest. After brief discussion, the Board requested staff look into costs of mussel dog services to assist with the quagga inspections at Ruth Lake.

G. CORRESPONDENCE

Letter from Humboldt LAFCo re: Election Results-Special District Appointment to Humboldt County Consolidated Redevelopment Agency (RDA) Oversight Board

Mr. Friedenbach shared the letter from LAFCo announcing the election results with Director Rupp winning the election. Board and staff congratulated Director Rupp.



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Letter from District to LAFCo re: Proposed Langlois Lane Annexation

Last month, the Board discussed the response to LAFCo regarding the Langlois Lane Annexation. Mr. Friedenbach shared the resulting letter sent to LAFCo.

Letter from District to OAL Reference Attorney re: proposed Dam Inundation Map regulations

DWR requested comments prior to their adoption of the proposed Dam Inundation Map regulation. Mr. Friedenbach shared the District's comment letter noting that we are regulated by FERC and already have approved inundation maps in place with our Emergency Action Plan to FERC. The letters note that regulations on inundation maps for FERC and DWR are similar but not identical, however none of the differences materially affect the implementation of the Emergency Action Plan or the response of emergency personnel. The proposed requirement by DWR to revise existing inundation maps is overly burdensome, unnecessarily redundant and costly for dam owners with existing FERC compliant inundation maps.

2017 Quagga Inspection Report from Ruth Lake CSD

Mr. Friedenbach stated the report is for the 2017 calendar year. We normally receive the report in January and discuss it at our Joint Board Meeting with Ruth Lake CSD. Given the management changes, we did not receive it until after the joint meeting. Director Fuller inquired how this report compared to previous ones and Ms. Harris provided a graph noting the differences. The Board expressed concerns regarding the thoroughness of inspections based on feedback from recent boaters at the lake. They suggested sending a letter to Ruth Lake CSD expressing concerns and offering a refresher course on the Quagga Inspection process.

H. CONTINUING BUSINESS

Water Resource Planning

Mr. Friedenbach stated there is not much to report. He signed the grant agreement for the instream flow project and is waiting for the executed agreement and notice to proceed. Once the notice to proceed is received, a meeting will be scheduled with the grant partners to discuss next steps. Later in the afternoon, he received the finalized agreement and notice to proceed.

Cannabis Grows affecting Mad River Watershed

The County is now allowing hoop houses in the flood plain. They are supposed to be temporary from April to October. The Board and staff expressed concern regarding follow up and enforcement of regulations.

RCEA Public Agency Solar Program

As previously noted, the District is participating in the program. Data is still being gathered to complete a feasibility study. Mr. Friedenbach stated he will bring the study to the Board once he receives it. He also shared the names of several other public agencies participating in the program.

I. NEW BUSINESS

NCRP Prop 1

Mr. Friedenbach stated the next round of solicitations will be out in early 2019 and due to the DWR in April 2019. He suggested the District request a grant for Collector 2 rehabilitation, however package it differently from previous grants. The Board liked the idea of the project and new approach.

Agreement with City of Arcata re: meters on District lines

Ms. Harris stated that a new project on Alder Grove Road in Arcata is requiring the installation of



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a fire water service line. The City of Arcata has asked to connect the new fire water service line directly to the District’s transmission line. She provided background on three other meters that were installed on West End Road in the 1970’s that connected directly to District lines. In the past, it was clearly documented that the City of Arcata is the entity selling water to the facilities and providing the billing. The District only reads the meters. Staff has discussed the new request and is supportive. The District would include any water consumption on the monthly wholesale invoice, and the City of Arcata would again be responsible for billing the customer for the additional fire line service. Management staff is also supportive of the City of Arcata completing the required work with District staff onsite to observe. Staff requests permission to draft an agreement to be reviewed by the District’s legal counsel outlining the District’s position for the meters on the HBMWD lines. The agreement will note any water usage through the meters with the monthly wholesale invoice for the City of Arcata, as well as give the responsibility of billing the retail customers to the City of Arcata. Once drafted and reviewed, staff requests approval to enter into an agreement with the City of Arcata. The Board concurred and directed staff to enter an agreement with the City of Arcata for the new fire service water line.

Conflict of Interest “no amendment required” filing

Ms. Harris stated the Conflict of Interest Code is reviewed biennially to determine if the code is accurate and meets all current requirements. Staff reviewed the Fair Political Practices Commission website for new releases or changes to our code as amended on August 2014. At this time, there are no recommendations for amendments. Staff recommends the Board approve the District’s 2018 Local Agency Biennial Notice with a response of no amendment is required. On motion by Director Fuller, seconded by Director Latt, the Board voted 4-0 file a notice of no amendment required.

J. REPORTS (from Staff)

1. Engineering

Blue Lake-FG CSD Water Line Replacement over Mad River (funded by Prop 84 NCIRWMP grant and FEMA Hazard Mitigation Grant)

Staff received an updated construction schedule. The drilling contractor will be starting a few weeks late due to problems on other job. This means the valve replacement and shut down will now occur in early September. Customers will receive written communication as well a phone call prior to the shutdown. Mr. Kaspari stated the letter to County certifying the CEQA document was sent out for the Prop 84 grant.

Surge Tower Replacement

Mr. Kaspari stated there’s not much to discuss. Staff submitted the latest quarterly report and the project must be completed by the end of 2019.

12kV Replacement

Mr. Kaspari stated that CEQA on this project will likely be a Negative Declaration. Mr. Friedenbach provided background on the negotiations with North Coast Rail Authority for the lease of their property for the 12kV Switch Gear sight which is out of the flood plain. A new license agreement was drafted for a term of 50 years. This is much better than the previous version with 30 years. Also, the previous termination time frame was a notice of 6 months. The new notification period is 60 months. Legal Counsel Paul Brisso was present for the discussion given the legal agreement and the recent proposed legislation SB 1029 Sponsored by Senator Mike McGuire. SB 1029 proposes to abolish the NCRA and replace it with the Sonoma-Marin Area Rail Transit District (SMART) and the Great Redwood Trail Agency (GRTA). GRTA would receive the “rights, privileges, and responsibilities, excluding any



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preexisting liability related to debt, litigation, or contractual obligations, related to its [NCRA] right-of-way north of mile post 142.5”. President Woo inquired what becomes of our agreement with NCRA if the legislation goes through. Mr. Brisso stated the agreement would be binding on the successor agency so it would still be valid. Staff recommended approving the revised agreement with NCRA. The Board expressed concern regarding the “landlord” agency not extending the license agreement after 50 years. Mr. Brisso stated the District could potentially exercise eminent domain. It is a different legal test versus a private individual. When one public entity is trying to get property from another public entity, we would need to prove that our need, the ability to provided clean, reliable water, is greater than the other public purpose. Director Latt concurred. On motion by Director Rupp, seconded by Director Fuller, the Board voted 4-0 to approve the revised NCRA agreement.

Collector Mainline Redundancy Hazard Mitigation Grants

Mr. Kaspari stated the grant application was submitted and we are awaiting a response.

Reservoir Structural Retrofit Hazard Mitigation Grant Application

Mr. Kaspari stated this grant application was submitted by the July 1 deadline. There was a change in the Local Match Fund Commitment Letter. The original grant was in the amount of \$2,686,500. The correction version that was sent in with the application is for \$2,742,750. The match amount increased by \$18,750 from \$895,500 to \$914,250. He apologized for not getting an accurate letter to the Board the first time.

Single Line Industrial Slough Crossing Hazard Mitigation Grant Application

The grant application for this project is due September 1st and staff is working on it.

Matthews Dam Spillway Analysis NOI

There is nothing to report as CalOES has not yet responded.

Axel Property Development

Mr. Friedenbach shared the letter to the City of Arcata Community Development Department continuing to oppose the Axel development as proposed. The District continues to oppose the project because the buildings are up against our easement. The easements are in place to allow the District access to the water line in case of emergency or repairs. As designed, if the District needs to access the water line, their buildings could be potentially taken down to allow the necessary access. John Winzler concurred and added that he has concerns regarding construction of the buildings on the property. Given the close proximity to the District’s water line, if heavy equipment is on our easement, it could cause the line to collapse. Based on the design drawings, they will have to be on the District’s easement to construct. Mr. Friedenbach stated he suggested all parties meet to discuss the concerns and the meeting is scheduled for the 27th of this month. Legal Counsel Paul Brisso and District Engineer Pat Kaspari will be attending as well.

2. **Financial**

Financial Report

Ms. Harris provided the June 2018 financial report. She provided a revised Statement of Fund Balances which reflects the current balance at the end of the fiscal year since all the numbers are in. Director Latt reviewed the bills and stated all looked good. He did request additional documentation on one of the bills which was provided to him. On motion by Director Rupp, seconded by Director Latt, the Board voted 4-0 to approve the June financial report and vendor statement in the amount of \$319,349.83.



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FY 2018/19 Budget – presentation of proposed total budget and revenue estimates

Ms. Harris provided a quick recap of the proposed budget. There are no changes except for the Employee Benefits portion of the budget. Staff recently learned from JPIA that there will be no increases to health insurance rates. As a result, the employee benefits budget was reduced by approximately \$17,000. This results in a corresponding reduction in charges to wholesale customers. Staff is also recommending a 3% COLA. On motion by Director Rupp, seconded by Director Fuller, the Board voted 4-0 to approve the 2018/19 budget as proposed with a 3% COLA.

Letter from County Treasurer summarizing interest earned report for quarter ending March 2018

Ms. Harris reviewed the Interest Apportionment Rate letter from the County. During the quarter ending March 2018, District funds in the County Treasury earning an annualized interest rate of 1.5% compared to LAIF which earned 1.51%.

Water Loss Audit Reports and Validation

Ms. Harris stated that since Governor Brown declared a “State of Emergency-Drought” on January 17, 2014, there has been an increase in legislative and regulatory items that have impacted water use and reporting in California. One area, water conservation by means of identification and reduction of both real and apparent water losses through urban water distribution systems has become a major focus to improve the efficiency of the state’s water systems. Beginning with this year’s Water Loss Audit Report due on October 1, 2018, all agencies that are required to complete this report have the additional requirement of having it reviewed and validated by a third-party Water Loss Audit Validator. This new third-party validation directly impacts the District and four of the seven Municipalities the District provides water service to. The American Water Works Association (AWWA) is tasked with certifying Water Loss Audit Validators on behalf of the SWRCB. Certification requires familiarity with the Water Loss Audit Reporting software, the components required to complete the audit, as well as completion of required validation training and certification exam. Ms. Harris attended the two-day training and stated it was one of the more difficult exams she has taken, but she is now an official certified Water Loss Audit Validator. She is currently one of only 66 certified Water Loss Audit Validators in California. The Board and staff congratulated Ms. Harris on her accomplishment.

Ms. Harris thanked the Board and stated that with this certification, there is also the potential to validate other municipalities. Revenue (if any) generated from this service would be refunded to the District’s Municipal Customers via Price Factor 2 reconciliation at the end of the year. Staff shared with the Board four options for providing validator services. After discussion, staff and Board concurred that Ms. Harris would only validate other agencies currently being serviced by the District, time allowing, at no charge, based on the PF2 reconciliation. Director Latt suggested an MOU and one year trial on the process.

3. Operations

June Operational Report

Mr. Davidsen provided the June Operational Report. Mr. Dean Adams of the Humboldt County Hazardous Materials Unit conducted an inspection of the Essex facility. He found everything in good order and there were no violations. The rebuilt transformer was installed in Collector 2, the log boom and spillway at Ruth were inspected and there were no issues. Staff attended a variety of trainings including: Water Systems Security, Forklift Safety and practical test were conducted



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at the Safety Meeting, and First Aid/CPR/AED training also took place. Mr. Davidsen reported out on his attendance at the AWWA annual conference where he was a co-presenter along with Henry Hunt. They discussed the Ranney well lateral replacement. Mr. Hunt used the District's Collector 1-1A rehabilitation project as his presentation project. Mr. Davidsen also attended training sessions on topics such as decontamination of pipelines, cyanotoxin risk communication, solving problems with Sodium Hypochlorite Systems. Director Rupp thanked Mr. Davidsen for representing the District and co-presenting our Collector 1-1A project. Mr. Davidsen thanked the Board and Mr. Friedenbach for supporting his attendance at educational forums such as the AWWA.

Surplus Equipment

Mr. Davidsen provided a list of pump motors no longer needed that he'd like the Board to declare as surplus. On motion by Director Rupp, seconded by Director Latt, the Board voted 3-0 to declare the items surplus. Director Fuller left the meeting prior to the discussion.

Ruth Lake Cabin Remodel

Mr. Davidsen shared that he just received the Ruth Cabin remodel bid from True North Constructors yesterday evening. The bid came in higher than anticipated at \$500,842. Staff and the Board discussed several options, including consideration of a manufactured home. On motion by Director Latt, seconded by Director Rupp, the Board voted 3-0 to counteroffer with \$475,000 and if not accepted, go back out to bid. Director Fuller was not present for the discussion.

K. MANAGEMENT

CSDA

Mr. Friedenbach shared the Humboldt Area Chapter minutes from the June meeting. He also stated the local chapter is hosting a Sexual Harassment Prevention Training on August 6th.

Ruth Lake CSD (RLCSD) Minutes

As part of the effort to improve and keep the lines of communication open, Mr. Friedenbach included the March and April Board minutes for RLCSD.

Generator claim to JPIA

Mr. Friedenbach stated he made an erroneous assumption that the District's deductible for the generator was \$25,000. The deductible is actually \$50,000. As a result, the District will not be receiving any reimbursement from JPIA for the generator.

L. DIRECTOR REPORTS & DISCUSSION

1. General -comments or reports from Directors

Director Rupp stated he will not be able to attend the September 13 Board meeting.

2. ACWA – JPIA

Director Rupp stated he attended the Employee Benefits Committee meeting. There will be no increase in the cost of health insurance. They will instead absorb the costs with their reserves. They also selected a new pharmaceutical manager and expect to see some substantial savings over the next three years.

3. ACWA

Director Rupp stated he attended the ACWA Finance Committee. They discussed the fact that OPEB will be required to be shown on the Balance Sheet. ACWA's is around \$500,000. Ms. Harris noted that the District currently shows OPEB on our balance sheet.



HUMBOLDT BAY MUNICIPAL WATER DISTRICT
828 7th Street, Eureka



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Mr. Friedenbach stated he received an email from Tim Quinn of ACWA regarding participation in a Greenhouse gas reduction working group. The ACWA Board of Directors has identified the area of greenhouse gas (GHG) emissions reductions and renewable energy policy as a priority policy for 2018-19. To help facilitate this a Working Group is being established to help develop policy principles in this area. Mr. Friedenbach inquired if the Board felt the need for a staff member to participate on this committee. They did not.

4. Organizations on which HBMWD Serves: RCEA, RREDC

President Woo reported out on RCEA. She has been working with their legal counsel on their Conflict of Interest Code, there is a new budget committee, and a wind energy contract is being worked out. She also noted their minutes are improving.

Director Latt reported out on the RREDC meeting. He stated Michael Kraft, senior project manager and consultant with Sequoia Personnel Services was the guest speaker. He shared that unemployment rates in Humboldt County are at an all-time low. The new direct flights from Arcata to Los Angeles seem to be going well.

ADJOURNMENT

The meeting adjourned at 3:49 pm.

Attest:

Sheri Woo, President

J. Bruce Rupp, Secretary/Treasurer

CONSENT

RUTH LAKE COMMUNITY SERVICES DISTRICT
Minutes of May 10, 2018
Board of Directors Meeting

I. Call to order

Flag Salute

A. Meeting was called to order at 4:04 pm by Dennis Johnson

B. Board Members present: Susan Gordon, Debra Sellman, Brian Nicholson, Dennis Johnson

C. Board Member Absent: John Wise

D. Other present: Mike Francesconi, Margaret Kiser, Cynthia Lofthouse, Gillian Toerpe,
Ann Krupa and Melony Higgins

II. Approval of the Agenda:

A. Consider Approval of the Agenda

1. Motion: Brian Nicholson and Susan Gordon to approve the Agenda for May 10, 2018.

II. Approval of Minutes:

A. Consider approval of minutes of Regular Board Meeting April 12, 2018, April 16, 2018

B. Motion: Motion was made by Debra Sellman and seconded by Brian Nicholson to approve the minutes of April 12, 2018 and April 16, 2018 with corrections.

Motion Carried: Brian Nicholson, Susan Gordon, Dennis Johnson and Debra Sellman.

IV. Public Comment:

A. Melony Higgins with STVFD asking for a donation. This would help provide maintenance for the Ruth truck and repair the jaws of life for Hetten Valley and Mad River. This will be but on the agenda in June to give STVFD \$15,000

B. Ann Krupa from STAR asking for a donation for new ambulance. This will be on the agenda in June to give STAR \$15,000.

V. Supervisor's Report:

A. None

VI. Correspondence:

A. Projects being approved for Lease Holders. Communication through email from Lease Holders helpful.

VII. Items for Board action and Investigation:

A. Mike Francesconi is looking for a Marquette to be placed out near the road this item is not very cheap. Mike will bring more information to a later meeting.

B. Water filtration for Hobart and Barlow test source Potable Water from both places. Both systems well chlorinated, drinkable water. Negative for E-coli and other test items. All test done in Arcata.

C. Marina steps will be done in the fall. Mike will get an estimate and have that

Information for the August Meeting.

- D. Widen of Old Ruth boat ramp. Need to get number count of boats using the ramp.
Will get an estimate for August meeting.
- E. Approve to put Cynthia as check signing.

VIII. Board Items:

- A. Salary schedule is ok.
- B. Camp host for Hobart Eric Godlewski will be the night watch person. Mike spoke to the Attorney in regards to job duties. Will hire on and he will do lite duty jobs.

IX Manager Report and Update


- A. Looked over Financial
- B. Letters will be sent out for past due lease payments.
- C. Community Hall
 - 1. Board agrees to having the blood bank at the Community Hall.
- D. New patio boat comes in on 5-11-2018.
 - 1. Boat count 1100 for 2017 season. Down from other seasons.
- F. Fishing Derby being held May 19, 2018.
- G. Long term parking policy needs to be put in place.
- H. Leases all approve on tree removal.

X. Closed Session: 6:06pm

- A. Personnel
 - 1. Legal updates
 - 2. Updates on past employee.
 - 3. Payroll summary.

Adjournment: 6:20pm


Submitted by _____ Date 7-13-18


Approved by _____ Date 7-13-18

RUTH LAKE COMMUNITY SERVICES DISTRICT
Minutes of June 14, 2018
Board of Directors Meeting

I. Call to order:

Flag Salute

- A. Meeting was called to order at 4:05 pm by Brian Nicholson
- B. Board Members present: Debbie Sellman, Susan Gordon, Brian Nicholson
- C. Board Members Absent: John Wise and Dennis Johnson
- D. Other present: Mike Francesconi, Gillian Toerpe, Cynthia Lofthouse

II. Approval of Agenda:

A. Consider Approval of the Agenda

- 1. Motion: Debra Sellman and Susan Gordon approved the Agenda for June 14, 2018.

III. Approval of Minutes:

A. Consider approval of minutes of Regular Board Meeting May, 10, 2018.

- B. Motion: Motion was made by Susan Gordon and seconded by Debra Sellman approve the minutes of May 10, 2018 with corrections.

Motion Carried: Brian Nicholson, Susan Gordon, Debra Sellman.

IV. Public Comment:

- A. None

V. Supervisor's Report:

- A. None

VI. Correspondence:

VII. Updates of District Projects:

A. HBMWD/RLCSD overview of meeting

- 1. Clean up of lake debris along the shoreline. Mike is also checking on the abandoned docks. Will send out letters to owners to have docks repaired.
- 2. John and Mike are looking into grant programs.
- 3. Clearing of trees.
- 4. Water filtration registering Hobart with the state. Barlow does not have a chlorination system.

5. Mike will continue to test for E. coli at Barlow send out for testing to keep compliant.
6. Dennis and Mike are reviewing the widening of the ramp at Old Ruth. Cost could be large amount.
7. Mike has a class for water certification in Redding on September 15, 2018. There will be another class in November 2018 or January 2019.

VII. Items for Board Action and Investigation:

A. Payment approvals.

1. Payment to Trinity Waste Management was approved by Debra Sellman.
2. Motion to pay SDRMA General Liability \$14,280.87 was approved by the board
3. Motion to pay SDRMA Workers Comp \$ 9,508.33 was approved by the board.

B. Lease Lot Transfers and Changes.

1. Lease lot transfer #40 from Richard & Patricia Cahill to The Richard and Patricia Cahill Living Trust. Was approved by Susan Gordon, Debra Sellman second the motion. Approved by the board.
2. Lease lot # 95A Jerry and Virginia Meadors would like to be removed from the lease and assign who are already on the lease Ted and Angela Murray. Paper work needs to be completed before board will approve.

C. Humboldt T.R.A Summer Festival.

1. We allow the use of campsites. Buck donates a boat. Gillian a campsites.

D. Coast Central Signature List.

1. Omit Valerie Davis and Margaret Kiser.
2. Keep Buck. Mike wanted to remove Gillian Debra felt that it was a good idea to have four signers.
3. No pre-signed checks in safe.
4. Motion to keep Gillian, Buck and Mike and add Cynthia. Motion to approve Debra, second the motion Susan. Board was all in favor.

VIII. Managers Report and Update.

A. Financial

1. Marina up income Campground down per report.
2. Lease payments still outstanding Patricia Gregg, Mark & Heidi Varshock and Michael Megowan. We had a in correct address for Donald Thompson this has been corrected and a new statement has been sent.
3. Lease site unpaid letters have been sent out to the above leasers.
4. One more payment has been made on Attorney fees.
5. Lehto has paid for returned check and lease.
6. Returns check should be charge at \$20.00. Place on statement.
7. Marina sticker count for up from last year at this time.
8. Campground quiet.

Information for the August Meeting.

D. Widen of Old Ruth boat ramp. Need to get number count of boats using the ramp.

Will get an estimate for August meeting.

E. Approve to put Cynthia as check signing.

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1. Boat count 1100 for 2017 season. Down from other seasons.

F. Fishing Derby being held May 19, 2018.

G. Long term parking policy needs to be put in place.

H. Leases all approve on tree removal.

X. Closed Session: 6:06pm

A. Personnel


1. Legal updates

2. Updates on past employee.

3. Payroll summary.

Adjournment: 6:20pm


Submitted by _____ Date 7-13-18


Approved by _____ Date 7-13-18

Mad River Union
Aug 8, 2018

Election

Are you ready to serve your town? Sign up!

♦ FROM A5

• **McKinleyville Community Services District Board of Directors:** There are three open seats on the MCSD Board of

Directors. This is the unincorporated community's version of a city council. The influential board oversees sewer, water, streetlights, open space maintenance, parks and recreation in McKinleyville. That may not sound too sexy, but the district really is the seat of power in Mack Town.

To run for the board, you must be a registered voter living within the district's boundaries. There's no cost to sign up and you don't

need to gather signatures. To sign up, go to the Humboldt County Office of Elections, 2426 Sixth St. in Eureka. If you win one of the four-year seats, you'll make a whopping \$125 per regular board meeting.

• **Trinidad City Council:** There are three seats available on the action-packed council for the seaside village. Councilmembers only make \$50 a month, but are compensated with glory, good

cheer and the never-ending thankfulness of their fellow citizens. Candidates must be registered voters living within the city limits and must obtain at least 10 signatures from voters registered within Trinidad. If you plan on running, contact the Trinidad City Clerk regarding the deadline.

• **Humboldt Bay Harbor, Recreation and Conservation District Board of Commissioners:** There are two open seats, one for Division Three (Arcata, Manila, Blue Lake) and one for Division Four (Eureka, Samoa). Commissioners receive a stipend of \$400 a month, with the president getting an extra \$100. Sign up at the Humboldt County Office of Elections, 2426 Sixth St. in Eureka.

• **Manila Community Services District:** There are two seats available on this board, which has seen its fair share of drama over the last couple of years. You must be a registered voter living within the district and have a strong stomach. No signatures required. If you are elected, you earn \$90 for each regular meeting and \$50 for special meetings. If you are appointed as the finance officer, you'll make an extra \$115 a month to compensate for all the check writing.

♦ UNION EDITORIAL

Wanted: A few good candidates

Humboldt County residents have an opportunity this November to not only influence local government, but to become part of it. There are numerous seats available on city councils, special districts and school boards.

Rather than being an armchair critic and complaining about how government is run, you can get elected, take a leadership roll and show everyone how things should be done. All you need to do is sign up and convince your neighbors that you're fit for the job.

The deadline for signing up is Friday, Aug. 10 at 5 p.m. If an incumbent fails to sign up to run for a particular race, then the deadline will be extended to 5 p.m. Wednesday, Aug. 15.

Below are some of the seats up for grabs:

- **Arcata City Council:** There are two open seats on the council, which is the pinnacle of power in our ecotopia. Candidates must be registered voters living within the Arcata city limits. Nomination papers are available at Arcata City Hall, 736 F St., Arcata. Candidates must gather a minimum of 20 signatures from voters registered at an address within the city limits. Councilmembers receive a salary of \$668.84 and full health insurance. Those are some sweet bennies.

ELECTION ♦ A6

• **Humboldt Bay Municipal Water District:** There are two open seats on the HBMWD Board of Directors, one for the Fifth District and one for the Fourth District. That means you must live in those districts to run for those seats. The HBMWD is the wholesale supplier for Arcata, McKinleyville, Blue Lake, Manila, Eureka and the Cullen area. Board members are paid \$160 per board meeting and \$80 for each committee meeting. They receive vision and dental insurance and are enrolled in the employee assistance plan, which offers a variety of counseling programs. They also receive medical flight insurance for themselves and their families.

There are also open seats on the Arcata Fire Protection District, Northern Humboldt Union School District and elementary school boards in Big Lagoon, Blue Lake, Jacoby Creek, Kneeland, Arcata, Trinidad and Eureka.

For a full list of open seats and more information, visit the Humboldt County Office of Elections website at humboldt.gov/org/890/Elections-Voter-Registration. Election Day is Nov. 6.

Years later, Evergreen Pulp likely not to pay for Samoa pulp mill emergency cleanup it caused

Company could walk away without repayment of \$16M emergency response

By Will Houston, Eureka Times-Standard

Friday, July 6, 2018



The company deemed responsible for nearly causing an environmental catastrophe on Humboldt Bay and the Samoa Peninsula may be walking away while public agencies pick up a more than \$16 million price tag for the cleanup, according to local and federal officials contacted by the Times-Standard this week.

The U.S. Environmental Protection Agency has deemed Evergreen Pulp Inc. as responsible for allowing tanks filled with caustic liquors at the Samoa pulp mill site to deteriorate and fill up to the point where the next major rainfall could have caused the chemicals to spill into the nearby bay.

The EPA states it paid \$15 million for the 2014 emergency cleanup — five times more than was first reported to the Times-Standard in 2014 — in which tanks containing the pulp liquors were drained and loaded into trucks bound for a Washington state pulp mill where the chemicals would be reused.

EPA officials previously told the Times-Standard that the plan was to have Evergreen Pulp provide repayment for the costs. But it appears the EPA is not the only entity looking for repayment from Evergreen Pulp.

“EPA investigated Evergreen Pulp, and believes it to be a liable party, but the investigation also revealed a long line of unsatisfied creditors ahead of EPA,” agency’s spokeswoman Margot Perez-Sullivan wrote in an email to the Times-Standard.

Perez-Sullivan did not respond to a follow-up question by Friday evening on whether Evergreen Pulp is expected to walk away without providing any form of repayment.

What the EPA plans to do next is unclear.

Asked what the EPA is seeking from Evergreen Pulp, Perez-Sullivan replied, “Future enforcement decisions are not appropriate for comment.”

The Humboldt Bay Harbor, Recreation and Conservation District now owns the pulp mill property, having bought it from its previous owner, Freshwater Tissue Co., in 2013. The district took a \$1.25 million loan from Coast Seafoods Company to pay for the liquor transport costs of which \$1.1 million is still owed, according to the district’s Executive Director Larry Oetker this week.

Oetker said he does not want to dwell on the past. Instead, he said the district is looking toward fulfilling its goal to transform the brownfield site into a economic driver for the county, a process which he said is already showing economic benefits.

“I just can’t emphasize we’re turning the corner and trying to work cooperatively to try to revitalize a previously blighted area,” Oetker said. “We’re looking forward as opposed to backwards.”

The harbor district and the EPA also came to a repayment agreement in which proceeds from salvaging materials and infrastructure going to the EPA, according to the Perez-Sullivan.

“No proceeds have been sufficient,” she wrote.

The agency does not anticipate being able to recuperate all the costs of the cleanup, but the Samoa pulp mill is a Superfund site.

“This is the purpose of the Superfund, to pay for responses where no liable party has means to pay for the clean up,” Perez-Sullivan said.

Oetker said the district went through the whole property to do a complete inventory of the equipment that could be salvaged. While they requested bidders, the district was not able to get any proceeds from the salvaged material, Oetker said.

“The core problem is that everything out there is supersized. It’s a big industrial operation,” Oetker said.

Inside the 17-story building at the pulp mill is a giant boiler, which alone would cost the district \$2 million to remove to salvage it, while the boiler itself would be salvaged at a value of about \$1.3 million, Oetker said.

“The building is perfectly good,” Oetker said. “So if we remove the boiler, then we have a whole 17-story building.”

In the meantime, Oetker said the district has received a \$200,000 brownfield site grant from the EPA to remove various soil and debris piles from the site and take some samples to test for contaminants. Oetker said the district plans to go out to bid on this project this summer.

Since the harbor district acquired the property, Oetker said 18 different businesses have moved in, which is set to bring in \$700,000 in annual revenue to the harbor district. A 740 kilowatt solar power system has also been installed, which he said powers not only the businesses in at the pulp mill site — which has since been rechristened Redwood Terminal II — but all the properties the harbor district owns and operates.

“We have also begun the aquaculture pre-permitting project where we have spearheaded the start of new aquaculture operations inside the docks out there,” Oetker said. “From the harbor district’s perspective, it’s really about how do we take this blighted piece of property and then turn it into an economic success story for Humboldt County?”

The harbor district is also working to allow aquaculture to use the pulp mill’s ocean outfall pipe to discharge aquaculture waste. A project to connect four trans-Pacific broadband fiber lines to proposed data storage area that would be located at the pulp mill site.

Oetker said that project is currently on hold until the completion of the Digital 299 project, which would deploy fiber broadband lines between Redding and Arcata along state Route 299.

Will Houston can be reached at 707-441-0504.

News Flash

County Administrative Office

Posted on: July 19, 2018

Study: Humboldt Bay at highest risk of sea level rise on U.S. west coast



Humboldt Bay is at the highest risk of sea level rise on the entire U.S. west coast. The County has completed a sea level rise vulnerability assessment indicating three communities are at risk of being inundated by sea level rise. Nearly 400 residential parcels are vulnerable in the unincorporated communities of King Salmon, Fields Landing, and Fairhaven.

Community members will have the opportunity to learn about local sea level rise and participate in planning conversations at two public workshops focused on these three communities. The first workshop will be for the communities of King Salmon and Fields Landing on Tuesday, August 7 at 6 pm at the Humboldt Agricultural Center, 5630 South Broadway in Eureka. The second workshop will be for the community of Fairhaven on Tuesday, August 14 at 6 pm at the Samoa Women's Club, 115 Rideout Ave, Samoa. Refreshments will be provided.

Local sea level rise planner Aldaron Laird of Trinity Associates will present the results of the vulnerability assessment and lead the discussion.

"The first thing we want to do is educate the people who live there, own property there, have a business there or just use those areas recreationally. By 2040, King Salmon could be tidally inundated at least eight times a year, and that's most of the residential lots. That's going to be problematic with the existing development in King Salmon," Laird said. "There's a limited amount of time; by 2070, King Salmon and Fields Landing could be inundated on a daily basis by mean high water. And it's not just these three communities with something at risk. By 2100, the PG&E power generating plant is expected to be tidally inundated on a monthly basis, and that would affect all of us."

Residents, property owners, business owners, utility service providers, stakeholders and other interested community members are encouraged to participate in the workshops. Attendees will have the opportunity to ask questions and contribute to the discussion of potential adaptation strategies.

"The first thing that needs to be explored is how can we protect these existing communities?" Laird said.

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Local Coastal Plan Update

Climate change brings new flood risks and new challenges for water storage managers. In California, one local water agency is taking on the big task of modifying its primary storage reservoir to be ready for these changes.

An aerial photo of the Yuba County Water Agency's New Bullards Bar Dam on the North Yuba River in California. A proposed secondary spillway would be built just to the right of the existing spillway at an estimated cost of \$160 million. Photo courtesy Yuba County Water Agency



AMONG CALIFORNIA RIVERS, the Yuba is one of the most dramatic. Draining the Sierra Nevada just north of Lake Tahoe, it is steep and flashy – one of the most flood-prone rivers in the state.

Yuba River floods have killed people – notably in 1955, 1986 and 1997 – and climate change is making such floods more likely. As the atmosphere warms, more winter precipitation falls as rain rather than

snow. This boosts the amount of runoff coursing downhill in any given storm.

The Yuba County Water Agency has been working for years to strengthen levees along the river to handle additional runoff, together with the cities of Marysville and Yuba City downstream. Now the water agency plans something more ambitious: a major modification of New Bullards Bar Dam on the North Yuba River, its primary water storage reservoir, to handle bigger and wetter storms.

It plans to build a second spillway at the dam to boost its water-release capacity, at an estimated cost of \$160 million. The larger spillway will allow dam operators to release water sooner and faster to prepare for approaching storms.

State and federal agencies have undertaken such complex projects, notably at nearby Folsom Dam on the American River, a billion-dollar project recently completed by the U.S. Army Corps of Engineers. But the New Bullards Bar project is a rare example of a local water agency undertaking costly dam modifications in response to changing hydrology.

“If you can evacuate water faster from the reservoir when there’s channel capacity, then you have more space in the reservoir for those peak flows,” said Curt Aikens, general manager of the Yuba County Water Agency. “Definitely, this will help to the extent climate change produces bigger storm events and bigger peak flows.”

A new spillway would boost the reservoir’s flood-control capacity when warm, wet storms are predicted. Also, the additional operating flexibility it offers could boost water storage at certain times of year, a major benefit to the agency’s agricultural water customers and hydroelectric power generation.

New Bullards Bar Dam, completed in 1970, is one of the most spectacular impoundments in the state. A graceful concrete-arch dam, it soars 645ft high over the North Yuba River, providing a storage capacity of about 1 million acre-feet.

The existing spillway at the dam has a relatively small release capacity of 19,000 cubic feet per second. Also, it is relatively high on the dam’s face – just 16ft below the typical full-reservoir water surface elevation. This means it can’t release water until the reservoir is nearly full, which limits options when responding to an approaching storm.

“With the current spillway, we can’t make big releases because we’re just waiting to fill up the reservoir to the point where you can release lots of water. That’s the point of this new spillway,” Aikens said.

The project involves tunneling through the mountainside on the dam’s right abutment. The tunnel would be 38ft wide and 28ft high, with operable gates and a concrete chute directing water into the Yuba River below the dam.



The Yuba County Water Agency proposes to build a new, larger spillway at New Bullards Bar Dam on the North Yuba River. The new spillway would involve tunneling through the mountainside next to the existing spillway. (Photo credit: Image courtesy Yuba County Water Agency)

It will have a release capacity of 45,000 cubic feet per second – more than double the existing spillway. And it will be 31.5ft lower than the existing spillway gates.

As a result, when a big storm is forecast, dam operators can release water a lot sooner to free up empty space in the reservoir. This means the potential impact of downstream flooding is reduced, because the peak flow can be spread out over a longer period of time. Aikens said the new spillway could reduce the flood peak on the Yuba River downstream at Marysville as much as 2ft, significantly reducing stress on the city’s levees.

The agency also looked at raising the dam 10ft as an alternative. But that was rejected because it would cost a lot more, cause more environmental impacts and would not improve operational flexibility. The new spillway’s estimated cost of \$160 million is about 46 percent less than raising the dam.

The **South Yuba River Citizens League**, an environmental group that has fought for decades to improve flows and habitat in the river, supports the concept of a new spillway, said Rachel Hutchinson, the group’s river science director.

She said the project is especially welcome after the disaster at Oroville Dam in 2017. Both spillways at Oroville, operated by the California Department of Water Resources, were severely damaged during heavy storm runoff, forcing thousands of downstream residents to evacuate amid fears the dam itself might collapse.

That disaster also churned up gobs of sediment and debris that clogged the riverbed and the Feather River salmon hatchery.

“I think having a little more safety surrounding our dams would help to protect the resources that we have in the river, instead of allowing them to be another victim in a potential dam crisis,” Hutchinson said. “The human population and safety of the dams, of course, is paramount. But when a dam fails, the environment also loses.”

A larger spillway would also provide a new kind of drought protection.

Normal operations require dam operators to keep lots of empty space in reservoirs during winter to be ready for floodwaters. The greater release capacity of a new spillway could allow the agency to keep the reservoir full more often, providing an important hedge against dry winters.

Recent storm patterns in California, for instance, have produced wet conditions in December sufficient to fill many reservoirs. But operators were required to release water to be sure there was room for floodwaters later in winter. But then January and February turned out dry, leaving reservoirs only partially filled by the time winter ended.

To take advantage of this winter flexibility, Yuba County Water Agency also plans to adopt a new strategy called forecast-informed reservoir operations. This would change flood-control rules at the dam, allowing the reservoir to be kept nearly full in winter if weather forecasts indicate no storms are approaching.

If forecasts show a storm is targeting the Yuba watershed, the agency could still create enough flood-control capacity by dumping water quickly with the new, larger spillway.

“Being able to manage the flood pool at New Bullards Bar is going to be more complicated in the future,” Hutchinson said. “With more of our precipitation falling as rain rather than snow, it’s going to fill more early and they’re going to want to hold onto that water. This should give them more flexibility with how they store water.”

Aikens said the agency plans to develop the new operating rules while the second spillway is under construction, so both are completed at the same time. Construction is expected to start in 2022, with completion three years later.

Hot Weather, Land Abuses Fueling Algal Blooms in Western Waters

Toxic bacteria produced by some algae are a threat to public health. Climate change may be one reason algal blooms have become a growing concern for many water agencies.

WRITTEN BY Matt Weiser

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A team from HAB Aquatic Solutions prepares to apply alum at Pinto Lake in Watsonville, California, in 2017. The alum is meant to neutralize and cap phosphorous in eroded soils on the lakebed to prevent algal blooms. Catherine Bosley, HAB Aquatics Solutions, LLC

THE WEST IS known for summer wildfires. Now it seems Western summers will be distinguished by another kind of flare-up: algae blooms.

This summer has witnessed an explosion of algae problems in Western water bodies. Usually marked by a bright green mat of floating scum, the blooms are unsightly and unpleasant for water lovers. More concerning are potentially toxic cyanobacteria often produced by the algae, which can be deadly to pets and livestock and cause illnesses in people.

These harmful algal blooms have popped up in freshwater lakes and streams for years. But in recent years they seem bigger and more widespread than ever, resulting in closed beaches, public health warnings and risks to drinking water in a few locations.

Blooms are even popping up in unlikely places, such as high-elevation mountain lakes.

But there is currently no federal drinking water standard for algal toxins and in many places, data monitoring of blooms is still scarce.

“This is really a devilish problem,” said Craig Cox, a senior vice-president for agriculture and natural resources at the Environmental Working Group who is tracking the issue. “The more I look into it, the more stunning the state of play seems to me.”

While the cause of each incident is not always known, two of the main known drivers of algal blooms are excess nutrients in the water and extreme heat. As a result, algae-coated lakes could become one of the most visible consequences of rising global temperatures.

Understanding the Problem

The most serious incident recently occurred in May in Salem, Oregon, where a health advisory was issued to more than 200,000 customers of the city water department following the detection of algal toxins in the drinking water supply. Young children, the elderly, pregnant women and people with certain medical conditions were warned not to drink tap water for most of the month of June.



Detroit Lake and Dam on the North Santiam River, a source of drinking water for Salem, Oregon, the state capital. A toxic algal bloom at the lake in May and June resulted in a weeks-long public health advisory in which children, the elderly and other sensitive groups were urged not to consume Salem's drinking water. (U.S. Army Corps of Engineers)

Salem officials still don't know what caused the toxic bloom.

"That's the million-dollar question that everybody wants to know," said Lacey Goeres-Priest, water quality supervisor at the Salem Public Works Department. "There's a lot of different factors that play into this type of event."

The algae and the bacteria involved in harmful blooms are all naturally occurring and are important building blocks of all life on Earth. But the two main causes of the blooms are not natural.

Erosion and excessive fertilizer are to blame for the high levels of nutrients. For the second factor, warm temperatures cause algae to bloom more aggressively and climate change seems a likely culprit. Scientists at Tufts University in Massachusetts published a study in 2017 predicting toxic algal blooms would increase as the climate warms.

"They like it hot, and this helps them outcompete beneficial phytoplankton," said Ali Dunn, an environmental scientist at the California State Water Resources Control Board (SWRCB) who studies blooms in that state. "It's definitely been a catalyst for their growth."

Closing the Data Gaps

Algal blooms are unpredictable, typically resulting from a suite of biological and environmental conditions. Most algal toxins come from a class of cyanobacteria present with some – but not all – algae. So the mere presence of algae does not mean a toxin is present.

The only way to detect algal toxins is through laboratory testing of water samples. This can take days, adding significant delay to any public health response.

"Each lake, river, water body kind of has its own story to tell," said Dunn. "The drivers are going to be different and unique to that system."

No one knows precisely how often blooms occur because there is no monitoring of the problem on a national scale.

Cox, based in Ames, Iowa, and his team at EWG decided to gather their own data by recording how often algal blooms were mentioned in the news media. He admits this was a crude method, but no other data was available. In their resulting report, released in May, they documented 169 blooms in 2017 – up from 51 the year before.

That is certainly a low estimate, because many blooms probably don't get reported in the media.

Case in point: in 2016, the SWRCB launched its own algal bloom reporting program. It is based entirely on volunteer reports. Even so, in 2017 it recorded 181 algal blooms just in California, an increase from 91 the year before. Of the 2017 blooms, 141 were serious enough to prompt health advisories.

One of the 2017 reports illustrates how algal blooms are popping up where they once didn't seem possible. On Sept. 8, a bright green lake-wide algal bloom was reported at Rim Rock Lake, a natural water body at the 7,000-foot (2,130 meters) elevation deep inside Lassen National Forest in Northern California. Water samples revealed four species of cyanobacteria, but none was producing toxins at the time.

The United States Environmental Protection Agency (EPA) conducts a National Lakes Assessment every five years that sheds a little more light on the issue. The most recent assessment now dates back to 2012. It found cyanobacteria and microcystin, a key algal toxin, had increased 8.3percent and 9.5 percent, respectively, in the nation's lakes compared with 2007.

In addition, the presence of phosphorus – a main nutrient from fertilizers that feeds algal blooms – also grew significantly worse. Eighteen percent of lakes showed increasing phosphorus concentrations compared with 2007. And 40 percent were recorded as having excess phosphorus.

“We’ve been able to show, with our occurrence data, that toxins are present across the country in all surface water types,” said Keith Loftin, a research chemist at the U.S. Geological Survey in Kansas. “But in terms of an exact count year to year, we do not have that data.”

To close this gap, Loftin is helping develop a new national Cyanobacteria Assessment Network. He's part of a team that includes the EPA, National Oceanic and Atmospheric Administration and NASA. They plan to use satellite sensors to detect and monitor harmful algal blooms nationwide. It will include a smartphone app to make the data widely available.



This satellite image shows the state of an algal bloom in July at Diamond Valley Lake near Riverside, California, a critical storage reservoir for the Metropolitan Water District. In June, the district closed the lake to recreating as a result of the bloom. (Image Courtesy Cyanotracker/University of Georgia)

The system is being tested now and Loftin hopes it will be publicly available within a year.

Data produced by the system could help develop new algae management techniques and regulations.

A Drinking Water Crisis

The EPA, the nation's water-quality police, has only issued recommendations and has yet to impose federal drinking water standards for algal toxins. As a result, many utilities are forced to improvise when an algal bloom strikes.

Such was the case during Salem's recent crisis.

The first indicator came on May 8, when an algal bloom appeared at Detroit Lake, a U.S. Army Corps of Engineers reservoir on the North Santiam River. Salem draws its drinking water from the reservoir, which is also popular for boating, swimming and fishing.

Because it had experienced blooms before, Salem already had a weekly testing program for algal toxins. Now it increased testing to twice weekly, sending samples to a laboratory in Ohio.

It wasn't until May 25, just before Memorial Day weekend, that test results from a sample of the city's water confirmed the presence of a type of cyanotoxin. Consulting with the Oregon Health Authority, the city took a wait-and-see approach to the problem over the long holiday weekend, Goeres-Priest said. It tweaked the water treatment process to try to control the toxin, and tapped a backup supply from the neighboring city of Keizer to help dilute the water.

But the bloom continued. So on Tuesday, May 29, the city issued a health advisory urging sensitive groups not to drink the tap water. It affected not just Salem, but three neighboring communities that draw water from the city.

With help from the state, Salem began distributing bottled water and the National Guard mobilized tankers to dispense clean water at two dozen sites for residents who brought their own containers.

The city lifted the health advisory five days later, on June 2, after two consecutive days of clean water samples.

Then the bloom roared back, and on June 6 Salem was forced to impose the advisory again, adding to public confusion. It was finally lifted on July 3, only after 12 consecutive days of clean water tests.

Algal blooms had struck Detroit Lake before, but none had ever lasted that long or required health warnings.

"What is different about this year than previous years? At this point, I don't know the answer to that," Goeres-Priest said. "We're still learning a lot about the toxins themselves, and trying to understand what triggers that toxin release."

A forest fire may be one new contributor. The Whitewater Fire, which started in July 2017, burned 14,000 acres of forest in the Santiam River watershed east of Salem. Fire ash contains phosphorus, a nutrient that could have fed this year's algal bloom. Goeres-Priest doesn't know to what extent that was a factor.

The algal bloom episode was costly for Salem, she said, although a full tally is not yet available.

Initially, the city spent hundreds of thousands of dollars on water sample testing. Later, to avoid the delay of sending samples to Ohio, the city bought its own testing machine at a cost of \$35,000. It also bought a cryofreezer because laboratory protocol requires samples to be flash-frozen and thawed three times before testing.

Salem also had to upgrade its water treatment plant, adding a process involving powdered activated carbon to remove algal toxins from the source water.



A Salem, Oregon, city employee prepares water samples for testing to determine the presence of algal toxins. The city purchased new testing machines during a recent toxic algal bloom to avoid delays in sending water samples to a lab in Ohio. (Photo Courtesy city of Salem)

In response to Salem's travails, the Oregon Health Authority imposed its own interim water quality standards for algal toxins. It now requires all water agencies to test for them regularly while it develops permanent standards.

Solving the Problem

One thing that's clear about toxic algal blooms is that treating the outbreak doesn't solve the problem. They are likely to recur until the root cause is corrected. Watsonville, California, provides an example.

Pinto Lake, a Watsonville city recreation site, began experiencing algal blooms as early as the 1980s, said Jackie McCloud, the city's environmental projects manager. The lake drains into the Pajaro River, then into Monterey Bay.

The blooms were not a drinking water concern, because the lake isn't used for that purpose. But the algae problem became unavoidable when sea otters, protected by the state and federal Endangered Species Act, began turning up dead on the bay shore in 2007.

Necropsies cited liver failure as cause of death in 33 sea otters. That, in turn was caused by exposure to microcystin, an algal toxin that accumulated in the tissues of sea urchins and shellfish eaten by the otters. It was the first time the freshwater toxin had been documented to survive in seawater and cause the death of marine mammals.

The toxin was traced upstream to Pinto Lake.

McCloud said the lake's algae problem dates back to the earliest days of settlement in the area. Vast redwood forests in the coastal mountains draining into the watershed were cut down for building materials, and the resulting erosion coated the bottom of the lake with nutrients – specifically phosphorus. Farming, road building and housing development sent more phosphorus-laden runoff into the lake.

“We were just seeing massive amounts of erosion from the watershed coming into the lake,” McCloud said.

The city took a two-pronged approach: stop the algal blooms and stop the erosion.

To control the blooms, the city hired a consultant who applied alum, a chemical compound meant to neutralize and isolate phosphorus in the lakebed. McCloud called this a “Band-Aid” measure because the real solution lies in the watershed upstream.

But the city has no land use authority in the watershed, so it began working with Santa Cruz County and the local Resource Conservation District, an organization that helps farmers improve land use practices.

Landowners were encouraged to adopt erosion control measures, such as water bars on dirt roads to manage runoff and buffer strips of vegetation to capture it. The county adopted similar measures on its public lands in the watershed, including Mt. Madonna County Park.

All this work, including the alum treatment, was funded by \$900,000 in EPA grants administered by the SWRCB. McCloud called it a success: there have been no algal blooms since the work began.

But she knows the job isn't done. The alum treatment will eventually wear off, and erosion controls require ongoing maintenance.

"We're going to see more of these hot, intense weather events where we don't have a lot of water coming into the system anymore and we're concentrating this phosphorus," McCloud said. "We knew the lake was the biggest problem, but we realized we're not going to solve anything by just looking at that one spot. You have to look bigger than just your lake."



WaterNews

Regulators Will Soon Know A Lot More About Algal Toxins in U.S. Drinking Water

July 10, 2018/in Algae Blooms, Water News, Water Quality /by Brett Walton

For the next two years, water utilities are required to test for ten cyanotoxins.



An algal bloom swirls in the western basin of Lake Erie, in September 2017. Photo courtesy of USGS/NASA

By Brett Walton, Circle of Blue

Authorities in Salem, Oregon, lifted a drinking water advisory on July 3 that had been in place for children and the elderly since Memorial Day weekend, when algal toxins were discovered in the city's water system.

How many other water systems are at risk from the toxin-producing scum that grows in rivers and lakes, particularly in the warmer months? Thanks to U.S. Environmental Protection Agency monitoring requirements, regulators will soon have more comprehensive data on how often such toxins show up in drinking water supplies and at what concentrations.

For the next two years water utilities are required to test for 10 cyanotoxins and their variants. The requirement stems from a Safe Drinking Water Act provision designed to help the EPA understand how frequently contaminants that are not regulated at the

federal level appear in drinking water. The data are used when considering whether to set mandatory safeguards.

“It’s going to be helpful,” Alan Roberson told Circle of Blue. Roberson is the executive director of the Association of State Drinking Water Administrators, the organization that represents state water regulators.

Produced by cyanobacteria, nourished by excess nutrients, and amplified by warming temperatures, the toxic blooms are a growing health threat in drinking water, both for humans and pets. The toxins target the liver, nervous system, and skin, and can cause nausea, rashes, stomach pain, and in rare cases, death. The EPA established drinking water [health guidelines](#) in 2015 for two toxins — microcystin and cylindrospermopsin — but the guidelines are not enforceable.

To inform its regulatory decisions, the EPA periodically orders utilities to gather data on unregulated contaminants in their treated water. During this [fourth assessment cycle](#), utilities must test for 30 such contaminants. In addition to cyanotoxins, the list includes the pesticide chlorpyrifos and metals like manganese and germanium.

The roughly 4,000 water systems that serve more than 10,000 people must participate in the testing. For smaller systems, the EPA randomly selected a group of 800 to monitor for cyanotoxins and another 800 to monitor for the other 20 contaminants.

Though testing of rivers and lakes to protect swimmers and boaters is common, few states require utilities to test drinking water for cyanotoxins.

Ohio is one of the leading states in addressing algal toxins, Roberson said. That leadership grew in large part from a shock: four years ago, the city of Toledo, which draws water from Lake Erie, made headlines for shutting down water service to some 400,000 people for several days due to detection of cyanotoxins. Blooms in recent years also fouled the Ohio River and dozens of lakes used as drinking water sources.

In Ohio now all utilities that draw water from rivers and lakes have mandatory cyanotoxin monitoring requirements. They also have to demonstrate the ability to remove cyanotoxins from drinking water.

When it issued the monitoring rules in June 2016, the Ohio Environmental Protection Agency argued that it could not wait several years for its federal counterpart to gather data and write regulations.

According to the Ohio EPA, since the rules went into effect no utility has issued a drinking water advisory for a harmful algal bloom.

“The rules provided regulators and system operators with greater awareness of the scale and scope of the problem,” James Lee, an agency spokesman, told Circle of Blue.

Oregon regulators, meanwhile, responded to the Salem incident by tightening their rules. The Oregon Health Authority issued [testing requirements](#) on July 1 for water systems that draw from sources that are vulnerable to algal blooms. The rules, which apply to 95 water systems, are a temporary, emergency patch until the authority goes through a public rulemaking process.



July 24, 2018 | Written by Jared S. Mueller

Members of Congress Propose Sweeping Reforms to the Endangered Species Act

Several members of the House of Representatives have proposed bills seeking to reform the Endangered Species Act (ESA) before the end of this legislative session. Enacted 45 years ago, the ESA was last amended in 1988. With several targeted measures, the House Western Caucus's "Bipartisan ESA Modernization Package" includes the following key changes:

- H.R. 6356, the LIST Act, authorizes the Secretary of the Interior to promptly de-list currently endangered or threatened species based on scientific studies demonstrating that a species is recovered, while empowering states, researchers, and other groups to notify the United States Fish and Wildlife Service (USFWS) when recovery has occurred.
- H.R. 6345, the EMPOWERS Act, requires federal agencies to consult states before making the decision to list a species, and to provide an explanation to such states to the extent that a decision deviates from the state's findings or advice.
- H.R. 6344, the LOCAL Act, declares clear statutory channels and codifies longstanding incentives for parties engaging in voluntary conservation activities by way of Species Recovery Agreements and Habitat Reserve Agreements.
- H.R. 6355, the PETITION Act, reforms the listing petition process to protect against frivolous petition filing or "petition backlogs" subjecting the USFWS or the National Marine Fisheries Service (NMFS) to litigation.
- H.R. 6364, the LAMP Act, permits the Secretary of the Interior to enter into cooperative management agreements with state and local governments, tribes, and other groups seeking to facilitate constructive interaction amongst stakeholders and federal agencies.
- H.R. 6360, the PREDICTS Act, codifies agency regulations for Habitat Conservation Plans, Candidate Conservation Agreements with Assurances, and Safe Harbor Agreements in an effort to provide certainty and incentivize cooperation between public and private entities.
- H.R. 6346, the WHOLE Act, requires consideration of all conservation measures prior to any federal actions, including actions undertaken outside of designated critical habitat.
- H.R. 6354, the STORAGE Act, excludes from critical habitat designations limited reservoir and artificial water delivery land lacking characteristics that would contribute toward species recovery.
- H.R. 3608, the Endangered Species Transparency and Reasonableness Act, requires data used by federal agencies for ESA listing decisions to be made publicly available and accessible through the Internet, while also requiring the USFWS to track, report, and make available online all funds spent responding to ESA litigation, the number of employees dedicated to litigation, and the attorneys' fees awarded in the course of ESA litigation and/or settlement agreements. This bill also caps the hourly rate awarded in ESA citizen suit litigation based on the Equal Access to Justice Act, which limits prevailing party attorneys' fees to \$125.00 per hour.

In addition to this activity in the House, Senate Environment and Public Works Chairman John Barrasso has proposed an overhaul package requiring greater input from states on listing and de-listing decisions, recovery goals, and habitat objectives. Chairman Barrasso's discussion draft bill, which was the subject of a committee hearing on July 17, 2018, also includes greater transparency in litigation, requiring publication of any ESA citizen suit complaint, notification of states and counties of any proposed settlements, and disclosure of attorneys' fees paid to any person in connection with an ESA citizen suit.

If you would like copies of any of the bills or contact information for any of the sponsors, please contact Jared Mueller at jmueller@somachlaw.com.

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July 26, 2018 - From the **July, 2018 (/issue/july-2018)** issue

Water Efficiency Standards for Water Agencies & Local Governments Now State Law

Tags:

Laura Friedman (/tags/laura-friedman) Water (/tags/water) drought resilience (/tags/drought-resilience) Governor Brown (/tags/governor-brown) Glendale Narrows (/tags/glendale-narrows)

*As part of a package of water related legislative reforms championed by both Assemblymember **Laura Friedman** and State Senator **Bob Hertzberg**, California established landmark water efficiency standards and enforcement mechanisms when Governor Brown signed the bills in May. Sitting down with **TPR**, Asm. Friedman explains how her AB 1668 (along with Hertzberg's SB 606) codifies the many of the goals outlined in the Governor's Water Action Plan. As the new laws are implemented by SWRCB and DWR over the next several years, they will dramatically change how local water suppliers plan for, report and achieve water use efficiency and drought management within their service areas. Friedman explains how the new water use standards for various industries take a balanced approach, and provide guidance for water agencies to help facilitate drought resiliency. Friedman also provides an update to the Glendale Narrows Riverwalk project in Los Angeles which now plans to create a bridge to Griffith Park.*

You and Senator Hertzberg authored AB 1686, now signed into law, to establish new water efficiency standards for various industries and to provide guidance for California's water agencies. What are the new law's primary objectives?

Laura Friedman: The first goal of this law is to make every water agency and every user of water across the state highly efficient over time. Right now, different water agencies have different levels of efficiency based primarily on their access to water. We have districts that didn't have meters until recently, and districts where multifamily housing still doesn't have meters. There are areas where water efficiency has not been a priority, while in other parts of the state, agencies have had to become highly efficient because of drought.

Water, obviously, is a statewide resource that is precious, and all of us, no matter where we live, should be efficient in our use of water. This law is an attempt to, over time, create a situation where all water agencies work with their users to become efficient.

The second goal of this law is to make sure that all water districts, large or small, have better planning to deal with drought. We discovered during the recent drought that some agencies were well prepared with very good contingency plans, while others fell short. We want to make sure that everybody has good plans that are workable and approved.



You have served in local government, both as a councilmember in Glendale and on the board of the Metropolitan Water District. How will AB 1686 affect the practices of water agencies and local governments?

Local government has a role to play, both as overseer or customer of water agencies and as the representatives of water users. Local governments work directly with residents and businesses on efficiency and can coordinate efforts with water agencies, who may be a bit further removed.

It's the agencies themselves that have to live within the water budget; any impact on individual users is fairly limited. The agencies will aggregate the number and types of users they have and be given a budget for indoor and outdoor use. Then, they can work closely with local governments to figure out how best to get to that efficiency goal over time.

In some districts, that might mean working with local government to make sure that users are aware of rebates for water-smart appliances like low-flow toilets. In some districts, it might mean working to get individual water meters on older multifamily housing units. There are all sorts of ways to get to these efficiency goals.

Metropolitan's project to replace water-thirsty turf with more drought-resistant landscaping was highly successful in getting homes to reduce their outdoor water use. I expect that we'll see more of that type of cooperation between residents, businesses, local governments, and water agencies.

Another point to keep in mind is that many agencies lose a lot of water within their own system, and there's never been any real penalization for that. We know that there are water agencies losing as much as 60 percent of their water to leaks in their system. That's pretty outrageous considering how important water is. We're hoping that the punitive part of this law, even though it rolls out over time, will make agencies realize that it might be more cost-efficient in the long run to fix their leaky systems than to have to pay penalties to the Water Board for failing to do so.

How challenging was it to include and win acceptance for penalties and enforcement provisions in SB 606?

The whole process has been difficult. At our first hearing, we had a line of opponents that went through the committee room, out the door, and down the hallway. They were from water agencies across the state. In some cases, their argument was simply: "We don't want anyone to tell us what to do. We want to run our agency the way we want to run it, and we certainly don't want penalties or forced conservation. If there's no drought order, we should be able to sell as much water as we can."

Water agencies certainly understand the need for conservation, and they want to help with it, but at the same time, they have to sell water. Like any other retailer, they have an incentive to sell a lot of their product. That's how they pay for their systems. And when they're selling less because of a drought order or mandatory conservation, they still have fixed costs. They still have employees and lines that they have to maintain. Meanwhile, Proposition 218 and other measures make it difficult for them to recover their costs.

In some ways, water agencies are going to have to rethink their model. But for now, it's a real problem for them when they're told to sell less water. For the state to tell them, "We're going to cut back what you can sell, and we're going to do it forever, and continue to ramp that number down," is a real concern for them. That was an inherent issue we were up against, and we had to come to terms with it.

But we worked very closely with them for a year and a half, and we got the bill to a place that they felt that was doable. They understand the long-term goals and are on board with making efficiency a way of life in California. And we'll be working with them to get them there.

"Water is a statewide resource that is precious, and all of us, no matter where we live, should be efficient in our use of water." - Asm. Laura Friedman

At the end of the day, water agencies are not the enemy—wasting water is the enemy. I stand ready to offer agencies the support they need to make this doable for them. I think they want to be efficient, so we need to make sure that they are able to do that.



Let's pivot to the state's newly approved \$8.6 billion water and parks bond—Prop 68, which passed in June—as well as to the water bond on the upcoming November ballot (<https://www.planningreport.com/2018/05/11/november-water-bond-promises-89-billion-towards-securing-california-s-future>). How do these bonds contribute to the objectives of the governor and the Legislature with respect to the intentional management of California's water supply?

Any funding that goes into more water infrastructure helps fulfill the goals of this legislation, because water agencies are going to need resources to invest in the infrastructure that will help with efficiency. Leak detection, smart meters, incentives for water-saving devices for businesses and individuals—all of that costs money. Even though it pays itself back in the long run because you're paying for less water use, help is often needed with those upfront costs.

We've got systems out there that are 100 years old. We've seen what happened in Los Angeles when they weren't able to invest fully in their infrastructure: exploding water mains and the like. No one wants to see that happen.

More locally, you've long been involved in the Glendale Narrows Riverwalk project. Share the project's importance and what progress has been made.

If I could point to one accomplishment in my first term in the California Assembly, it would be this. I never thought I'd be able to get this project financed, and I did. I'm grateful to the governor and Speaker Rendon for their help with that.

The first two phases of the Glendale Narrows Riverwalk Project created a pedestrian and bike path on the eastern side of the LA River, from the Burbank border through Glendale. But that path essentially dead-ends when you get to the southern part. Now, Phase III will create a bridge to Griffith Park.

That part of Glendale—and really the whole east side of the LA River—is cut off from Griffith Park by the LA River and the 5 Freeway. They can only get there by taking the 134 Freeway or by diverting all the way into Burbank or LA to Los Feliz Boulevard, which is very unfriendly to pedestrians and cyclists. It's also very congested, and taking cars off that road is a real imperative for the district

This bridge will provide a safe way for people to walk and bicycle across the LA River to Griffith Park. It's the missing link for the whole east side of the river to get to Griffith Park safely. Moreover, it will create connectivity from Burbank and Glendale to the LA River Bike Path, which is also inaccessible from our side of the river.

What makes this project even better is that Los Angeles is planning to run a small shuttle all around Griffith Park, and the bridge will be one of their shuttle stops. Now, 100,000 people who live within a mile of the bridge site will be able to walk or bike across the bridge and then take the LADOT shuttle to get to the Observatory, the zoo, the Hollywood Sign, the theater, and all the other destinations around the park.

We got \$20 million in the state budget for the bridge, and hopefully the city of Glendale will move quickly to get it built. It's an astoundingly important project for bicycle and pedestrian commuting and for getting cars off of Los Feliz Boulevard and the 134, and it's a game-changer for residents on that side of the river.

The Planning Report has been tracking Los Angeles County Supervisor Sheila Kuehl's work on the stormwater parcel tax measure for the November ballot. Speak to the importance and opportunity of that proposal.

We have an EPA decree and a lot of regulatory mandates to comply with when it comes to stormwater. If we don't take action, we could face huge penalties from the federal government—millions or even a billion dollars. If we don't do it, there will be a lot of financial costs on the other end, not to mention a lot of wasted water.

I hear from people all the time about how frustrating it is, when we're being asked to conserve water, to see so much water wasted because it runs into the sewer drains and out to the ocean.

This is very necessary infrastructure. The question then is how we pay for it in a way that is equitable—that doesn't just fall on the shoulders of coastal cities, but is spread more evenly around the county. I know the county has spent years negotiating this particular scheme, and I think it's really important that people give it the utmost consideration.

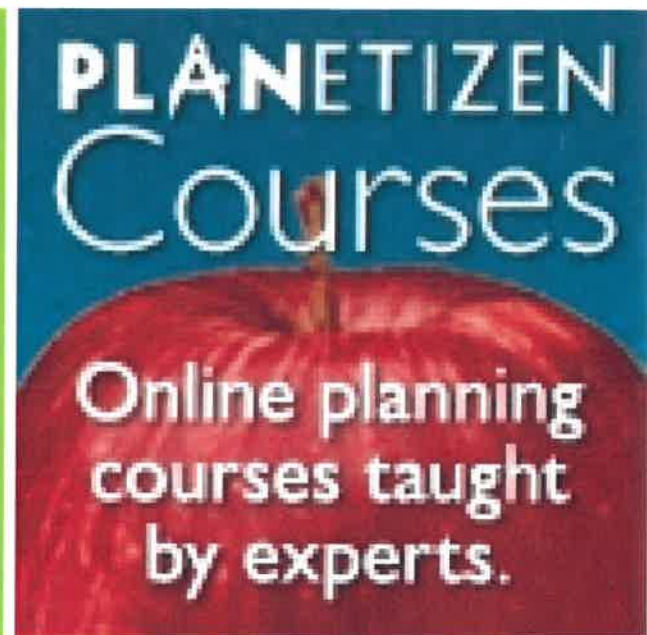
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California drought legacy: State approves \$2.5 billion to build new dams, water storage projects



(Gary Reyes/ Bay Area News Group)

The North Fork Pacheco Creek Reservoir is the site of a newly planned \$969 million reservoir in the hills of Eastern Santa Clara County near Gilroy, Calif., on Tuesday, April 11, 2017. The reservoir would hold 140,000 acre-feet of water, making it the largest reservoir in Santa Clara County. (Gary Reyes/ Bay Area News Group)

By **PAUL ROGERS** | progers@bayareanewsgroup.com | Bay Area News Group
PUBLISHED: July 24, 2018 at 11:52 am | UPDATED: July 24, 2018 at 2:53 pm

In a historic vote, the administration of Gov. Jerry Brown on Tuesday approved spending \$2.5 billion to help fund eight new large water projects across California — four new dams and four underground storage projects — including two in the Bay Area.

The funding came from Proposition 1, a water bond approved by voters in November, 2014, during California's five-year drought. It is believed to be the largest commitment of state money to construct new dams and water storage projects in California since 1960, when voters approved a bond to build Oroville Dam and the State Water Project.

“This meeting represents a huge step forward,” said Armando Quintero, chairman of the California Water Commission, a state agency that approved the funding Tuesday on an 8-0 vote.

The vote followed several years of public meetings and evaluations of a dozen projects. Among the top-scoring projects that received the most money Tuesday are two in the Bay Area: \$485 million to the Santa Clara Valley Water District to construct a new 319-foot-tall dam at Pacheco Pass in rural southern Santa Clara County, and \$459 million to the

Contra Costa Water District to raise the height of the dam at Los Vaqueros Reservoir in eastern Contra Costa County by 55 feet, increasing the lake's size by about 70 percent.

The new funding would pay roughly half the cost of each project.

The local agencies still need to raise the rest of the money through other sources, including asking for federal funding, partnerships with other water districts, and raising local water rates. If they are unable to complete those steps by Jan. 1, 2022, they will lose the state funding, although backers of both Bay Area projects say they expect to meet that deadline.

The estimated total cost of the new Pacheco Reservoir is \$969 million. Construction would start in six years after the Santa Clara Valley Water District purchases thousands of acres of ranch land surrounding the site just north of Highway 152 near Casa de Fruta, completes engineering and environmental studies, raises the rest of the money and secures water rights.

"It's important for the residents of Santa Clara County to have another source of water that's reliable," said Richard Santos, chairman of the Santa Clara Valley Water District's board. "I think it's the right thing for the future. I'm very proud of what we are doing. We're going to get more droughts. And temperatures are getting hotter. Having a new reservoir really is an insurance policy."

The Santa Clara Valley Water District provides water to 2 million people in San Jose and other parts of Santa Clara County. It has 10 reservoirs. If completed, the Pacheco project would hold 140,000 acre feet of water — enough for the annual needs of about 700,000 people. The new reservoir would be built on top of a small reservoir of only 6,000 acre feet that was built in the 1930s. It would become the largest in Santa Clara County, surpassing the 90,000-acre foot Anderson Lake near Morgan Hill, which was constructed in 1950.

The Los Vaqueros expansion would construct a reservoir even larger.

In that project, whose environmental studies are already completed, the total project cost is estimated at \$980 million. The Contra Costa Water District would raise the height of Los Vaqueros Dam in eastern Contra Costa County by 55 feet to 273 feet high. That would expand the reservoir's capacity from 160,000 acre-feet to 275,000 acre-feet, providing more water for Bay Area cities during droughts and some for wildlife refuges near Los Banos. Already 15 water districts, including East Bay Municipal Utility District and San Francisco Public Utilities Commission, have expressed interest in helping fund the project and sharing its water, said Jennifer Allen, a spokeswoman for the Contra Costa Water District.

"It's a positive step forward for a project we have been looking at for quite some time," Allen said. "This is a good opportunity for us locally, and for other agencies around the Bay Area and Central Valley."



A pair of anglers fish at Los Vaqueros Reservoir on Monday, Oct. 2, 2017, in Brentwood, Calif. Los Vaqueros is currently 95 percent full, and would be expanded by 70 percent under new plans that won state funding Tuesday. (Aric Crabb/Bay Area News Group)

Environmental groups, who often file lawsuits to block new dams when they block rivers and kill salmon and other fish and wildlife, have supported the Los Vaqueros project. Among the supporters are the Nature Conservancy, Audubon California and the Planning and Conservation League.

Plans call for ground to be broken in 2022, Allen said, with the project finished in 2028.

Water for both Los Vaqueros and Pacheco would come from the Sacramento-San Joaquin River Delta. For Los Vaqueros, water already is sent through the Contra Costa Canal from the Delta into Los Vaqueros, which is currently 95 percent full, and which provided a cushion to Contra Costa County residents during the drought.

For Pacheco, the water would be piped from nearby San Luis Reservoir, where Santa Clara Valley Water District stores water it purchases under state and federal contracts from the Delta.

The water commission on Tuesday also approved funding for four groundwater storage projects. They are \$280 million to the Sacramento Regional County Sanitation District to treat recycled wastewater and provide it to farmers in Sacramento County, along with \$207 million to the Inland Empire Utilities Agency to store recycled water in a groundwater storage bank in San Bernardino County for use by local cities, businesses and farms; \$67 million for the Kern Fan groundwater storage project near Bakersfield and \$95 million the Willow Springs groundwater bank 50 miles north of Los Angeles near Rosamond in Kern County, which would add 500,000 acre-feet of new storage.

The funding from Proposition 1 is not without controversy, however.

Some of the projects approved, such as funding for Temperance Flat Dam in the Southern Sierra east of Fresno and Sites Reservoir in Colusa County will face certain lawsuits from

environmental groups. Temperance Flat, a \$2.6 billion project, was awarded only \$172 million Tuesday under a scoring system in which state officials required supporters of each project to document in detail the public benefits of each project in a cost-benefit ratio.

And Sites was awarded \$816 million. Its total cost is estimated at \$5.2 billion.

Jay Lund, director of the UC Center for Watershed studies, noted that Proposition 1 was the first time in California history that the state agreed to fund large water projects with general obligation funds, which are repaid from the state's treasury. Other water projects have been funded with revenue bonds, in which money from each water district paid off the bonds thorough local taxes and water rates.


"It is taking money from the state general fund that provides for schools, prisons and everything else and gives it to some of the most well-off water districts in the state," Lund said, noting the state must repay the bonds, with interest over decades. "Every billion of that is going to be taking \$50 million out of the general fund every year for a long time."

THIS JUST IN ... Commission Approves Investing \$2.7 Billion in Eight Water Storage Projects

July 24, 2018 Maven Breaking News

Proposition 1 Funds Conditionally Committed to Add 4.3 Million Acre-Feet of Storage Capacity

From the California Water Commission:

 Eight proposed projects that would boost California's water storage capacity by 4.3 million acre-feet are in line to receive nearly \$2.7 billion in Proposition 1 funding following action today by the California Water Commission.

The Commission approved conditional funding amounts for the projects, which range from expanding existing reservoirs to boosting groundwater storage to building 21st century surface storage facilities. Applicants must complete remaining Proposition 1 requirements, including final permits, environmental documents and commitments for non-Proposition 1 funding, by Jan. 1, 2022, to receive a final funding award from the Commission.

"Today marks a major milestone for the Commission and project applicants," Commission Chair Armando Quintero said. "After an intensive process, the Commission has concluded that these eight storage projects will ensure the strongest return on the public's investment. We applaud the applicants for their hard work to get to this point, and we are confident they will use this momentum to do the remaining work needed to secure these crucial investments in California's water future."

The Commission also approved requests from three applicants to receive a portion of their funding early to help complete permits and environmental documents. The three projects are Sites Reservoir, Los Vaqueros Reservoir Expansion, and Pacheco Reservoir Expansion. Proposition 1 allows applicants to receive up to 5 percent of their Commission-approved conditional funding amount as early funding.

Moving forward, the Commission will continue meeting with applicants, state agencies and stakeholders to review the status of each project. Once an applicant has obtained all necessary permits, contracts, and documents, the Commission will hold a final funding hearing.

Below is a summary of the Commission-approved Maximum Conditional Eligibility Determination (MCED) and early funding for each project.

Project	Final Expected Return for Public Investment Score	Rank	Commission-Approved Eligible Amount (May 2018)	Applicant Request (May 2018)	Commission MCED (July 2018)	Early Funding (Portion of MCED)
Pacheco Reservoir Expansion Project	82	2	\$484,550,000	\$484,550,000	\$484,550,000	\$24,200,000
South County Ag Program	77	2	\$280,530,000	\$280,500,000	\$280,500,000	None Requested
Los Vaqueros Reservoir Expansion Project	76	2	\$459,000,000	\$459,000,000	\$459,000,000	\$13,650,309
Temperance Flat Reservoir Project	73	2	\$171,330,000	\$171,330,000	\$171,330,000	—
Chino Basin Conjunctive Use Program	70	2	\$206,900,000	\$206,900,000	\$206,900,000	None Requested
Sites Project	61	3	\$1,008,280,000	\$916,620,000	\$816,377,686	\$40,818,884
Kern Fan Groundwater Storage Project	54	3	\$85,660,000	\$85,700,000	\$67,537,315	None Requested
Willow Springs Water Bank	53	3	\$123,290,000	\$123,290,000	\$95,405,999	None Requested
		Totals	\$2,819,540,000	\$2,727,890,000	\$2,581,601,000	\$78,669,193
				Total Available	\$2,581,601,000	

Proposition 1, approved by 67 percent of California voters in 2014, created a competitive process for funding projects based on their public benefit aspects. The projects were evaluated and ranked on criteria established in the Water Storage Investment Program regulations.

Proposition 1 dedicated \$2.7 billion for the Water Storage Investment Program. As noted at the beginning of the application process, 2 percent of that amount is set aside for bond financing and 2.5 percent is set aside for state administrative costs over the life of the program, so the total funding available is \$2.582 billion.

CWC MARKS MILESTONE, APPROVES FUNDING AMOUNTS FOR WSIP PROJECTS

BY WILL HOLBERT JUL 24, 2018 WATER NEWS

The California Water Commission (CWC) today approved nearly \$2.7 billion in Proposition 1 funding for eight projects through its Water Storage Investment Program (WSIP).

The conditionally approved funds will pay up to half the total cost of the projects, with proponents responsible for funding the rest. The eight projects would boost California's water storage capacity by a total of 4.3 million acre-feet. The projects include the Sites Reservoir Project, Kern Fan Groundwater Storage Project, Willow Springs Water Bank, Temperance Flat Reservoir Project, Los Vaqueros Reservoir Expansion Project, Pacheco Reservoir Expansion Project, South Sacramento County Agriculture Program and Chino Basin Conjunctive Use Environmental Water Storage Program.

"This decision puts California on the road to add more than four million acre-feet of new storage capacity to the state water supply system," said ACWA Executive Director Timothy Quinn. "The majority of these funds, about 75%, will go to new surface storage capacity, with the remainder expanding groundwater storage. This action moves us toward an integrated system that is highly consistent with the storage policy goals identified by ACWA's Board in 2015."

The CWC also approved requests from three applicants to receive a portion of their funding early to help complete permits and environmental documents. The three projects are Sites Reservoir, Los Vaqueros Reservoir Expansion and Pacheco Reservoir Expansion. Proposition 1 allows applicants to receive up to 5% of their CWC-approved conditional funding amount as early funding.

Temperance Flat's proponents also requested early funding, but it was effectively denied after the eight-member CWC split evenly on granting the full amount requested – \$8.5 million – and again on approving half that amount.

Moving forward, the CWC will continue meeting with applicants, state agencies and stakeholders to review the status of each project. Once an applicant has obtained all necessary permits, contracts, and documents, the CWC will hold a final funding hearing.

Proposition 1, approved by 67% of California voters in 2014, created a competitive process for funding projects based on their public benefit aspects. The projects were evaluated and ranked on criteria established in the WSIP.

Proposition 1 dedicated \$2.7 billion for the WSIP. As noted at the beginning of the application process, 2% of that amount is set aside for bond financing and 2.5% is set aside for state administrative costs over the life of the program, so the total funding available is \$2.582 billion. For more information and approved conditional funding for each project, see the CWC news release.

California commission votes to eliminate Sativa Water District over brown water issues

A California commission unanimously voted to eliminate the Sativa Water District, which serves parts of Compton and Willowbrook, over the issue of brown, smelly water.

By Carlos Granda

Wednesday, July 11, 2018 08:07PM

DOWNTOWN LOS ANGELES (KABC) --

Compton and Willowbrook residents wanted to make sure their message was heard loud and clear during a hearing.

"We should have clean water here," one resident said.

Inside where a meeting was being held, residents told their stories. For months they have complained of brown, murky and smelly water coming out of their taps.

"It's very heartbreaking to see that we get dirty water. But it's more heartbreaking to get no response from Sativa," resident Martha Barajas said.

There are allegations the district has been mismanaged and it operated without enough oversight.

"They can't be trusted with the funds if they have sat up there all these years and nothing's been changed, they're not going to change," resident Karen Lewis said.

At the end of the meeting, a unanimous vote was made by the Local Agency Formation Commission to eliminate the Sativa Water District, which serves about 1,600 customers in Compton and Willowbrook. Supervisors said the county is ready to take control.

"We're going to start taking over and begin looking at their books to make sure that the district is running properly," Supervisor Janice Hahn said. "In the meantime, we're going to be looking for an agency to replace Sativa."

Attorney Mark Ravis said private companies could step up to provide some people with bottled water and relief until the situation is resolved.

The changes will take some time to take effect as all of it has to be approved by the State Water Board.

Western Water July 13, 2018 Gary Pitzer

VEXED BY SALT AND NITRATES IN CENTRAL VALLEY GROUNDWATER, REGULATORS TURN TO UNUSUAL COALITION FOR SOLUTIONS SPOTLIGHT: LEFT UNADDRESSED, SALTS AND NITRATES COULD RENDER FARMLAND UNSUITABLE FOR CROPS AND FAMILY WELL WATER UNDRINKABLE



An evaporation pond near Kettleman City in Kings County, with salt encrusted on the soil. (Source: California Department of Water Resources)

More than a decade in the making, an ambitious plan to deal with the vexing problem of salt and nitrates in the soils that seep into key groundwater basins of the Central Valley is moving toward implementation. But its authors are not who you might expect.

An unusual collaboration of agricultural interests, cities, water agencies and environmental justice advocates collaborated for years to find common ground to address a set of problems that have rendered family wells undrinkable and some soil virtually unusable for farming.

“It’s a better solution because it was developed by people from different areas of California and they could raise issues we might not have been considering if we were only looking in Kern County or Colusa County,” said Jeanne Chilcott, environmental program manager with the Central Valley Regional Water Quality Control Board.

“If not addressed, economic impacts of salts and nitrates on the Valley are estimated to exceed \$3 billion per year.”

~Central Valley Salinity Alternatives for Long Term Sustainability.

The nitrate problem mainly stems from more than 50 years of spreading fertilizers on the nation’s most productive farmland; the salts come from simply irrigating any crops. Nitrates in drinking water can be harmful for human health, particularly for infants. Salts can stunt plant growth, encrust the dirt, and — in the Central Valley — squeeze the productive life out of some of the most fertile soils in the world. In the Middle East, centuries of irrigation in the floodplain of the Tigris and Euphrates rivers have left a thick crust of salt on the land and soil hardened by salt deposits, a result Central Valley farmers and others hope to avoid.

The regional water board approved the Central Valley Salt and Nitrate Control Program May 31 that calls for bottled water to be delivered to some affected communities as part of the development of nitrate management zones. The State Water Resources Control Board will vote on whether to approve the

program next year. The program, a result of the [Central Valley Salinity Alternatives for Long Term Sustainability](#) (CV-SALTS), a deliberative process that seeks to stem nitrate discharges while acknowledging the longer-term challenge of cleaning up aquifers and returning them to productivity.



A Central Valley salinity coalition workshop. (Source: CV-SALTS coalition) For years, growers, water providers, regulators and others have recognized that something needs to be done about the salt and nitrate in the soil and groundwater of the Central Valley, particularly those areas where contamination is so bad that it has hurt agricultural production and put the safety of public water sources in jeopardy. In 2012, researchers with the University of California, Davis reported that based on continuing trends, 80 percent of the people in the Tulare Lake Basin would be affected by nitrate-contaminated groundwater by 2050.

Addressing legacy contamination

The program's path began in 2006 when state officials invited people to discuss salt accumulation in the valley and whether a solution could be fashioned as opposed to "watching the valley eventually become a desert," Chilcott said.

"That regulatory framework as it was set up to deal with nitrates in groundwater did not work well for anyone. It didn't fix the problem and it put agricultural and other industries that discharge nitrates to groundwater in a position that they couldn't comply with the regulations."

~Farmer David Cory, chairman of the stakeholder-led Central Valley salinity coalition.

People quickly recognized that a broad-based stakeholder perspective was needed and "not just one agency trying to frame a solution" to a problem that has existed for decades and has to be addressed even while discharges continue, Chilcott said.

"We are trying to deal with a situation where we have legacy contamination on a broad scale both for nitrate and salt," she said.

Farmer David Cory, chairman of the stakeholder-led Central Valley Salinity Coalition, said something had to be done about the problems in a manner that didn't put farmers out of business.

"That [existing] regulatory framework as it was set up to deal with nitrates in groundwater did not work well for anyone," he said. "It didn't fix the problem and it put agricultural and other industries that discharge nitrates to groundwater in a position that they couldn't comply with the regulations."

The program revises the regional water board's two basin plans (Sacramento/San Joaquin and Tulare Lake) that cover the Central Valley and set the water quality rules that are implemented through permits, known as waste discharge requirements, that dischargers must follow. Actions taken depend on the specifics of each field, though Cory noted that "the first step is to increase nitrogen-use efficiency" through correct application rate, timing and source of fertilizer.

Cory, who grows cotton, alfalfa, wheat and rice on about 2,000 acres in the Los Banos area, said shutting down farming operations to stanch nitrate discharges "wasn't going to help the drinking water problem and certainly was not going to help the small towns and the folks affected by nitrate." That, he said, was "a lose-lose situation."

Cory said the program is the result of more than 10 years of extensive consultation and negotiation. "By sitting in a room together at least one day a month for many, many years, we really got to understand each other's issues and tried to come up with a way that we could solve this problem, and all coexist," he said.



Tess Dunham, an attorney with Somach Simmons & Dunn in Sacramento, was one of the chief architects of the program. She represents agricultural interests. (Source: CV-SALTS coalition) Tess Dunham, one of the chief architects of the program, said the approach was the result of a broad stakeholder process that sought a bottom-up means of dealing with the problem.

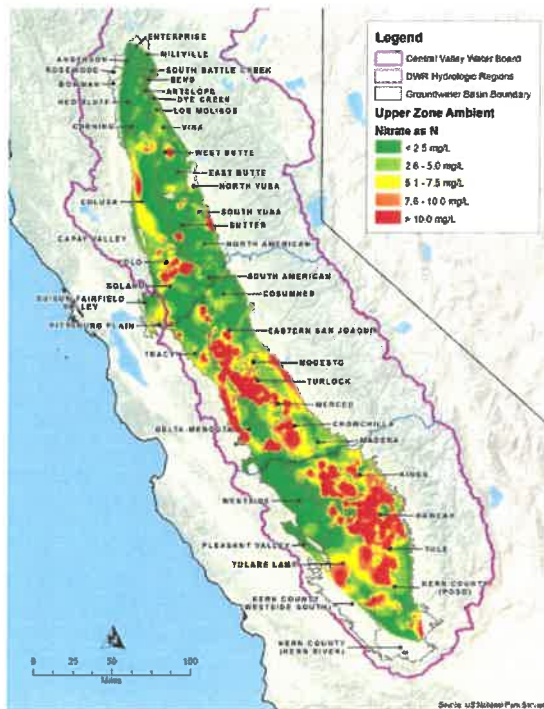
"[Former regional board Executive Director] Pamela Creedon in her tenure basically directed the stakeholders that either you all can come together and help put together the salt and nitrate management plan or we are going into the regional board offices and write it ourselves and you may not like what comes out at the other end," said Dunham, an attorney with Somach Simmons & Dunn in Sacramento.

'Do no more harm'

The program emphasizes the ability of local and regional groups to develop site-specific management plans that first provide safe drinking water and then implement cost-effective measures to balance salt or nitrate loadings and begin restoring groundwater. Its primary focus for the first 10 years is to reduce the level of nitrates affecting groundwater supplies used for drinking water and provide safe drinking water for users currently affected, such as the hardest-hit high-priority parts of the Central Valley: the Kaweah, Turlock, Chowchilla, Tule, Modesto and Kings groundwater basins and subbasins.

"There are basically three goals," said Daniel Cozad, executive director of the coalition. "The first is to provide safe drinking water. The second is what we call 'reaching balance' ... essentially a 'do no more

harm' kind of a thought, and then ultimately, where possible and feasible, remediate the basin back to where it meets all of the water quality goals."



Nitrate hot spots in the Central Valley are highlighted in orange and red (Source: National Park Service , CV-SALTS coalition)Chilcott, with the regional water board, said the program aims to “empower localized solutions” that work best for groundwater users, especially those with impacted drinking water supplies.

“Obviously, short-term, what we anticipate is initially probably buying bottled water, but we want that to expand and, in some areas, it means doing wellhead treatment,” she said.

Advocates for disadvantaged communities affected by nitrate-contaminated wells laud the program’s goals of providing drinking water, achieving a salt/nitrate balance and aquifer restoration. Although they were part of the

coalition, they believe a more aggressive approach is warranted.

“Unfortunately, only the provision of drinking water is actually required with the clear standards of oversight by the regional water board, whereas the goals of balance and restoration are only required where ‘reasonable, feasible and practical,’” said Debi Ores, Sacramento staff attorney with the Community Water Center, a nonprofit environmental justice advocacy group based in the Tulare County city of Visalia that was a coalition participant.

Community Water Center would like to see the program returned to the regional board to correct what its advocates say are deficiencies and to strengthen the focus on returning affected areas back to health.

Tackling such a major problem as salt and nitrate required a staged, incremental approach, Cozad said.



Daniel Cozad, executive director of the CV-SALTS coalition, said the goals are to provide drinking water to those who need it, stop the nitrate and salinity problems from getting worse, and eventually to restore the groundwater basins. (Source: CV-SALTS coalition)“It’s a comprehensive, long-term plan,” he said. “It doesn’t change the world in a minute. It doesn’t even promise to do that. What it does is to lay out for two constituents — salinity and nitrate — a path to compliance for people who discharge as well as for improving groundwater quality.”

Cozad said the idea is to give people more time and flexibility to achieve nitrate compliance subject to the oversight of the Central Valley regional water board.

“It is a trade-off,” he said. “We can’t regulate ourselves into getting clean water for people. No matter what you do today, it will still take 20 to 50 years in many cases to get clean water and that’s not a solution anyone would say solves anything.”

Getting people clean water

Nicole Gleason, a Sacramento attorney representing agricultural interests in the development of the program, said the program essentially recognizes that it’s not technically feasible for dischargers to reduce their concentrations to the amounts regulators believe are necessary to meet water quality standards.

“For the very first time, we are just going to focus on finding all the people that are drinking dirty water and getting them clean water,” she said. “We have never done that before.”

Yet Gleason said she is concerned about some of the compliance aspects of the program.

“My stress ... is how are those folks going to figure out those management zones in a short period of time and how are they going to ever feel comfortable proposing that they are going to take this action on replacement water when they don’t even know if the people [farmers] they have invited to participate in this proposal are going to accept,” she said.

“Unfortunately, only the provision of drinking water is actually required with the clear standards of oversight by the regional water board, whereas the goals of balance and restoration are only required where ‘reasonable, feasible and practical.’”

~Debi Ores, Sacramento staff attorney with the Community Water Center, which participated in the salinity coalition.

Meanwhile, the salinity component is more difficult to solve. Every time a field is irrigated, or wastewater is discharged, water with higher salinity is left behind. This is a problem in the parts of the Central Valley where little or no drainage exists. Salt accumulation has taken 250,000 acres out of production and impaired another 1.5 million acres.

“If not addressed, economic impacts of salts and nitrates on the Valley are estimated to exceed \$3 billion per year,” the CV-SALTS says.

Stakeholders know that the magnitude of the problem requires framing the response in the proper context.

“‘Solve’ is a strong word,” Cozad said. “I would say ‘manage’ is a much better word.” The program provides for about 10 years to figure out all the details and put together governance and the environmental plan and funding to deal with that. In the meantime, he said, it provides for people who are managing their salt currently to be able to participate in the salt solution as opposed to having meet more rigid regulations.

Still work ahead

Drinking water providers at the San Joaquin Valley’s drainage outlet in the Delta worry the program doesn’t adequately address water quality issues.

“No matter how difficult, complex, or expensive, and no matter how long or for what reasons the discharge has been allowed to proceed, it is the discharger that the law ultimately requires to address, manage, and solve those problems,” said a May 2018 letter from the Alameda County Flood Control and Water Conservation District and the Contra Costa Water District to the regional water board. “The cost of the water quality protection that discharges can cause should not be shifted to other parties.”

“We can’t regulate ourselves into getting clean water for people. No matter what you do today, it will still take 20 to 50 years in many cases to get clean water and that’s not a solution anyone would say solves anything.”

~Daniel Cozad, executive director of the Central Valley Salinity Alternatives for Long Term Sustainability coalition.

Contra Costa Water District relies on the Delta as its sole water source and has invested more than \$1 billion in the past two decades to manage its water quality and to achieve the delivery goal to its customers, said Yuan Liu, associate water resources specialist.

“We are not sure how salty the Delta water would be due to the [program],” she said. “The regional board claimed that they would maintain the water quality as it is today, but we don’t see a guarantee for this.”

Cozad said the program makes no substantive changes to the existing water quality objectives for surface or groundwaters and that the requirement for the Central Valley regional water board to conduct anti-degradation analysis, evaluate downstream impacts and protect water quality remain in place. The state’s anti-degradation policy requires “best practicable treatment or control” of discharges to high-quality waters.

Cory, the Los Banos farmer, acknowledged that there’s still work ahead to solve the salt problem.

“We need to figure out where do we want these salts to go? We’ve got to acknowledge it and we can’t just say, ‘You’re not putting it here, you’re not putting it there.’ You’ve got to look at it on a Central Valley-wide basis,” he said. “That’s the next step, what I call CV-Salts 2.0, is looking at long-term salinity planning.”



Members of the Central Valley salinity coalition meet to hash out elements of the long-range plan to control salts and nitrates in the valley.

(Source: CV-SALTS coalition)Now that the program has passed through the Central Valley regional water board, Gleason, the Sacramento

attorney, believes it is imperative for those affected by its provisions to take notice.

“Even though they tried their best to bring in agencies and to bring in the other dischargers, it’s still going to catch people by surprise,” she said. “I think everybody that is subject to CV-SALTS should anticipate that once they start on a path of providing replacement water, that they are never stopping. It’s going to be a very long time before the science catches up to this problem.”

Chilcott with the regional board said her agency had the option of pursuing its legal authority with cleanup and abatement orders for salt and nitrate, but that going that route would have been a “recipe for litigation.” Instead, the decision was made to facilitate local solutions that protect users, control contamination and then work on restoration.

Cozad acknowledged that the program puts a burden on people, but said that it also provides the opportunity for creative, local solutions to the discharge dilemma.

“That’s a lot different than just saying ‘You’ve got to comply with this and pay this much or do these things,’” he said. “When you do risk assessment, it’s the risk you can control versus the risk you can’t control, and if you can control it, you are willing to take a much bigger risk.”

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The unintended consequences of water conservation

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Dr. Kurt Schwabe discusses the impact of water conservation on recycled water; Yorba Linda Water District GM discusses effects of 36% water conservation on his district

During the recent drought, conservation mandates were imposed across the state with some areas mandated to cut their water use by one-third or more. However, reducing water consumption by one-third means a significant reduction in the flow of water through distribution systems, creating challenges for water managers.

What were the unintended consequences of the water conservation mandates? A panel at the [Orange County Water Summit](#) discussed the unintended consequences and impacts of the conservation mandates. First, Dr. Kurt Schwabe, adjunct fellow at the Public Policy Institute of Californians Water Policy Center and professor of Environmental Economics and Policy at the UC Riverside, discussed the technical side of the effects of indoor conservation on wastewater recycling; next, Marc Marcantonio, general manager of the Yorba Linda Water District, spoke about the impacts of a 36% conservation mandate on the system and the community.

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DR. KURT SCHWABE: Drought, water conservation, and wastewater reuse: Identification of some unintended consequences

Dr. Kurt Schwabe began his presentation by presenting a slide with a quote by Frederick Bastiat about accounting for the full



Drought, Water Conservation, and Wastewater Reuse: Identification of Some Unintended Consequences

"There is only one difference between a bad economist and a good one: the bad economist confines himself to the visible effect, the good economist takes into account both the effect that can be seen and those effects that must be foreseen" [Bastiat, F. "What is Seen and What is Not Seen" July, 1850]

Kurt A. Schwabe
Professor of Environmental Economics and Policy
School of Public Policy
University of California – Riverside
Adjunct Fellow, Water Policy Center, Public Policy Institute of California
Adjunct Professor, Center for Food and Resources, University of Adelaide



range of impacts of decisions: "There is only one difference between a bad economist and a good one: the bad economist confines himself to the visible effect; the good economist takes into account both the effect that can be seen and those effects that must be foreseen."

Dr. Schwabe said that the quote expresses the idea that good economics and good cost-benefit analyses account for unintended consequences; Ben Franklin said something similar in a letter he wrote to a friend where he the idea of 'prudential algebra', which was sort of a cost-benefit analysis of that time.

"These unintended consequences are not one-time events; they are pervasive," he said. "It was the genesis of environmental economics, where back in the 60s we realized that market transactions, while good for the market economy, often overlooked unintended consequences and externalities, so we started to bring that into our models. It's not one-time events. Every consumption and production activity creates an externality or some type of residual which often leads to pollution, so it's around us, it's everywhere, and it's pervasive."

There are a number of unintended consequences with water conservation, something that Dr. Schwabe and others have been researching. Low flush toilets lead to more flushing, low flow showerheads lead to longer showers, front load washers lead to more rinse cycles, and so on, and Jevon's Paradox states that increases in irrigation efficiency often lead to more water use, he pointed out. There are also positive unintended consequences in that reducing water use leads to a reduction in energy use.

That led Dr. Schwabe to the question, are there unintended consequences from water conservation on recycling of wastewater?

"This is really important because conservation is a demand side

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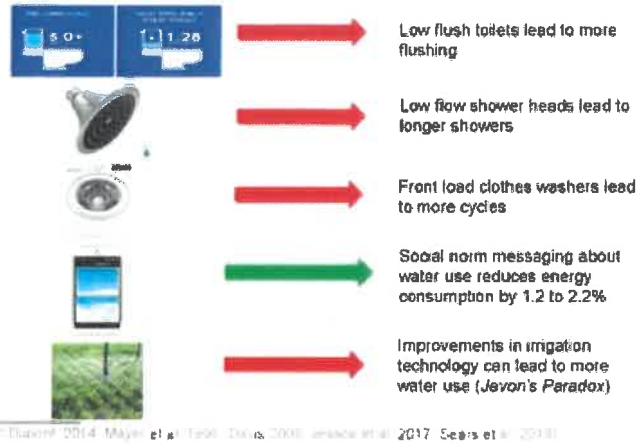
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Some "Unintended Consequences" with Water Conservation*

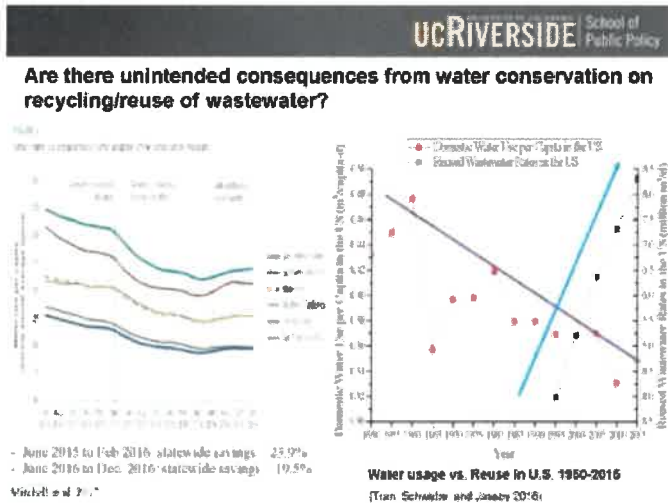


*Blazynski 2014; Mayer et al 2009; Davis, 2008; Jevons et al 2017; Sears et al 2018

management strategy to address drought and water scarcity, and water recycling is kind of a supply side, augmentation

strategy," he said. "Do they work in concert together or is there sometimes friction between the two and should we be aware of that friction?"

He presented a slide with two graphs. The graph on the left shows the reduction in gallons per capita per day which shows a



significant reduction in water use because of the state mandate for conservation. He noted that the nationwide trend has been a reduction in per capita water use nationwide, while wastewater recycling has been increasing as well, as shown in the graph on the right.

To answer the question, what are the impacts of conservation and recycling strategies, Dr. Schwabe gave a simple analysis: If one person in a water district consumes 100 gallons of water, 50% indoor and 50% outdoor, and there is no wastewater recycling, their gallons per day is 100; their use of source water is also 100 gallons. If that water is recycled, assuming 20% of indoor use is consumed and 80% is wastewater, then although the overall gallons per day is still 100, the gallons per day from source water drops to 60 units, or a negative 40% reduction already in terms of the use of imported or source water. If a conservation mandate imposed on society and both groups decide to conserve and reduce their water use indoors by 20%, then the no recycling situation leads to a 10% reduction in imported water use,

- JUL 19 THU Delta Protection 19 Jul @ 05:30 p
- JUL 20 FRI Delta Heritage f 20 Jul @ 09:00 a
- JUL 23 MON WEBINAR: Cali 23 Jul @ 11:00 a
- JUL 24 TUE California Water 24 Jul @ All-day
- State Water Res 24 Jul @ 09:30 a
- Water and Almc 24 Jul @ 11:30 a
- BROWN BAG S Decisions 24 Jul @ 12:00 p
- Flood-MAR – U: 24 Jul @ 12:00 p
- JUL 26 THU Delta Stewardsl 26 Jul — 27 Jul @
- USGS Lecture: 26 Jul @ 07:00 p

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UCRIVERSIDE School of Public Policy

Indoor Conservation, Recycling, and Imported Water: An Example of Two Hypothetical Cities

	No Conservation Mandate		Conservation Mandate: 20% Indoor Reduction		Recycled water decreases by 20%
	No Recycling	Recycling	No Recycling	Recycling	
Total Water Demand	100	100	90	90	TDS likely increases
Indoor Water Use	50	50	40	40	
Outdoor Water Use	50	50	50	50	Relatively ineffective at reducing imports
Recycled Water Available	0	40	0	32	
Imported Water Purchases	100	60	90	58	
Efficiency					
GPCD	100	100	90	90	
GPCD (Import Water)	100	60	90	58	
% Change in Import Water Use	0%	-40%	10%	-3%	

Takeaway: When recycling reuse is present, degree to which conservation reduces imports depends on relative fraction of indoor versus outdoor conservation. If indoor conservation adopted, then recycling may not be as drought proof as often suggested.

whereas if the wastewater is recycled, it only leads to a 3% reduction in water use. "So if recycled water decreases

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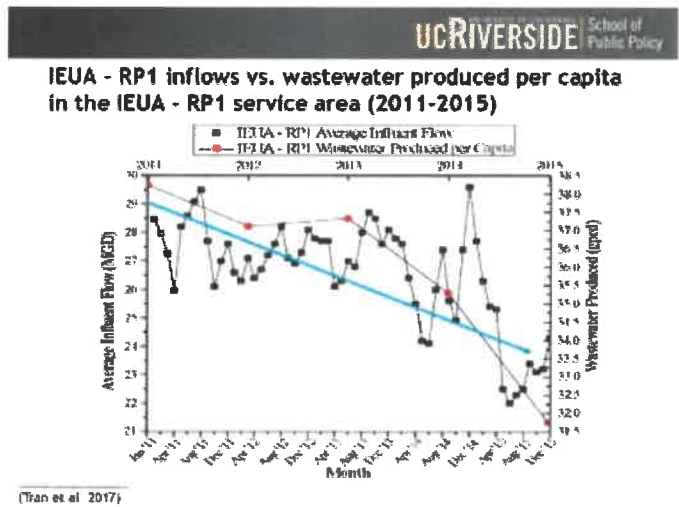
The unintended

consequences of water conservation

July 18, 2018 (13)

by 20% because of the indoor water conservation, it's likely going to lead to an increase in TDS and other constituents in our wastewater, and it's relatively ineffective in reducing imports," Dr. Schwabe said. "So you could say then that when recycling is present, the degree to which conservation reduces imports or source water use depends on relative fraction of indoor versus outdoor conservation. And therefore if indoor conservation is adopted, then recycling may not be as drought proof as people always claim it is."

What does the evidence suggest? Dr. Schwabe presented a graph from the Inland Empire Utilities Agency's regional



recycling plant #1 (RP1). The left hand axis shows average inflows in millions of gallon per day showing the trend, which has generally been decreasing over time from 2011 to 2015. He acknowledged that there can be storms which can cause flows to go up, but the general trend is less water going to the recycling plants. The red dots represent wastewater produced in terms of gallons per capita per day; he noted that there is also a trend of flows going down over time which is consistent with the trend in water use.

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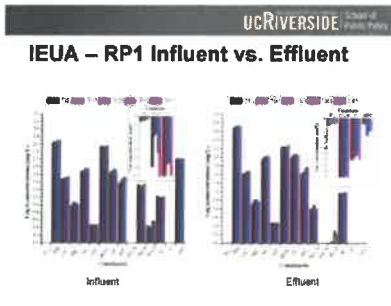
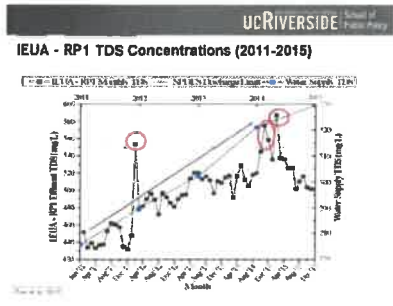
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What about TDS concentrations? "My theoretical model suggests it should be going up and it is, and it's going up for two reasons," said Dr. Schwabe. "First of all, as the drought hits, your water supply often becomes a little more saline, and so your source water increases in salinity, but also if people engage in indoor water conservation, then the wastewater becomes more concentrated, and I think that is what explains the differences here over time from 2011 to 2015. The dotted red line on the graph (above, left) is the NPDS permit, and four violations occurred at this plant since 2011. So that is the anecdotal evidence."

Analysis of Conservation Mandate and Drought on WWTP Influent Quality and Flow

(Schwabe, Amin, Jansky, Tran, Janta, Castelnu, & Water Policy Center, PFC)
Regression Analysis

Equations

$$Y1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$$

$$Y2 = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \alpha_4 X_4 + \alpha_5 X_5 + \epsilon$$

Notes:
 Y1 = Influent Flow
 Y2 = Effluent Salinity (TDS concentration)
 X1 = Conservation Mandate
 X2 = Plant's Treatment Technology
 X3 = Plant Design Flow
 X4 = regional location
 X5 = time

- Data: 32 WWTP over 48 months (2013-2016)
- Fixed Effects OLS

Preliminary Results:

Mandate had a

- **negative and statistically significant impact on influent flow**
- **positive and statistically significant impact on effluent TDS**

Effluent-dominated Streams

Stream Flow = $g(Y1, Y2, \dots)$
 Stream Quality = $f(Y1, Y2, \dots)$

- One monitoring point so far

period, including their monthly flow rates and their monthly TDS qualities; that was related to the state mandate and the stress test after the state mandate was rescinded while controlling for other factors that would influence flow and TDS at the plant; they then did a regression analysis.

"The results suggest that the mandate had a negative and statistically significant impact on influent flow; it had a positive and statistically significant impact on effluent TDS, similar to what the theory was predicting and what we know as anecdotally," he said.

The next stage of the study is to relate that to an effluent-dominated stream and see how flow and quality are affected by changes at the wastewater treatment plant; Dr. Schwabe said some streams will be affected while others aren't. They are still gathering data for this part of

July 17, 2018 (764)



THIS JUST IN S

Secretary Laird sends letter opposing riders to exempt Cal Water Fix and other water projects from judicial review

July 17, 2018 (734)



THIS JUST IN R

Sen. McNeerney and Garamendi offer amendments to protect California water rights and ensure tunnels comply with environmental laws

July 17, 2018 (628)



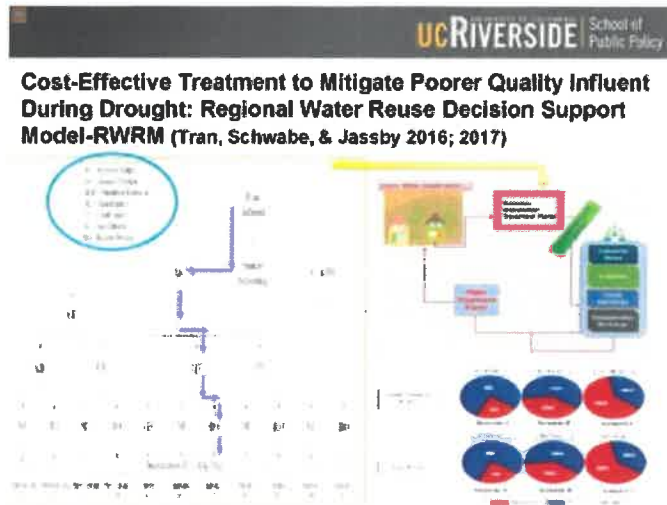
DAILY DIGEST T

What the \$8.9 billion water bond would buy; Why aren't there more controlled burns? Preparing for extreme weather by planting trees; Trump's big reorganization plan gets second and third look; and more ...

July 16, 2018 (617)

the study, so he isn't in a position to speak about any results just yet until more data is collected.

At the recycling plant level, if inflow is going down and constituents are going up, how should the plant operator respond?



Dr. Schwabe and his colleagues have developed a plant level model that considers the rising levels of constituents; the model looked at blending techniques to cost-effectively address the increase in salinity and other constituents in the wastewater which can be blended into 'purposed water' to meet the water quality requirements for the particular type of demand, such as golf courses, turf, or orange groves. "The model illustrates how you can do these blending techniques and identify cost effective blending techniques," he said.



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UCRIVERSIDE School of Public Policy
A constrained optimization groundwater model in Southern California: Evaluation of Management Options under Uncertainty
 (Tran, Schwabe, Ajami, and Jassby, 2016)

Example



Possible issues analyzed:

- Impact of climate change and natural recharge variability on groundwater sustainability and management
 - Role of recycling on groundwater recharge
 - Impact of demand-side management on recycling and groundwater use
 - Impact on municipal finances and groundwater recharge from providing recycled water to agriculture
- => **Unintended consequences abound**

For dealing with the flow, a much broader model is needed, so Dr. Schwabe and colleagues have also developed

a regional model. Currently, they've modeled San Bernadino Valley Municipal Water District and the Bunker Hill basin, looking at natural recharge and stochastic recharge over 50 years, as well as changes in demand, changes in prices, and changes in recycling. "We can answer a lot of interesting questions that get at this idea at understanding what the unintended consequences are," Dr. Schwabe said. "It's very complex, and without a model like this, it's hard to understand how changes in the price of agricultural wastewater affects the whole system in terms of recharge and in terms of the water quality going to the stream."

Dr. Schwabe then gave his conclusions. "So I would summarize then by saying that recycling and conservati on are integral parts of California's portfolio to address water scarcity and drought.

Summary

- Recycling and conservation are integral parts of California's portfolio to address water scarcity and drought
- Evidence suggests that conservation efforts and the drought – including the state mandate – impacted wastewater treatment influent flow and quality
- "unintended" conservation efforts may
 - increase wastewater treatment costs
 - reduce recycling opportunities
 - impair surface water flows and qualities (especially in areas with effluent dominated streams)
- Policy makers need to recognize the potential dependence of recycling on conservation, particular indoor water conservation

The evidence does suggest that the conservation efforts in the drought and the state mandate impacted wastewater treatment influent and quality; these unintended conservation efforts may increase wastewater treatment costs, reduce recycling opportunities, and impair surface water flows and qualities, especially in effluent dominated streams. Basically it suggests that there's an argument to be made that policymakers need to recognize the potential dependence of recycling, particularly when the conservation is indoors."

MARC MARCANTONIO: The effect of 36% water conservation mandate on Yorba Linda



Marc Marcantonio is the General Manager of the Yorba Linda Water District.

The District provides water and wastewater service to about 80,000 people in the cities of Yorba Linda, Placentia, Anaheim, Brea, and unincorporated Orange County. The area was originally an agricultural community which has transitioned into the sixth richest city of California with large residential lots, hobby farms, and horse and view properties. The community has a large amount of recreational properties; the two largest customers are the city of Yorba Linda and the school district. The district is adjacent to the wildlands of Chino Hills State Park with more than 16,000 homes bordering the state park.

"I bring out these points to illustrate that Yorba Linda Water District has very high irrigation need, especially since rainfall is extremely limited in

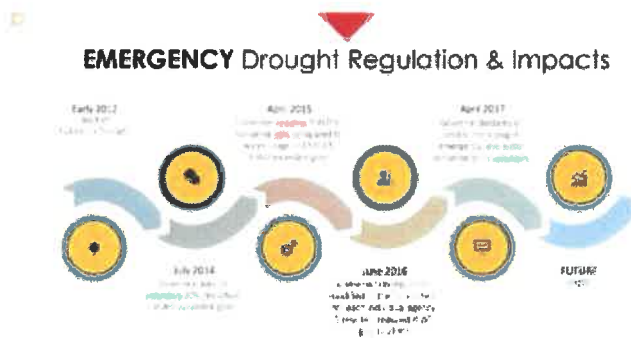
our area," he said.

The District has 11 wells, four



connections with Metropolitan for imported water, 14 underground reservoirs totaling 54 million gallons, and 12 booster pump stations for 20 different pressure zones, due to the steep terrain present in the area. He noted that the different colors on the service area map represent different elevations throughout the system. "Each one of those is a different pressure zone, which makes managing the system somewhat unique," he said.

The District has almost completed a project to replace and expand the 40-year old Fairmont booster pump station; completion of the project will mean that the District will now be capable of pumping both groundwater and imported water to their entire service area, giving them two completely redundant sources of supply should any one be lost.



Mr. Marcantoni then reviewed key points from the most recent drought. "When the Governor

asked for a voluntary 20% reduction in 2014, our customers exceeded that goal," he said. "When the emergency was declared in 2015, Yorba Linda Water District was required to reduce our consumption from 2013 levels by 36%, the highest in the state. While nobody thought we could do it, our customers complied and exceeded the 36% requirement. When reason prevailed and the stress test was implemented, Yorba Linda was shown to be drought resilient, and our requirement was reduced to 0."

He pointed out that their customers have been becoming more efficient, reducing their usage over the past 5 years from 35 million gallons a day down to 20 million gallons per day, despite more population and more water connections.

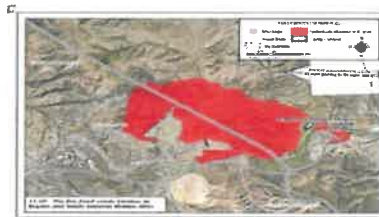
The District immediately realized many unintended consequences of the emergency drought regulation and water conservation, Mr. Marcantonio said. He noted that the 100% of their wastewater is reused, purifying it for potable use and returned to the aquifer for reuse and the stormwater system routes runoff to settling ponds which recharges groundwater, as does the water used for irrigation.

"The soils in our area are extremely well drained, which is why Orange County Water District locates their settling basins adjacent to us and why our wells are located where they are," he said. "Virtually all of our water is reused locally, with the exception of that which is lost to evapotranspiration and reused through the hydrologic cycle. I would contend that water is a local issue, unique to every area, so water conservation solutions should follow and also be local. Due to the recent emergency drought declaration, our mandate of 36% of water reduction did not prevent water waste in our district, nor did it provide a single glass of water to East Porterville."

Public health and public safety is more of a concern than water supply for him, he said, and the District's terrain along with the community's experiences have led to their water system having some unique issues.

One of those issues is providing sufficient fire flow for domestic and commercial building fires, as well as the added challenge of being adjacent to the state park and having to deal with wildland fires. He said generally, up to 60 to 70% of any water district's costs can be for supporting the fire flow requirements of the city or county authority having jurisdiction.

Public Safety - Fire



He presented photos of the 2008 Freeway Complex Fire which occurred in their service area, noting that the speed of the fire was overwhelming and the intensity was devastating. *"Our average day at peak demand is 20 million gallons a day, but during this fire, it increased to 45 million gallons a day,"* he said.

The fire burned over 30,000 acres and 90% of the Chino Hills State Park; 112 homes in Yorba Linda destroyed and 314 residences damaged or destroyed in the cities of Yorba Linda, Brea, and Anaheim. *"This resulted in an inverse condemnation judgement of \$69 million against Yorba Linda Water District for failure to protect, and continues to instill fear in our community, especially when water is restricted,"* he said. *"We all know fear is a powerful motivator, which resulted in the public insisting that we invest in infrastructure that is oversized."*

They have several reservoirs that are oversized, including one that serves only 112 homes and should be about a half a million gallons but instead was built to hold 2 million gallons.

2008 Freeway Complex Fire



This creates a concern for water quality and public health that is magnified during water

conservation periods as the key to maintaining water quality in the distribution system is circulation and consumption, Mr. Marcantonio said. With less water flowing through the system, pathogens and unhealthy chemicals may accumulate and be less diluted throughout the distribution system, so if water consumption decreases, flushing of the distribution system must be increased to maintain water quality.

The water quality starts out as being excellent, but long detention times in mains and reservoirs can lead to stagnation. Where distribution systems involve rugged terrain, including hills, ridges, and valleys, there are many places where water does not get circulated or consumed, he explained. One-way water mains, oversized reservoirs, oversized pipes and pumps all contribute to water stagnation, especially during conservation and even with water use efficiency measures.

"Water quality depends on maintaining a good disinfectant residual to these extremities of your distribution system and to prevent nitrification and disinfection byproducts and the only way to ensure this is the flushing of all dead ends," Mr. Marcantonio said.

Yorba Linda Water District disinfects their groundwater with free chlorine and the import water is disinfected with chloramines; with decreased water use, they must carefully monitor the water quality in the reservoirs, especially to prevent nitrification in reservoirs filled with chloraminated water.

The red dots on the map illustrate over 5000 dead ends, most of which are fire hydrants and mains that are not looped due to terrain issues. "All must be routinely flushed to maintain water quality," he said. "The less water consumed by customers, the more we must flush."



There were financial consequences as well. He pointed out that public and private water districts provide a service; their expenses are directly related to the service of water treatment, storage, pumping, and delivery. These expenses include operations, and the repair and replacement of infrastructure.

"We provide fire service, but few districts list the charge on customer bills for fire flow service and most customers simply do not realize that they pay for service," he said. "As an industry, we don't help things by charging customers as if we're selling them water as a commodity, like a retail store might sell products."



Unintended Consequence: Financial

Water sales revenue
 Lost 36% of consumption revenue
 Increased infrastructure with customers
 "pay more for less water"
 Bill service, just water

Water providers typically charge a base fee and a consumption charge; because they reused

their water prior to the drought emergency, most of the costs were recovered with the consumption charge, thereby keeping the basic service charge artificially low. "This financial model worked well for the district for over 100 years, but it failed when the state took the unprecedented action to mandate a 36% rationing of our water use or face fines up to \$10,000 per day," he said. "The sudden loss of consumption revenue put Yorba Linda Water District upside down on our bond debt covenant ratio, requiring a dramatic increase in the basic service charge. In our case, the unintended consequence was that water bills increased especially for those with low water use, since water sales were reduced 36%."

The district also lost revenue that was planned for water use efficiency projects. Their distribution system was designed and built over many years, and optimized to provide high volumes of water for fire suppression. Water use efficiency is good, whereas water conservation can strand expensive infrastructure assets, he said.

Perhaps the hardest unintended



consequence was the damaging of public trust. "The newspapers in Northern California called Yorba Linda profligate and touted our relatively high water use as being wasteful and entitled, but never once mentioned that we are the model agency for water reuse," he said. "Locally we went through stages of public denial a drought even existed, then accusations of gouging, harassment, death threats to the staff, and humiliation on public talk shows. We were recipients of a referendum movement to overturn a valid Prop 218 rate increase that the customers approved. We were the recipients of a lawsuit and a recall election and even more."

"Because public water agencies are critical to life, public trust is imperative," Mr. Marcantonio said. "Believe me, it's very easy to lose and very difficult to restore."



"So in conclusion, we are victims of our own success," he said. "Our customers wake up every

morning, flush their toilets, and the waste disappears magically. They turn the faucet handle and safe drinking water always comes out. This reliability of service has made inconsequential life's most critical elements. We need to make a paradigm shift and educate the public how difficult and expensive it is to provide safe and reliable drinking water. We need to tell our story. We need to promote our business as a service, instead of a commodity."

"Confusing conservation with efficiency is like confusing motion with progress. As water providers, our primary mission is public safety and public health. We can't ignore this for the sake of conservation or efficiency."

Audience question: Regarding the Freeway Complex Fire, how did they decide that you were responsible, and what about the other communities peripheral to the Chino Hills there, why weren't they in the same situation you were?

"I'm not an attorney and so my opinions that I will give you on that are from my observations and education," Mr. Marcantonio said, noting that he wasn't even here during the Freeway Complex Fire. "Ultimately, if you boil it down to one thing, we were responsible to repay for a small group of homes because in that particular area, the fire hydrants lost water. In all the other areas of our district, even where all the other homes were lost, the system didn't fail. Water was still available in the fire hydrants. It just overwhelmed the infrastructure's capability."

"We all build for fire flow and that why all of our systems are as large as they are; it's not for drinking water, it's for our fire fighting mission. It's designed for domestic fires and commercial fires, not wildfires. Nobody's system can really handle that type of a fire. But a small group of homes burned because the fire hydrants ran out of water, because the fire burned the pump station down and shorted the pump and the heat deprived the air of oxygen, so the backup gas generator couldn't operate because of being starved for oxygen – those hydrants didn't have water, and the court decided that because we're a public entity, we took the homeowners use of those facilities away and they needed to be compensated for that. In the areas where water continued to flow, we weren't found liable."

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Rail with trail: a great idea with unintended consequences

By Bruce Silvey

Friday, July 20, 2018

Most people in our county would love to have an excursion train sharing the right-of-way around Humboldt Bay with the yet to be completed Humboldt Bay Trail. The cities of Arcata and Eureka built their amazing sections of the Bay Trail to incorporate the rails, and this possibility, at considerable extra expense. The county of Humboldt will build the remaining four miles in the same way.

State Sen. Mike McGuire's bill — Senate Bill 1029, the Great Redwood Trail Act, which passed the State Senate and is currently working its way through the Assembly — is not a threat to the rails around the bay. The true problem is the condition of the rails and the cost to bring them up to standard to support a train. Sen. McGuire's office estimates that cost to be \$17 million to \$20 million just around the bay, and a million dollars a mile for every mile south of Eureka to South Fork.

No credible source believes that there is state funding of that magnitude to support an excursion train. Also, despite the best efforts of the North Coast Railroad Authority, in the 20 years the corridor has been dormant the NCRA has been unable to find a rail operator willing to make that type of investment. If a rail operator ever did find a financially viable enterprise in Humboldt County, they could apply to the Surface Transportation Board to reconvert any part of the rail-banked line back to active railroad.

Besides the huge costs to repair the rails, building rail-with-trail (where old rails are left in place and the trail is built next to them) has been estimated to cost 40 percent more than rail-to-trail (where the rails are removed and the trail utilizes the existing rail bed). This extra cost, on the prayer that someone will eventually invest the millions to repair the rails, could sink the Great Redwood Trail and its real economic and recreational opportunities for our communities.

I recently attended a meeting of the Humboldt Bay Harbor, Recreation and Conservation District. It is the district's mandate to support commerce, recreation, and conservation of the bay. At their regularly scheduled meeting on May 24, district commissioners reviewed SB 1029-McGuire. After a discussion of all the potential uses of rail around the bay, the commissioners overwhelmingly agreed that there were no economically viable possibilities in the foreseeable future. One commissioner observed that attempting to strap SB 1029 with the extra costs of building rail-with-trail could kill the trail for no achievable purpose, and leave the bay without a major recreational opportunity. The commissioners voted to support the bill as written.

That observation speaks to the potential unintended consequences of continuing to push for rail-with-trail in Sacramento. SB 1029 has a very good chance of being passed by the Legislature and being signed by the governor, but the funding to make it happen has to be allocated by the governor's office. The NCRA was created by legislation, but was never funded. That, plus Mother Nature and changes in our economy, has led to an NCRA debt in excess of \$8 million and an incredible, but neglected, transportation corridor that is now a liability instead of an economic driver for the North Coast.

I believe that it is time for the North Coast to stop hoping for a miracle to save the trains, and to support the miracle and beauty of this right-of-way becoming a world-class trail for everyone to enjoy. Whether it is a short walk with a baby stroller along the bay, a student commuting to CR, or a multi-day ride by visitors who come from around the country and the world to enjoy the recreation and the sights, we will all benefit.

The competition for state funding is fierce. The more the community stands divided, or insists on funding that is not available, the more likely we will end up with what we have had for 20 years, a deteriorating corridor that is of no use to anyone. Please act now and call Gov. Brown's office to say you support SB 1029 and request that the governor support it with the necessary funding. Phone 916-445-2841, fax 916-558-3160. Thanks.

Bruce Silvey is on the Board of Directors of the Humboldt Trails Council and resides in Kneeland.

URL: <http://www.times-standard.com/opinion/20180720/rail-with-trail-a-great-idea-with-unintended-consequences>

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Mad Rwer Union
Aug 8, 2018

❖ MCKINLEYVILLE

MCKMAC: Protect the Mad River

Jack Durham
MAD RIVER UNION

MCKINLEYVILLE - The McKinleyville Municipal Advisory Committee (McKMAC) is urging the Board of Supervisors to protect, preserve and enhance the Mad River.

The committee voted 5-0 on July 25 in favor of sending a letter to supervisors stressing the importance of the river, which snakes its way along the town's southern and western edges. Committee members Ben Shepherd and Barbara Georgianna abstained from voting on the letter, while committee member Otto van Emmerik was absent.

The idea for the letter was spurred, in part, by a controversial proposal

earlier this year by Mercer-Fraser to build a cannabis extraction factory on the banks of Mad River in Glendale. The factory would have been located across the river from the Humboldt Bay Municipal Water District (HBMWD), which is the wholesale water supplier to McKinleyville, Fieldbrook, Blue Lake, Glendale, Arcata, Manila, Eureka and Cullen.



Craig Tucker

River and how the town wants it protected.

The river, Tucker pointed out, is the source of the community's drinking water and is a popular place to fish. "My kids swim in the Mad River from time to time. We can walk there from my house," Tucker said.

MAD RIVER ❖ A2

an appeal of the Planning Commission's approval of the project by the HBMWD, Mercer-Fraser dropped its project in April.

But McKMAC member Craig Tucker said he wanted the committee to make a general statement about the importance of the Mad River and how the town wants it protected.

The river, Tucker pointed out, is the source of the community's drinking water and is a popular place to fish. "My kids swim in the Mad River from time to time. We can walk there from my house," Tucker said.

MAD RIVER ❖ A2

Mad River: The river 'is awesome and we like it'

FROM AT THE LETTER, prepared by Tucker, states, in part, "We want to highlight that McKinleyville residents consider the protection and enhancement of the Mad River to be of utmost importance. The Mad River serves as our source of drinking water, provides recreational opportunities, supports a fishery and adds to the natural beauty of our area. We urge the Humboldt County supervisors to prioritize the protection, preservation and enhance-

ment of this irreplaceable community resource." "I think it [the letter] was basically a statement to reaffirm to the county supervisors that we in McKinleyville really do care about the Mad River," Tucker said, adding that he wants supervisors to "think twice" before making any decision that affects the Mad. McKMAC member Kevin Jenkins voiced support for the letter, saying "I'm fairly comfortable with the wording as it is now."

However, McKMAC member Ben Shepherd, who serves on the Humboldt County Planning Commission and voted in favor of the Mercer-Fraser project, had questions for Sheriff Woo: the Fifth District representative to the Humboldt Bay Municipal Water District. Woo was in attendance to answer questions about her district and the river. Shepherd queried Woo about whether the water district classified the water it pumps from its wells under the Mad River as surface water or ground water.

Shepherd appeared to be referencing arguments that took place in the 1990s, when officials with the California Department of Health Services (DHS) became concerned about high turbidity in the district's drinking water during heavy storm events. The state wanted the district to build a filtration plant to reduce turbidity. At the time, some district officials argued that the water came from groundwater wells without a direct influence from surface water, therefore the filtration plant was not necessary. Ultimately,

Shepherd jumped in and said "It's all one in the same in my mind." "Essentially, this comment [the letter] is just a luff-fluff," Shepherd continued. "It really doesn't say anything. It's really just a feel-good thing."

Shepherd said that an argument could be made that there are already substantial protections in place or the Mad River. "Do you

the water district backed down and ended up building what's now called the Lloyd L. Hecathorn Turbidity Reduction Facility at a cost of \$10 million.

Shepherd seemed to want to explore why the district changed its argument from the 1990s to the opposite with regard to the Mercer-Fraser project. He asked Woo about the safety of the district's water and the Mercer-Fraser proposal. "And so when we are talking about the relative risk, to me that was a higher risk than I felt the district should take," Woo said, referring to the risk of the proposed cannabis extraction factory.

Shepherd countered that the chemicals that would have been used at the cannabis extraction factory would be limited to food-grade alcohol. "This prompted Woo to ask "Are we rehabbing Mercer-Fraser, or are we talking about supporting..." Shepherd jumped in and said "It's all one in the same in my mind."

"Essentially, this comment [the letter] is just a luff-fluff," Shepherd continued. "It really doesn't say anything. It's really just a feel-good thing."

Shepherd said that an argument could be made that there are already substantial protections in place or the Mad River. "Do you

feel there's significant protections for the water?" he asked Woo.

"I don't really feel like it's up for me to say," Woo said. "This is kind of like you guys' letter. If you want to write this letter, go for it."

Tucker, a fisheries biologist, weighed in on the difference between surface water and groundwater under the river. "You think about a river like the Mad River, think about your bath tub with gravel in it and water in the bath tub. The water is all connected."

Tucker also sought to distance the letter from the Mercer-Fraser controversy.

"This issue of the whole Mercer-Fraser thing came and went, but what I took from that was the community outcry over the issue was really a reflection of our community's values," Tucker said. "The fundamental value of people who live here is that the Mad River is awesome and we like it and we don't want it polluted. We want to drink out of it, we want to fish in it and we want to swim in it."

Tucker said the letter signals to the Board of Supervisors "Hey, if you're thinking about some kind of industrial development, or any kind of development that could potentially affect the Mad River, you better think twice 'cause for people in McKinleyville, the Mad River is really important. And that's all this letter says."

McKMAC member Greg Orsini made a motion to send the letter, which was seconded by Jenkins and then approved by the committee.

CORRESPONDENCE



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July 25, 2018

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Mandy Mager, City of Blue Lake
Brian Gerving and Wendy Howard, City of Eureka
Rick Hanger, Fieldbrook-Glendale CSD
Dave Hull, Humboldt CSD
Chris Drop, Manila CSD
Greg Orsini, McKinleyville CSD

Dear Municipal Customers:

This month, Humboldt Bay Municipal Water Districts' Board of Directors approved the FY 2018/19 budget. Attached for your information are the following items related to the approved budget.

Attachment 1 presents the estimated wholesale water charges for each customer. These are gross charges based on the approved FY2018/2019 budget plan.

Attachment 2 presents the Price Factor 2 (PF2) reconciliation from FY2017/2018, in accordance with Section 7.2.4 or Ordinance 16. The total PF2 credit is \$37,888.85.

This credit results from non-water revenues (such as our share of 1% property taxes, interest earnings and miscellaneous receipts) coming in higher than budgeted, and expenditures coming in lower than budgeted thus offsetting our costs to you. The impact of the PF2 credit/charge on individual agencies is calculated based on the following factors: Rolling Five-Year Average, Peak Rate Allocation, and Assessed Valuations (from Humboldt County).

This total credit/charge will be applied to your FY2018/19 monthly billings.

Attachment 3 presents your estimated *net* wholesale water charges after this PF2 credit/charge has been applied.

If you have any questions, please call me.

Sincerely,

John Friedenbach
General Manager

**Humboldt Bay Municipal Water District
2018/19 Budget
Summary of Wholesale Customer Charges Based on Adopted Budget
(Gross Charges which do not Reflect Prior-Year Price Factor 2 Reconciliation)**

	2017/18 Budget	2018/19 Budget	Comparison	
			\$	%
Pulp Mill/Harbor Dist	\$10	\$0		
Total Industrial:	\$10	\$0	-\$10	
Eureka	\$2,763,315	\$3,119,229	\$355,914	12.9%
Arcata	\$1,164,978	\$1,321,044	\$156,066	13.4%
Blue Lake	\$164,416	\$182,807	\$18,390	11.2%
Humboldt CSD	\$925,671	\$1,072,333	\$146,662	15.8%
McKinleyville CSD	\$937,796	\$1,066,249	\$128,453	13.7%
Fieldbrook CSD	\$151,440	\$174,392	\$22,952	15.2%
Manila CSD	\$62,264	\$70,168	\$7,904	12.7%
Total Munis:	\$6,169,881	\$7,006,223	\$836,342	13.6%
Total Wholesale	\$6,169,891	\$7,006,223	\$836,332	13.6%

Humboldt Bay Municipal Water District
PF2 Reconciliation

Month of Fiscal Year 12

2017-18 Price Factor 2 Actual vs Flat Reconciliation


Actual	Month of Fiscal Year										Month end comparison between actual and flat
	Arcata	Blue Lake	Eureka	Fieldbrook	Humboldt	McKinleyville	Manilla	Total	Month to date	Total	
Jul-17	51,233.24	6,903.75	118,892.09	6,964.40	45,970.57	43,740.97	2,645.04	276,350.06	276,350.06	276,350.06	117,989.69
Aug-17	55,561.25	7,976.56	134,496.09	7,787.68	48,698.38	45,468.49	2,937.66	302,926.11	579,276.17	302,926.11	208,203.33
Sep-17	108,187.28	14,509.24	251,917.98	15,133.72	101,001.43	93,054.73	5,494.32	589,298.70	1,168,574.87	589,298.70	12,644.38
Oct-17	74,178.09	10,366.33	175,967.49	10,154.59	64,811.01	61,745.31	3,900.86	401,123.68	1,569,698.55	401,123.68	5,260.45
Nov-17	102,946.77	13,801.61	239,532.48	14,362.44	95,826.80	88,534.52	5,233.84	560,238.46	2,129,937.01	560,238.46	(161,238.26)
Dec-17	73,093.28	9,827.11	169,820.88	10,052.36	66,676.98	62,607.30	3,748.01	395,825.92	2,525,762.93	395,825.92	(163,324.43)
Jan-18	(6,337.77)	4,467.23	39,077.79	(170.56)	(33,472.74)	(28,456.98)	753.71	(24,139.32)	2,501,623.61	(24,139.32)	254,554.64
Feb-18	75,180.82	10,097.75	174,760.83	10,391.70	69,071.25	64,486.48	3,843.56	407,832.39	2,909,456.00	407,832.39	240,462.00
Mar-18	71,775.25	9,670.76	166,571.38	9,762.26	64,453.87	61,288.50	3,704.36	387,226.38	3,296,682.38	387,226.38	246,975.37
Apr-18	74,875.18	10,089.94	173,844.31	10,201.92	67,375.56	63,944.93	3,861.50	404,193.34	3,700,875.72	404,193.34	236,521.78
May-18	(9,250.96)	3,730.05	29,231.52	(499.98)	(33,377.10)	(29,352.31)	513.65	(39,005.13)	3,661,870.59	(39,005.13)	669,266.66
Jun-18	189,035.81	25,404.59	439,471.20	26,103.45	173,372.52	162,057.86	9,672.13	1,025,117.56	4,686,988.15	1,025,117.56	37,888.85
Total	860,478.24	126,844.92	2,113,584.04	120,243.98	730,408.53	689,119.80	46,308.64	4,686,988.15		4,686,988.15	

Flat	Month of Fiscal Year										Month end comparison between actual and flat
	Arcata	Blue Lake	Eureka	Fieldbrook	Humboldt	McKinleyville	Manilla	Total	Month to date	Total	
Jul-17	72,360.17	10,516.19	176,184.15	10,083.30	62,136.36	58,594.38	3,865.20	393,739.75	393,739.75	393,739.75	
Aug-17	72,360.17	10,516.19	176,184.15	10,083.30	62,136.36	58,594.38	3,865.20	393,739.75	787,479.50	393,739.75	
Sep-17	72,360.17	10,516.19	176,184.15	10,083.30	62,136.36	58,594.38	3,865.20	393,739.75	1,181,219.25	393,739.75	
Oct-17	72,360.17	10,516.19	176,184.15	10,083.30	62,136.36	58,594.38	3,865.20	393,739.75	1,574,959.00	393,739.75	
Nov-17	72,360.17	10,516.19	176,184.15	10,083.30	62,136.36	58,594.38	3,865.20	393,739.75	1,968,698.75	393,739.75	
Dec-17	72,360.17	10,516.19	176,184.15	10,083.30	62,136.36	58,594.38	3,865.20	393,739.75	2,362,438.50	393,739.75	
Jan-18	72,360.17	10,516.19	176,184.15	10,083.30	62,136.36	58,594.38	3,865.20	393,739.75	2,756,178.25	393,739.75	
Feb-18	72,360.17	10,516.19	176,184.15	10,083.30	62,136.36	58,594.38	3,865.20	393,739.75	3,149,918.00	393,739.75	
Mar-18	72,360.17	10,516.19	176,184.15	10,083.30	62,136.36	58,594.38	3,865.20	393,739.75	3,543,657.75	393,739.75	
Apr-18	72,360.17	10,516.19	176,184.15	10,083.30	62,136.36	58,594.38	3,865.20	393,739.75	3,937,397.50	393,739.75	
May-18	72,360.17	10,516.19	176,184.15	10,083.30	62,136.36	58,594.38	3,865.20	393,739.75	4,331,137.25	393,739.75	
Jun-18	72,360.17	10,516.19	176,184.15	10,083.30	62,136.36	58,594.38	3,865.20	393,739.75	4,724,877.00	393,739.75	
Total	868,322.04	126,194.28	2,114,209.80	120,999.60	745,636.32	703,132.56	46,382.40	4,724,877.00		4,724,877.00	

Fiscal Year to Date - Month Total

Actual vs FY Total Flat difference

Actual vs YTD Flat : Over(Under)


 Reviewed by
 Date 6/23/18

**Humboldt Bay Municipal Water District
2016/17 Budget
Summary of Customer Charges Incorporating Prior-year Price Factor 2 Reconciliation**

	Estimated Charges Based on Approved 2018/19 Budget	PF 2 Reconciliation for FY 2017/18	Estimated Net Charges
Evergreen Pulp, Inc.	\$0	n/a	\$0
Total Industrial:	\$0		\$0
Eureka	\$3,119,229	(\$626)	\$3,118,604
Arcata	\$1,321,044	(\$7,844)	\$1,313,201
Blue Lake	\$182,807	\$651	\$183,457
Humboldt CSD	\$1,072,333	(\$15,228)	\$1,057,106
McKinleyville CSD	\$1,066,249	(\$14,013)	\$1,052,236
Fieldbrook CSD	\$174,392	(\$756)	\$173,636
Manila CSD	\$70,168	(\$74)	\$70,094
Total Mumis:	\$7,006,223	(\$37,889)	\$6,968,334
Total Wholesale	\$7,006,223		\$6,968,334

H.B.M.W.D. AUG - 6 2018

SECTION G2 PAGE NO. 1

EDMUND G. BROWN JR., Governor

STATE OF CALIFORNIA - CALIFORNIA NATURAL RESOURCES AGENCY

DEPARTMENT OF WATER RESOURCES

1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791



AUG 01 2018

To Whom It May Concern:

On June 27, 2018, legislation went into effect that modified Division 3, Part 1, section 6161 of the California Water Code. The legislation clarifies the requirements of dam owners who had an emergency action plan (EAP) for their dam as of March 1, 2017. Please refer to the enclosures for additional information about the recent legislation requirements. *This letter is not applicable to dams without an EAP as of March 1, 2017.*

If you have any questions, you may contact Senior Engineer Kristen Martin at (916) 227-2170 or at MapRegs@water.ca.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Sharon K. Tapia".

Sharon K. Tapia, Chief
Division of Safety of Dams
Department of Water Resources

Enclosures (2):

- Notice to owners of dams with EAPs that existed as of March 1, 2017
- California Water Code section 6161

Notice to Owners of Dams with Emergency Action Plans (EAPs) that existed as of
March 1, 2017

For owners of dams with an EAP existing as of March 1, 2017 (pre-March EAP), recent changes to the Water Code clarify the submittal and approval process for inundation maps and EAPs. Inundation maps are approved by the Department of Water Resources, Division of Safety of Dams (DSOD); EAPs are approved by the Governor's Office of Emergency Services (Cal OES).

In June 2017, Senate Bill 92 (SB 92) added Water Code section 6161(a)(1) that requires dam owners to submit EAPs that contain inundation maps for the dam and all critical appurtenant structures (CAS). However, many pre-March EAPs likely do not contain CAS maps, and these maps are now required if the dam has CAS.

In June 2018, SB 854 added Water Code section 6161(a)(4) that clarifies the submittal process for the following scenarios.

Scenario	<u>Scenario 1</u> The pre-March EAP includes inundation maps for all structures that require an inundation map: <ul style="list-style-type: none"> • The dam only, where no CAS exist, or • The dam and all CAS, where CAS exist. 	<u>Scenario 2</u> The pre-March EAP includes a map for the dam but not all of the CAS, where CAS exist.
What do I, the owner, need to do?	<ul style="list-style-type: none"> • Submit the existing inundation map(s) to DSOD. • Once DSOD approves the map(s), submit the complete EAP to the CalOES within 30 days of DSOD's approval. 	<ul style="list-style-type: none"> • Submit the following to DSOD for approval: <ul style="list-style-type: none"> ○ Existing inundation map(s) ○ Plan & schedule for completion of the remaining maps (due Aug. 25, 2018) • Once DSOD approves the existing map(s), submit the existing EAP to the CalOES. • Once you have completed the remaining CAS map(s) according to the approved plan & schedule, submit them to DSOD. • Once DSOD approves the new CAS map(s), submit a revised EAP to CalOES within 60 days.

It is our understanding that most dam owners with pre-March EAPs have already submitted existing inundation maps to DSOD. If, however, you have not yet submitted your map(s) contained in a pre-March EAP, you are encouraged to do so as soon as possible.

More information about inundation mapping is available on the DSOD website: Water.ca.gov/damsafety. If you have any questions about inundation maps, please contact Senior Engineer Kristen Martin at (916) 227-2170 or MapRegs@water.ca.gov.

More information about EAPs is available on the Cal OES website: CalOES.ca.gov/dams. For questions regarding the EAP review process, please contact Cal OES at EAP@caloes.ca.gov.



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WATER CODE - WAT

DIVISION 3. DAMS AND RESERVOIRS [6000 - 6501] (*Heading of Division 3 amended by Stats. 1965, Ch. 1225.*)

PART 1. SUPERVISION OF DAMS AND RESERVOIRS [6000 - 6470] (*Heading of Part 1 amended by Stats. 1965, Ch. 1225.*)

CHAPTER 4. Powers of the Department [6075 - 6162] (*Chapter 4 enacted by Stats. 1943, Ch. 368.*)

ARTICLE 6. Inundation Maps and Emergency Planning [6160 - 6162] (*Article 6 added by Stats. 2017, Ch. 26, Sec. 88.*)

6161. (a) (1) An owner of a state jurisdictional dam, except an owner of a dam classified by the department pursuant to Section 6160 as a low hazard dam, shall submit electronically to the department an inundation map that shows the area that would be subject to flooding under various failure scenarios unique to the dam and the critical appurtenant structures of the dam.

(2) Before approval of an inundation map, the department shall review the map and may require the owner to make changes that the department deems necessary.

(3) Upon approval of the inundation map or maps by the department, the owner of the dam shall develop and submit electronically to the department and the Office of Emergency Services an emergency action plan that is based upon the approved inundation map or maps.

(4) If an owner of a dam has an existing emergency action plan as of March 1, 2017, the department shall review any inundation map or maps contained in the plan. If the department determines the inundation map or maps are sufficient, as described in subparagraphs (A) or (B), the owner of the dam shall submit the emergency action plan associated with the inundation map or maps to the Office of Emergency Services to review the emergency action plan as follows:

(A) If an emergency action plan existing as of March 1, 2017, contains an inundation map for the dam and all critical appurtenant structures, if critical appurtenant structures exist, and the department determines that the inundation map or maps for the dam and all existing critical appurtenant structures are sufficient, the owner of the dam shall submit the complete emergency action plan reflecting all critical appurtenant structures to the Office of Emergency Services for review within 30 days of department approval.

(B) (i) If an emergency action plan existing as of March 1, 2017, contains an inundation map for the dam but not for all critical appurtenant structures, if critical appurtenant structures exist, the department shall review a map included in the existing emergency action plan for sufficiency. If the department approves the map, the owner of the dam shall submit the existing emergency action plan associated with the approved map to the Office of Emergency Services. The owner of the dam shall continue to prepare inundation maps with due diligence for any remaining critical appurtenant structures and submit the map or maps to the department for review and approval. The Office of Emergency Services may defer review and approval of the new or updated emergency action plan until the Office of Emergency Services has received inundation maps approved by the department for the dam and all critical appurtenant structures. If the Office of Emergency Services approves an emergency action plan when the owner of the dam is continuing to prepare inundation maps with due diligence pursuant to this subparagraph, an owner of a dam may use that emergency action plan that existed as of March 1, 2017, on an interim basis, pending approval of a new or updated emergency action plan that includes maps for the dam and all critical appurtenant structures.

(ii) For the purposes of this subparagraph, "due diligence" means that the owner of a dam is progressing toward completion of the inundation map or maps for all critical appurtenant structures according to a reasonable schedule proposed by the owner of the dam and approved by the department. When evaluating the time schedule proposed by the owner of the dam, the department may consider, among other relevant factors, the hazard classification of

the dam, the number of critical appurtenant structure inundation maps that are outstanding, and the complexity of the failure scenarios. The owner of a dam shall submit a proposed time schedule to the department no later than 60 days after the effective date of the act that added this subparagraph. Failure to submit a proposed time schedule to the department or to comply with a time schedule approved by the department may result in the imposition of penalties, restrictions, or liens pursuant to Chapter 8 (commencing with Section 6425). After the department approves maps for the critical appurtenant structures, the dam owner shall submit a new or updated emergency action plan including the approved maps to the Office of Emergency Services within 60 days.

(b) (1) The Office of Emergency Services shall review and approve an emergency action plan no later than 60 days after receipt of the plan from the dam owner pursuant to Section 8589.5 of the Government Code. To the extent possible, the Office of Emergency Services shall give priority to a dam with the highest hazard classification as determined by the department pursuant to Section 6160.

(2) If the Office of Emergency Services determines a proposed emergency action plan does not meet the requirements of Section 8589.5 of the Government Code, the Office of Emergency Services shall inform the owner of the dam and require the owner of the dam to amend and resubmit the emergency action plan for approval. The Office of Emergency Services shall review and, if the emergency action plan meets the requirements of Section 8589.5 of the Government Code, approve a resubmitted emergency action plan within 30 days of receipt from the owner of the dam.

(3) Upon approval by the Office of Emergency Services of an emergency action plan, the Office of Emergency Services shall notify the department and the owner of the dam of the approval. The owner of the dam shall ensure that the approved emergency action plan is disseminated to appropriate public safety and emergency management agencies in potentially affected jurisdictions, to the extent these agencies want to receive approved emergency action plans.

(c) (1) The department shall make available to the public an approved inundation map and any schedule submitted pursuant to clause (ii) of subparagraph (B) of paragraph (4) of subdivision (a).

(2) Nothing in Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code shall be construed to require disclosure of an emergency action plan.

(d) (1) Pursuant to the classification by the department under Section 6160, an owner of a dam shall complete and submit an emergency action plan as follows:

(A) On or before January 1, 2018, if the hazard classification of the dam is extremely high.

(B) On or before January 1, 2019, if the hazard classification of the dam is high.

(C) On or before January 1, 2021, if the hazard classification of the dam is significant.

(2) An owner of a dam who has an existing emergency action plan as of March 1, 2017, that the department determines has a sufficient inundation map and that the Office of Emergency Services determines has a sufficient emergency action plan pursuant to paragraph (4) of subdivision (a) is not subject to the timelines set forth in paragraph (1).

(e) An owner of a dam shall update an emergency action plan, including an inundation map, no less frequently than every 10 years, and sooner under conditions that include, but are not limited to, the following:

(1) A significant modification to the dam or a critical appurtenant structure, as determined by the department.

(2) A significant change to downstream development that involves people and property.

(Amended by Stats. 2018, Ch. 51, Sec. 49. (SB 854) Effective June 27, 2018.)

CONTINUING BUSINESS

Sites Reservoir earns \$816 million in Proposition 1 funding



A valley west of Maxwell would be underwater if the Sites Reservoir is ever built. (Bill Husa — Enterprise-Record file)

By STAFF REPORTS |

PUBLISHED: July 24, 2018 at 12:36 pm | UPDATED: July 24, 2018 at 4:35 pm

SACRAMENTO — Nearly four years after voters approved billions of dollars for new water storage in California, the state finally announced how the pie would be divided.

Sites Reservoir in Colusa County, west of Maxwell, will get the largest chunk.

The proposed reservoir has been on the drawing boards since last century. It's the largest and most expensive proposal of the eight projects considered by the California Water Commission on Tuesday. It received the largest award, too — \$816 million.

The proposed 1.8 million acre-foot off-stream reservoir, which would fill with Sacramento River water with the help of canals during high winter and spring runoff, is estimated to cost \$5.2 billion to build. Even before the Proposition 1 money awarded Tuesday, the Sites Project Authority said it had enough commitments from water users to get the project built.

As designed Sites would add 500,000 acre-feet of water to the state's system annually, according to the project authority, two-thirds of the total water the eight projects will provide.

The bigger concern is lawsuits, which in California are likely to greet any effort to build a new reservoir.

The Water Commission approved \$2.5 billion in water storage funding on an 8-0 vote. Four of the projects were for new or expanded reservoirs. Four were for groundwater storage.

Other funding commitments for reservoirs included \$171 million for Temperance Flat Reservoir on the San Joaquin River, a fraction of the total cost of \$2.6 billion; \$459 million for Los Vaqueros in Contra Costa County, which will pay about half the total price tag; and \$485 million to replace and expand the Pacheco Reservoir Dam in Santa Clara County, which also will pay about half the total cost.

The groundwater projects were in Sacramento and San Bernardino counties, and two in Kern County.

Sites proponents have argued that storing more water in wet years at Sites would give the state more flexibility both upstream and downstream in the delta.

“Sites is the only project approved by the Water Commission that can improve water supply reliability within the Sacramento Valley Watershed while also increasing flows on the Sacramento River at times that are most critical to struggling fish populations,” said Jim Watson, general manager of the Sites Project Authority in a news release.

“The Sites Project offers the unique benefit of improving water quality and habitat conditions in the Sacramento River and delta when and where it’s needed most,” Watson said. “The project will not block fish migration, does not dam a large river or stream, and will only be filled by storm events, when excess water is available in the Sacramento River and after all existing environmental requirements have been met.”

Assemblyman James Gallagher, R-Yuba City, was relieved that the hard work to secure funding paid off.

“Over the last four years I have worked closely with the Sites Project Authority to ensure that this vital project received its fair share of funding out of the Proposition 1 water bond,” Gallagher said in a statement. “We held town hall meetings in the district with water commissioners, built bipartisan support in the Legislature, and were constantly reminding the Water Commission of the many benefits of this project. Today I am proud to see that our advocacy has paid off ... including over \$40 million in early funding to help get Sites off the ground. This has truly been a team effort that would not have been possible without us all working together.”

To: Board of Directors
From: John Friedenbach
Date: August 3, 2018
Subject: Sustainable Groundwater Management Act

.....

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package, composed of AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley), collectively known as the Sustainable Groundwater Management Act (SGMA). This law provides a framework for California for sustainable, groundwater management - "management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results."

SGMA requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, that will be 2040. For the remaining high and medium priority basins, 2042 is the deadline.

In his signing statement, the governor emphasized that "groundwater management in California is best accomplished locally." Through the Sustainable Groundwater Management Program, DWR provides ongoing support to local agencies through guidance and financial and technical assistance.

SGMA empowers local agencies to form Groundwater Sustainability Agencies (GSAs) to manage basins sustainably and requires those GSAs to adopt Groundwater Sustainability Plans (GSPs) for crucial groundwater basins in California.

The Mad River Basin had previously been designated as a "very low priority" basin, which did not require our District to prepare a Groundwater Sustainability Plan. However, in the most recent categorization release by DWR on May 18, 2018, the Mad River Basin was scored as a "medium priority" by one scoring point. DWR will be holding Public Meetings June 25-27, 2018 on the proposed 2018 SGMA Basin Prioritization and are accepting public comments until August 20, 2018 (extended due date).

Staff has been reviewing the scoring criteria and data in conjunction with Hank Seemann, Natural Resources Director at the County of Humboldt as well as Greg Orsini at McKinleyville CSD and Mark Andre of the City of Arcata. Because the County is the lead agency for SGMA compliance, Mr. Seemann will be preparing a staff report for the Board of Supervisor's meeting to be held on August 14th. Rather than duplicate his efforts, District staff will be presenting his report to our Board at our August 16th Board meeting to facilitate our discussions on this topic. District staff may propose that we join with the County of Humboldt in a response letter regarding the Mad River basin's classification by the DWR.

If the County staff report on SGMA is not available by our board packet production date, it will be distributed at or just prior to our Board meeting.

New Business

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

To: Board of Directors

Date: August 16, 2018

From: Chris Harris

RE: HBMWD Sick Leave Policy Discussion

Background

Full-Time Employees of HBMWD currently accrue sick leave at a rate of 8 hours/month (12 days/year). This accrued time is expected to be used for personal sick days, wellness-related appointments, and kin-care days (sick family member)¹. Unless retiring, this accrued sick time cannot be cashed-out and is forfeited if the employee separates from the District for any reason (other than retirement).

Other Agencies

Agency	Accrual Rate	Max. Accrual	Cash Out Option	Service Credit*	Comments
HBMWD	8 hours/month	1,040 hrs.	Up to 35% at retirement	Yes	
ACWA/JPIA	8 hours/month	No Limit	Indirect, see comment	Yes	Two days sick leave can be used annually as personal time
HCSO	8 hours/month	No Limit	Annual buy-back of up to 25% accrued days and 50% at retirement	Yes	Annual Buy-Back if employee has used less than 4 days/year
MCSD	8 hours/month	No Limit	Up to 50% at retirement	Yes	
Marin Municipal Water District	10 hours/month	No Limit	Annual buy-back and up to 750 hours at retirement	Yes	
Sonoma County Water Agency	8 hours/month	No Limit	Up to 25% at retirement	Yes	
City of Arcata	8 hours/month	No Limit	480 hours if resigning +15 yrs and 50% at retirement after 10 years	Yes	
City of Eureka	8 hours/month	No Limit	% at retirement based on tenure	Yes	
City of Fortuna	8 hours/month	No Limit	Anything over 480 hours at 25% of value at any time	Yes	
City of Redding	8 hours/month	No Limit	33 1/3% - 60% depending on years of service	Yes	
City of San Jose	8 hours/month	No Limit	If hired prior to 2012, 50-75% of hours at any time	Yes	
City of Santa Rosa	8 hours/month	No Limit	Up to 600 hours at retirement	Yes	
City of Sonoma	4 hours/month + alternative hours	No Limit	Indirect, see comments	Yes	24 hrs. "alt. time" awarded 2x a year
Alameda County	8 hours/month	No Limit	No	Yes	
Contra Costa County	8 hours/month	No Limit	No	Yes - 1 to 1 credit	
Humboldt County	8 hours/month	No Limit	14-25+ yrs of service = 50-100% at retirement	Yes	

¹ HBMWD Employee Handbook, rev. 01/01/18, pages 43-45

Discussion

Unlike the other agencies researched, HBMWD limits the maximum amount of time that can be accrued by an employee to 1,040 hours (130 days). This threshold is set specifically to cover the timeframe until an employee becomes eligible for disability benefits, should there be a serious illness.

Based on the accrual rate of 12 days/year, this maximum threshold takes nearly **eleven years** (10.83 years) to accumulate -- without taking any sick days over the course of those nearly eleven years.

Upon retirement, and after working for the District for a *minimum of ten years*, the employee has three options for their unused accrued sick leave:

1. All of the total accumulated sick leave hours can be cashed in at a rate of 35%, paid out at the most recent rate of pay.
2. 100% of the accumulated sick leave hours can be converted to additional service credit at a rate of 0.004 for retirement purposes (CalPERS mandate).
3. A hybrid of both the above, with the cash amount not to exceed 35% of the accumulated sick leave hours.

While the District does currently have three employees that have reached the maximum accrual bank of 1,040 hours, the current average sick-leave hours accrued for the District’s 27 full-time employees is 388 hours. The chart below gives examples of the three scenarios listed above; using both the maximum accrued sick-leave hours as well as the current average accrued sick-leave hours, with the current average rate of pay (\$34.00/hr.).

	Average Accrual/Average Rate (388 hrs/\$34.00/hr.)	Maximum Accrual/Average Rate (1,040 hrs/\$34.00/hr)
Option 1 – Cash-Out @ 35%	\$4,617	\$12,376
Option 2 – 100% CalPERS Service Credit @ 0.004	0.19 yr. Service Credit	0.52 yr. Service Credit
Option 3 – Hybrid*	194 hrs. x 35% x \$34 = \$2,309 194 hrs.=24.25 days x 0.004 = 0.10 yr. service credit	520 hrs. x 35% x \$34 = \$6,188 520 hrs. = 65 days x 0.004 = 0.26 yr. service credit

*Hours divided evenly in example

CalPERS requires all agencies to have a provision for allowing employees to convert unused sick leave into service credit. The HBMWD CalPERS contract stipulates the most common conversion rate of 0.004 (1,040 hours = 130 days*0.004 = 0.52 yr.). While this rate is the same for many agencies, there are some that are required to allow the employee to convert unused sick leave on a one-to-one bases.

Recommendation

The District continually works to remain competitive with other agencies in order to attract and retain high quality staffing. Based on the maximum accrual limit already established and the length of time required to reach the

maximum accrual, as well as the comparison of sick-leave policies with other agencies, staff believes any changes to the sick-leave accrual policies will negatively impact staff productivity and retention.

SECTION I1 PAGE NO. 3

Attachments

1. Government Code Section 20965: *PUBLIC EMPLOYEES RETIREMENT SYSTEM; Article 3 – Computation of Service Credit*
2. Government Code Section 31641.03: *COUNTY EMPLOYEES RETIREMENT LAW; Article 7 – Service*
3. Pages 11-12 of CalPERS Contract with the District - *“Credit for Unused Sick Leave”*
4. HBMWD Employee Handbook, §4001.5 Sick Leave, pages 43-45

GOVERNMENT CODE - GOV

TITLE 2. GOVERNMENT OF THE STATE OF CALIFORNIA [8000 - 22980] (Title 2 enacted by Stats. 1943, Ch. 134.)

DIVISION 5. PERSONNEL [18000 - 22980] (Division 5 added by Stats. 1945, Ch. 123.)

PART 3. PUBLIC EMPLOYEES' RETIREMENT SYSTEM [20000 - 21703] (Part 3 repealed and added by Stats. 1995, Ch. 379, Sec. 2.)

CHAPTER 11. Service Credit [20890 - 21054] (Chapter 11 added by Stats. 1995, Ch. 379, Sec. 2.)

ARTICLE 3. Computation of Service Credit [20960 - 20972] (Article 3 added by Stats. 1995, Ch. 379, Sec. 2.)

20965. A local miscellaneous member and a local safety member, whose effective date of retirement is within four months of separation from employment with the employer which granted the sick leave credit, shall be credited at his or her retirement with 0.004 year of service credit for each unused day of sick leave certified to the board by his or her employer.

The certification shall report only those days of unused sick leave that were accrued by the member during the normal course of his or her employment and shall not include any additional days of sick leave reported for the purpose of increasing the member's retirement benefit. Reports of unused days of sick leave shall be subject to audit and retirement benefits may be adjusted where improper reporting is found.

This section shall not apply to any contracting agency nor to the employees of a contracting agency until the agency elects to be subject to this section by contract or by amendment to its contract made in the manner prescribed for approval of contracts, except that an election among the employees is not required, or, in the case of contracts made after September 26, 1974, by express provision in the contract making the contracting agency subject to this section.

This section shall only apply to members who retire after the effective date of the contract amendments.

(Repealed and added by Stats. 1995, Ch. 379, Sec. 2. Effective January 1, 1996.)

GOVERNMENT CODE - GOV

TITLE 3. GOVERNMENT OF COUNTIES [23000 - 33205] (Title 3 added by Stats. 1947, Ch. 424.)

DIVISION 4. EMPLOYEES [31000 - 33017] (Division 4 added by Stats. 1947, Ch. 424.)

PART 3. RETIREMENT SYSTEMS [31200 - 33017] (Part 3 added by Stats. 1947, Ch. 424.)

CHAPTER 3. County Employees Retirement Law of 1937 [31450 - 31898] (Chapter 3 added by Stats. 1947, Ch. 424.)

ARTICLE 7. Service [31640 - 31658] (Article 7 added by Stats. 1947, Ch. 424.)

31641.03. In any county the board of supervisors may provide by ordinance that members specified in the ordinance shall be credited, for up to 100 percent of sick leave accumulated as of the date of their retirement, and that sick leave credit shall be in addition to service credit. The additional cost to the retirement system shall be borne by the county or district.

This section shall not apply to members who are employed by a district unless the governing board of the district provides by resolution for its application to such members.

(Added by Stats. 1975, Ch. 574.)

9. Section 20936 Prior Service Credit for Employees of an Assumed Agency or Function

An agency may provide credit for service rendered with a public agency if that agency or a function of that agency is, or was, assumed by the contracting agency. The cost for prior service credit is the liability of the contracting agency. Documents of origin for the assumed agency may be required to determine whether the agency qualifies as a public agency.

Employer Cost: Valuation required.

Member Cost: None.

10. Section 20938 Limit Prior Service to Persons Employed on Contract Date

A contracting agency may limit prior service credit (service rendered to the agency prior to its contract date with CalPERS) to persons in employment with the agency on the effective date of its CalPERS contract, or amendment to contract. This benefit can be provided in the initial contract or by amendment for agencies that provide 0% prior service and now wish to provide all or a portion of prior service credit to current employees only. This option may also be applied upon the removal of an exclusion of a member group or classification.

Employer Cost: Valuation required.

Member Cost: None.

11. Section 20965 Credit for Unused Sick Leave

This benefit is mandated for pooled plans.

Unused accumulated sick leave at time of retirement may be converted to additional service credit at the rate of 0.004 year of service credit for each day of unused sick leave (i.e., 250 days of sick leave equals one additional year of service credit).

The employer must report only those days of unused sick leave that were accrued by the member during the normal course of employment. Additional days of unused sick leave reported for the purpose of increasing the member's retirement benefit are prohibited. Most safety member formulas limit the member benefits to a maximum of 90% of final compensation. The addition of this benefit does not increase the maximum percentage allowable.

This section applies to members whose effective date of retirement is within four months of separation from employment and who retire after the effective date of the contract amendment.

Employer Cost: Valuation required for non-pooled plans only.

Rough Estimate: Impact on Employer Normal Cost:

- 0.1% to 0.2% of payroll for all groups

Impact on Total Employer Contribution Rate:

- 0.2% to 0.6% of payroll for all groups

Member Cost: None.

12. Section 20996 Military Service Credit as Prior Service

Employees, who are/were on a military leave at the time the agency contracts for CalPERS coverage and return to employment with the agency within six months after discharge from active military duty, can receive service credit for the period of their absence. If the agency provides this benefit, former employees employed by other CalPERS employers would also be eligible to claim service credit. The agency would be liable for the cost.

Employer Cost: No valuation required. Actual costs will emerge in future valuations.

Member Cost: None.

13. Section 21020.5 Public Service Credit for California Senate Fellows, Assembly, Fellowship, Executive Fellowship, or Judicial Administration Fellowship Programs

A member who was employed on or after October 14, 1991 under the California Senate Fellows, Assembly Fellowship, or Executive Fellowship programs may elect to receive service credit for that public service prior to retirement. A member who was employed on or after January 1, 2003 under the Judicial Administration Fellowship program may elect to receive service credit for that public service prior to retirement.

Employer Cost: No valuation required. Actual costs will emerge in future valuations.

Member Cost: Individual calculation required. After the contract has been amended, the member may obtain cost information by contacting the Employer Account Management Division.

14. Section 21022 Public Service Credit for Periods of Layoff

This provision is mandated for pooled plans.

A member may receive up to one year of public service credit for each period of layoff from employment on or after January 1, 1981. To be eligible to receive the service credit, the member must meet the following conditions:

4001.5 Sick Leave - All employees are provided paid sick leave benefit. Sick leave is defined as the time an employee is absent from work due to illness or injury, or to undergo medical, dental or optical examinations or treatment, or for family purposes that meets the following criteria:

- o Care of an eligible family member who is incapacitated because of illness or injury and definitely requires personal care. The length of an absence for this purpose shall be limited to the time reasonably required to either provide care or to make other arrangements for such care. For the purpose of this subsection, an eligible family member is the employee's spouse, child, parent, grandparent, domestic partner (as defined by Section 297 of the California Family Code), or domestic partner's child. Additionally, under this subsection, an eligible family member is any other close relative or child who resides with the employee.
- o To transport an eligible family member to and from a local hospital for medical treatment or operation, including childbirth.
- o To be in attendance during serious medical treatment or operation, including childbirth, performed upon an eligible family member.

Sick leave of three days is available for part-time employees at the beginning of each twelve-month period. There is no carryover of sick leave for part-time employees. For full-time employees, sick leave is accumulated at the rate of one day (8 hours) per month, up to a maximum of 130 days, during months the employee is working or on authorized paid leave. Sick leave will no longer accrue when an employee's accumulated sick leave balance equals 130 days (1040 hours). Sick leave is

used in increments of no less than one-quarter hour. A record of accumulated sick leave and sick leave used will be maintained at the District's administrative office.

It is your responsibility to notify your supervisor as soon as possible, and when reasonably possible, no later than one-half hour after the start of the work shift, if you are unable to come to work due to illness or injury. If the illness lasts more than one day, you must keep your supervisor notified of your condition and estimated return to work.

The District may request a doctor's certificate clearing you to return to work if, in the sole discretion of the District, the illness or injury so merits. A doctor's certificate may also be required on any absence exceeding three work days. The District may periodically evaluate your ability to return to work with your physicians, and with Worker's Comp or SDI if applicable.

When applicable, the District will coordinate its sick leave benefits with Worker's Compensation benefits (Section 4001.7) and with State Disability Insurance (SDI) (Section 4002.1). If you receive Worker's Comp or SDI payments, you must report them in writing to the Accounting and HR Specialist for proper accounting and coordination. Under such circumstances, you will be credited with the equivalent amount of sick leave. In no event will you receive more in total compensation from the District and the insurer than your regular wage.

In the event you become ill or incapacitated longer than your accumulated time off (including vacation), health, dental and life insurance benefits will remain in effect as long as the terms of the benefit policy in effect allows. Any employee share of benefit premiums, if applicable, will be deducted from your paycheck from the District. When such is no longer possible, you must pay any employee share to continue the benefit coverage.

4001.5a Kin Care Leave - Full-time employees may use a portion of their accrued sick leave as Kin Care Leave to care for immediate family members who are sick. You may use up to half of the sick time accrued per calendar year (up to 6 days) to care for a sick family member, regardless of the seriousness of the illness. Family members covered include parents, children and spouses. Kin Care Leave will not accumulate from year to year. You must provide as much notice as possible to request Kin Care Leave. If the leave exceeds one day your supervisor must be kept informed.

4001.5b Termination and Sick Leave - You will not receive days off in lieu of sick leave when terminating from the District. However, as a reward for low sick leave usage, terminating employees who have worked for the District for ten or more years (who are not retiring) will be reimbursed by cash in an amount equal to the total accumulated sick leave x 35% x most recent hourly wage.

4001.5c Retirement and Sick Leave - Retiring employees who have worked for the District for ten or more years may choose in writing at least 30 days prior to employment end date, one of three options:

- 1) Cash in an amount equal to the total accumulated sick leave hours x 35% x most recent hourly wage
- 2) Conversion of 100% of accumulated sick leave hours to additional service credit for retirement purposes (subject to the District's CalPERS contract and any other requirements imposed by CalPERS)

A portion in cash and a portion as service credit, the sum of which may not exceed 100% of the accumulated hours. The cash portion may be any percentage up to 35% (for example 20% cash and 80% service credit). The cash portion may not exceed 35% of the total accumulated hours of sick leave times the most recent hourly wage.

When an employee is approaching retirement, the employee should consult with a representative from CalPERS to learn how the service credit provision works, as well as any limitations or requirements.

4001.6 Bereavement Leave - Regular employees are eligible to receive up to three days paid leave at any one time when they are absent from work due to death of a member of their immediate family. For this purpose, immediate family includes the following individuals for the employee, the employees spouse, or the employees domestic partner: mother, father, grandmother, grandfather, or a grandchild, son, son-in-law, daughter, daughter-in-law, niece, nephew, brother, or sister.

4001.7 Worker's Compensation: Work-Related Injury - Workers' compensation insurance is paid by the District and protects you if you are injured while performing assigned duties on the job. All employees are covered by the District's Worker's Compensation Insurance. You must report any work-related injury or illness immediately to your supervisor. Work-related illness or injury will be treated in the manner prescribed by the Worker's Compensation Insurance carried by the District. This includes immediate diagnosis and treatment at a hospital or emergency room if necessary, and follow-up care with appropriate physicians.

You will be placed on a Workers' Compensation Leave if temporarily and completely disabled from work for more than five days. A doctor's written certificate of disability is required. While on Workers' Compensation leave, you are required to provide periodic updates on your medical condition to the Superintendent or General Manager. Prior to returning to work, you must provide a written release from your doctor that permits you to return to work and indicates any restrictions to full duty. As discussed above, Worker's Comp benefits will be coordinated with the District's sick leave benefits (see Section 4001.5).

4001.7a Return to Work Policy - In an effort to minimize serious disability due to on-the-job injuries and illnesses and to reduce Workers' Compensation costs, the District has developed a Return To Work Program with its insurance provider. The program will be implemented by a team comprised of your supervisor, the District's claims representative (from ACWA JPIA), the medical provider, the injured employee, and the General Manager. All team members will be asked to take an active role in returning the injured/ill employee to a productive status.

Supervisors will assist by directing the employee to appropriate care and assisting in proper reporting of the injury or illness while maintaining a positive and frequent flow of communication with the injured worker. They will also assist in reducing lost production time by arranging work meeting "light duty" restrictions, as needed. The Supervisors and General Manager will work with the JPIA claims representative to assist with the assessment of the employee's ability to return to work. Together they will encourage the treating physician to release the injured employee to work as soon as possible, with appropriate work limitations and restrictions. By this joint effort, the District will help the injured/ill worker recover at a more rapid rate, gain production for wages paid, minimize the employee's wage loss, and reduce workers' compensation costs.

If you are injured and subject to this policy, you will have certain responsibilities. You must engage in the interactive process. After your first appointment with a physician, a Return to Work Recommendations Record (or other documents provided by the physician) should be provided to your supervisor. Whenever possible, the District will provide you with work within your restrictions, if any. Once you are released to light duty, you should report to work immediately.

Once you are back at work, you are responsible for:

- o Working within the physical limitations set by the physician at all times and performing only those temporary duties assigned to you by your supervisor;
- o Letting your supervisor know if you are having any difficulties performing your assigned tasks;
- o Telling your supervisor in advance if you must miss work for a medical appointment; and
- o Ensuring that your supervisor knows of any changes in your work restrictions you learn from your doctor.

If you do not report to work (light duty or regular work) when you are released, you may not be eligible for temporary disability payments or wages.

4002 Disability Insurance, Leaves and Leave Donation

4002.1 State Disability Insurance (SDI) - The District is a member of the State Disability Insurance program which provides short-term weekly benefits in the event

To: Board of Directors

Date: August 16, 2018

From: Chris Harris

RE: RFP for Actuarial Services for OPEB Valuation

Background

Along with most all other agencies, HBMWD provides *Other Post-Employment Benefits* (OPEB) as part of the total compensation offered to attract and retain the services of qualified employees. This is in addition to CalPERS pensions. In general “OPEB” includes retiree healthcare, life insurance, and deferred compensation. HBMWD provides only retiree medical insurance and imposes specific restrictions for this post-retirement benefit.

Agency	Retiree Health Care Benefit	Timeframe
HBMWD	\$640/capped contribution No spousal benefit	Hired prior to 2004 – No limit (9 employees) Hired after 2004 - 10-yr limit, or Medicare eligible
HCSD	No capped contribution 10yrs = 50% premium tiered up to 20yr = 100% premium No spousal benefit	Until Medicare eligible
MCSD	No capped contribution 100% coverage for retiree, spouse, and dependents	Until Medicare eligible
City of Arcata	No capped contribution >10yrs but <20yrs = 2% premium for each year of service >20yrs = 3% premium for each year of service No spousal benefit	Until Medicare eligible
City of Eureka	No capped contribution 20/80 contribution split, with specific requirements	Until Medicare eligible
JPIA	\$500/month each for both retiree and spouse	Until Medicare eligible

Similar to the CalPERS pension liability, the OPEB benefit creates a future liability for the District. In order to calculate this future obligation, the services of an actuary are used to forecast what this amount may be in today's dollars. The standards and frequency for these calculations are established and governed by the Government Accounting Standards Board (GASB), with Statement 45 (GASB 45) being the prior standard for all OPEB valuations. Effective June 15, 2017, GASB 45 was eliminated and replaced with Government Accounting Standards Board Statement Number 75 (GASB 75).

GASB 75 is very similar in that it establishes standards for the measurement, recognition, and display of OPEB expense/expenditures and related liabilities (assets), note disclosures, and required supplementary information (RSI) in financial reports. In addition, the new GASB 75 also establishes a more robust disclosure of the assumptions used in the valuation, defines the discount rate to be used, and requires more frequent valuations.

Discussion

In the past, the District was required to contract with an actuary every three years to perform the necessary computations to comply with the reporting requirements. With GASB 75, this requirement is now every other year. Staff recently issued a RFP for a standard OPEB valuation with the added additional requirements:

- Calculate the OPEB liability with a reduction of the District contribution to the retiree health care.
- Calculate the OPEB liability with an elimination of the District contribution to the retiree health care.
- Calculate the impact of the changing employee demographic and changing CALPERS retiree demographic (Classic = 2.0% at 55, PEPRA = 2.0% at 62).

These additional requests will provide the Board additional information to evaluate any potential changes to retiree healthcare coverage. Once the OPEB analysis is complete and reviewed (deadline October 15th), staff will provide additional analysis to the Board regarding the post-retirement benefit.

Staff forwarded RFP's to the following agencies:

David Becker, James Marta & Company, LLP
Ted Price, GovInvest, Inc.
Josh Giosa, Price Paige and Company, Inc.
Denise Harris, Bartel Associates, LLC

Recommendation

Prior to the Board Meeting, staff will receive and review the RFP proposals – response deadline is August 10th. Staff will provide a response summary at the Board Meeting. After discussion, staff will recommend that the Board authorize staff to enter into an engagement agreement with the selected agency for the required computations and disclosures for GASB 75.

Attachments

RFP for Actuarial Services



HUMBOLDT BAY MUNICIPAL WATER DISTRICT

Request for Proposals

for

Actuarial Services to value Other Post-Employment Benefits (OPEB) in compliance with Governmental Accounting Standards Board Statement No. 75 (GASB 75).

INTRODUCTION

The Humboldt Bay Municipal Water District Board of Directors is requesting proposals from qualified consultants for Actuarial Services in accordance with the included specifications, terms, and conditions shown in this Request for Proposals (RFP). Prospective respondents are advised to read this information carefully prior to submitting a proposal.

Proposals must be received via USPS or email by 5:00 pm on August 10th, 2018.

Mailed proposals should be addressed to:

HBMWD – Actuarial Services RFP
ATTN: Chris Harris
PO Box 95
Eureka, CA 95502-0095

Emailed proposals should be addressed to:

harris@hbmwd.com
(Subject line: "Other Post-Employment Benefits Actuarial Services")

Questions may be directed to the Business Manager, Chris Harris (harris@hbmwd.com).

GENERAL INFORMATION

Humboldt Bay Municipal Water District (HBMWD) is seeking proposals from qualified professional actuary firms to provide services to value Other Post-Employment Benefits (OPEB) in compliance with Governmental Accounting Standards Board Statement No. 75 (GASB 75) for inclusion in the District's CAFR as of June 30, 2018 and June 30, 2020, with consulting available for the entire timespan, including for the year-ended June 30, 2019.

Said valuations must be performed in accordance with generally accepted actuarial standards of practice promulgated by the Actuarial Standards Board and based on the actuarial assumptions and methods prescribed by the California Public Employees' Retirement System (CalPERS) Board. The required services and performance conditions are described in the SCOPE OF WORK section of this document.

There is no expressed or implied obligation of HBMWD to reimburse responding firms for any expense incurred in preparing proposals in response to this request.

During the evaluation process, HBMWD reserves the right, where it may serve Humboldt Bay Municipal Water District's best interest, to request additional information or clarifications from proposers, or to allow corrections of errors or omissions.

HBMWD reserves the right to retain all proposals submitted and to use any ideas in a proposal regardless of whether that proposal is selected. Submission of a proposal indicates acceptance by the firm of the conditions contained in this request for proposal, unless clearly and specifically noted in the proposal submitted and confirmed in the contract between Humboldt Bay Municipal Water District and the firm selected.

To be considered, a proposal must be received by 5:00 PM, August 10th, 2018. Please see the INSTRUCTIONS TO SUBMITTING FIRMS in this document for further information.

DISTRICT BACKGROUND

Humboldt Bay Municipal Water District was formed in 1956 pursuant to the California Municipal Water District Act. The District is a Special District, a form of local government in the State of California. A five-member elected Board is the governing body of the organization.

The District was created to develop a regional water system to provide a reliable supply of drinking and industrial water to customers in the greater Humboldt Bay area of Humboldt County. Current facilities and operations of the District include:

1. The R.W. Matthews Dam which forms Ruth Reservoir in southern Trinity County
2. The Gosselin hydro-electric power house at R.W. Matthews Dam
3. The John R. Winzler Operations and Control Center
4. The Lloyd L. Hecathorn Turbidity Reduction Facility
5. Additional storage and treatment facilities
6. Two separate and distinct pipeline systems which deliver treated drinking water or untreated raw water to the District's customers

The District supplies treated drinking water on a wholesale basis to seven municipal agencies in the greater Humboldt Bay area. The District's wholesale municipal customers are: the City of Arcata, the

City of Eureka, the City of Blue Lake, Fieldbrook CSD, Humboldt CSD, Manila CSD, and McKinleyville CSD. The District previously supplied untreated, raw water on a wholesale basis to industrial customers on the Samoa Peninsula. The District is hopeful to provide this service again in the future. The District also provides direct retail water service to approximately 200 customers who reside outside the boundaries of other municipalities.

HBMWD contracts with the California Public Employees' Retirement System (CalPERS) to provide retirement benefits. To be eligible for District-paid retiree health benefits, an employee must:

1. Retire from the District
2. Be eligible for CalPERS retirement benefits upon retirement from the District (in accordance with the District's CalPERS contract)
3. Have a minimum of ten years of service at the District prior to retirement.

The duration of retiree health benefits provided by the District, subject to the requirements above, depends on the date an employee was hired by the District. For all full-time regular employees hired by the District *prior to July 8, 2004*, the District will pay the medical cost premium during retirement, subject to a maximum of \$640 per month, without a specific time limitation as to how long this benefit will be provided during a retiree's retirement. For all full-time regular employees hired by the District *after July 8, 2004*, the District will pay 100% of the medical cost premium during retirement, subject to a maximum of \$640 per month, for a maximum of 10 years or until the retiree reaches age 65, whichever comes first. The District's health insurance plan is available, depending on the plan provider, to retirees after age 65 if the entire premium is paid by the retiree.

SCOPE OF WORK

Humboldt Bay Municipal Water District is seeking proposals from qualified firms interested in providing actuarial services to the District for valuation of OPEB offered by the District. The primary objectives for this actuarial valuation include:

1. Ensure compliance with GASB 75.
2. Determine OPEB related valuation and related roll-forward data for June 30, 2018 and June 30, 2020.
3. Prepare necessary information for inclusion in the District's audited financial statements for the FYE June 30, 2018 and June 30, 2020. This includes drafting in its entirety the note to the financial statements for inclusion into the District's financial statements that conform to all of the requirements of GASB Statement 75; and all of the required supplementary information required by the same.
4. Calculation of ongoing OPEB obligation and unfunded liability using different scenarios:
 - a. No change in the District contribution to the retiree's health care premium.
 - b. Reduction of the District contribution and/or maximum duration to the retiree's health care premium.
 - c. Elimination of the District contribution to the Retiree's Health Care Premium.
 - d. Projection of impact of changing age demographic and changing statistics of CalPERS retirement plans (Classic vs. PEPRA) of District employees.

5. Provide consulting as needed related to the District's OPEB liability for FYE June 30, 2018 through FYE June 30, 2020.
6. Assistance in implementing any new GASB statements and other financial pronouncements related to OPEB and providing ongoing professional consultation.
7. Deadline for completion: October 15th, 2018.

PROPOSAL REQUIREMENTS

The respondent's proposal must include a *Project Plan* for the actuarial services engagement to be performed under this RFP for the valuation of Other Post-Employment Benefits. The Project Plan should include, at a minimum, the following:

1. Approach and methodology for the valuation
2. Approach and methodology to include compliance with GASB standards
3. Data requirements from the District
4. Identification of Project Plan milestones
5. Schedule for project completion and issuance of report
6. Valuation report elements to include:
 - a. Actuarial present value of total projected benefits
 - b. Actuarial accrued liability
 - c. OPEB assets
 - d. Unfunded actuarial accrued liability
 - e. Normal cost
 - f. Annual required contribution as a dollar amount and as a percentage of Payroll
 - g. Annual OPEB cost
 - h. Net OPEB obligation
 - i. Summary of data used for the valuation
 - j. Summary of actuarial methods and assumptions
 - k. Financial notes to be included in the District's audited financial statements in the GASB prescribed format
7. Describe the governmental experience of the firm including the specific details regarding experience in the area of actuarial valuation services related to OPEB.
8. Provide a list of municipal government references where the firm has provided OPEB actuarial valuation services in the past thirty-six (36) months. This list should indicate the names and contact information of finance officers in these municipalities.
9. Provide information regarding staffing including the experience of the individuals who will be assigned to the engagement. This should also include each individual's relevant experience with municipalities and preparing OPEB actuarial valuations. Also, include information as to the annual training plan of the firm related to governmental services.

10. Provide the proposed cost of services. The District requires a firm, fixed fee for the actuarial valuation services for the two terms.

PROPOSED TERM OF CONTRACT

The proposed term of the contract is two terms, up to and including OPEB actuarial valuation data to be used in the District's audited financial statements as of June 30, 2018 and June 30, 2020. The District may extend this agreement for an additional two terms.

SCHEDULE FOR SELECTION

Deadline for submittal of Questions:	August 3, 2018
Response to Questions:	August 6, 2018
Deadline for submittal of Proposal:	August 10, 2018
Interviews (if necessary):	August 15, 2018

SELECTION CRITERIA

The District will evaluate the information provided based on the following selection criteria:

1. Responsiveness of the proposal to the scope of services requested
2. Potential to benefit the District
3. Prior experience in providing similar services to other special districts
4. Qualifications of the firm, and in particular, the assigned principal
5. Cost effectiveness
6. Information will be evaluated by:
 - John Friedenbach, General Manager
 - Chris Harris, Business Manager
 - Becky Moyle, HR & Accounting Specialist

INSTRUCTIONS TO SUBMITTING FIRMS

1. *Examination of Proposal Documents:* By submitting a proposal, the prospective firm represents that it has thoroughly examined and become familiar with the services required under this RFP, and that it is capable of delivering quality services to the District in a cost-effective and service-oriented manner.
2. *Questions/Clarifications:* Please direct any questions regarding this RFP to Chris Harris, Business Manager, at harris@hbmwd.com. Questions must be received by 5:00 p.m. on August 8th, 2018.
3. *Submission of Proposals:* Complete written proposals must be submitted in sealed envelopes or received via email no later than 5:00 PM on August 15th, 2018, to the address below. Proposals will not be accepted after this deadline.

HBMWD – Actuarial Services RFP
ATTN: Chris Harris
PO Box 95
Eureka, CA 95502-0095

Or emailed to: harris@hbmwd.com with the subject line “Other Post-Employment Benefits Actuarial Services”.



Retirement Policy Requirements

ACWA JPIA permits employers to provide qualifying employees with post-employment health benefits. Employers are required to establish and maintain a Retiree Policy that meets the requirements established by JPIA and the Insurance Carriers. JPIA staff does not retain each employer's retiree policy information, but may do so upon request to ensure plans are administered consistent with employer policies. All retirement policies require member Board approval and must be presented to JPIA at implementation or when changes are enacted.

JPIA has established base requirements for Retirement Policies. Employer policies may be more or less generous, so long as they do not violate the requirements provided here. JPIA has not set a minimum years of service requirement. This is at the discretion of each member agency's Board. Employer policy must be documented and adhered to without exception. The following is a summary of JPIA retiree health plan requirements:

- Employee must be at least age 50 at the time of retirement. Exceptions to the minimum age requirement are not available for early disability retirements.
- Retirees must meet years of service and age requirements in employer's written policies to be eligible for retiree coverage.
- Employer must contribute at least 25% of the retiree only premium for the least cost plan for which the retiree is eligible. (If the employer is on the Incentive rating system, the employer must contribute 50% of the retiree only premium for the least cost plan for which the retiree is eligible.)
- Retirees may not reimburse the employer for the employer share of the premium. This is considered "self-pay" and is prohibited in all JPIA plans, except in the case of COBRA.
- Employer contributions for the retiree's dependents may be at any level.
- Employees must enroll in the plan they wish to retire into during the Open Enrollment period prior to retirement, unless the employer's policy offers Open Enrollment annually to all retirees.
- There can be no lapse in coverage between the date of retirement and the date retiree benefits begin. The employee must transfer from active status directly to retired status. The employee may not go from Active to COBRA to Retiree benefits eligible.
- If at any time a retiree is removed from the policy, he/she will not be eligible for reinstatement.
- Employer may provide a Surviving Spouse Policy. This should be documented clearly in employer policies.

There are many options when constructing a Retirement Policy. It is imperative for an employer, in the process of implementing a *new* policy, to be aware that JPIA will not enroll past retirees who are not currently enrolled in the employer's health plans at the time of transition in JPIA health plans. However, once a policy is in-force the employer should apply



MCKINLEYVILLE MUNICIPAL ADVISORY COMMITTEE
 McKinleyville Middle School Conference Center
 2275 Central Ave
 McKinleyville, CA 95519
 July 25, 2018- 6:00 p.m.

Agenda

All meeting rooms are ADA accessible.
 Electronic devices should be turned off during the meetings.

I. Call to Order

II. Roll Call (Board Secretary)

I.

Salute the Flag

II.

Review/Approval of Minutes – June 27, 2018

III.

Public Comments

Time will be reserved for the general public to address the MMAC on any matter within the Board's jurisdiction, *excluding* those items on the agenda. **Comments are limited to 3 minutes.**

As to matters on the Agenda, an opportunity will be given to address the Board when the matter is considered. **Comments are limited to 3 minutes. Letters should be used for complex issues.** The Board Chair may limit the public forum to thirty minutes (30) initially, and continue any remaining appearance beyond the thirty minutes at the end of the regularly scheduled business of the day.

IV.

Discussion/Action Items

1. Report from Arcata/McKinleyville Fire Department. Listen and take appropriate action.
2. Mad River protection statement draft. Review and take appropriate action.

3. Report from Sheriff's office. Listen and take appropriate action.
4. Dog ordinance. Listen and take appropriate action.

-2-

5. Humboldt County Public Health Department presentation on needle exchange programs. Review and take appropriate action.
6. Future agenda requests

VI. Event Announcements and Board General Comments

VII. Adjournment

Postings of this Agenda are at the Humboldt County Library, McKinleyville Branch, the office of the McKinleyville Community Services District office; electronic agendas are sent to the *Mad River Union*, and forwarded to all Board members and interested members of the public,

July 31, 2018 2-4 pm

HBMWD Office – 828 7th Street, Eureka

=====

WATER TASK FORCE

The Water Task Force (WTF) is an ad-hoc advisory group comprised of two representatives from HBMWD and two representatives from each of the District's wholesale customers. One representative is from management and one representative is an elected official. Alternates may also be present. The purpose of the Task Force is to work with, and provide input to, HBMWD on important matters affecting the District or the regional water system. The adopted *Purpose Statement* is attached.

1. WELCOME AND INTRODUCTIONS

2. OVERVIEW OF WATER TASK FORCE (given new members)

3. IMPACTS OF MARIJUANA CULTIVATION IN MAD RIVER WATERSHED

- a) Overview of regulatory program to address adverse effects
- b) Discussion re: ideas/actions to address in Mad River watershed including financial support to CDFW Enforcement Team

4. WATER RESOURCE PLANNING

- a. Brief introduction and background (given new Task Force members)

<https://www.hbmwd.com/water-resource-planning>

- b. Status report re: progress on top-tier water use options:

- i. Local sales
- ii. Transport/transfer
- iii. Instream flow

Water Task Force Purpose Statement

COMPOSITION

The Water Task Force is an ad hoc advisory group composed of the following representatives:

- a. The Board President and one management representative from the Humboldt Bay Municipal Water District (HBMWD)
- b. one Board/Council representative from each of the District's wholesale Municipal Customers as follows:
 - a. City of Arcata
 - b. City of Blue Lake
 - c. City of Eureka
 - d. Fieldbrook Community Services District
 - e. Humboldt Community Services District
 - f. Manila Community Services District
 - g. McKinleyville Community Services District
- c. One management representative from each of the District's wholesale Industrial Customers (if applicable to matter at hand.)

PURPOSE

The purpose of the Task Force is to work with HBMWD to consider and/or evaluate matters of a regional and significant nature within HBMWD's jurisdiction. Examples of such matters may include:

- A) Consideration of new, larger-scale water marketing or sales opportunities;
- B) Consideration of new safe drinking water regulations or other regulatory requirements which may trigger significant new treatment requirements;
- C) Consideration of Special Facility additions to HBMWD's system which are of regional interest; and
- D) Consideration of important service or pricing provisions during wholesale contract renewals.
- E) Consideration of other matters as deemed necessary.

The Task Force is advisory in nature and shall have no decision-making authority.

Water Task Force Purpose Statement

ACTIVITIES

Typical activities in which the Task Force may be involved with include:

- A) defining important issues and questions which should be addressed;
- B) evaluating engineering, economic, environmental, legal or general policy considerations (whichever are relevant for the issue under consideration);
- C) preparing reports and recommendations to each of the participating agencies' governing bodies regarding particular decisions/actions prior to HBMWD's final consideration of such decision/action;
- D) preparing recommendations as to the cost and/or revenue sharing mechanisms which should be included in new or modified wholesale water contracts.

OPERATION

The Task Force will be moderated by the HBMWD. General staff support and coordination will also be provided by HBMWD.

Meetings will be scheduled by HBMWD as needed at HBMWD's Eureka office. Meeting agendas will be prepared by HBMWD (with input from any Task Force member), and will be distributed and posted at least three days in advance of the meeting.

Representation of at least one formally appointed task force member by a majority (5) of the task force agencies constitutes a quorum. Each agency participating in the task force has one vote which may be cast by either of its formally appointed members. Actions of the Task Force must be approved on the basis of majority vote, provided a quorum is present.

To: Board of Directors
 From: Samantha Ryan
 Date: August 9, 2018
 Subject: Potential Peninsula Community Services District (PCSD) Retail Water Service Transfer

Background:

On November 7th 2017, Measure Z was passed, creating the Peninsula Community Services District (PCSD). A key element of the financial viability of the new PCSD requires them to assume responsibility of the retail water customers and related infrastructure currently existing within the new PCSD boundaries from Humboldt Bay Municipal Water District (HBMWD). An agreement between PCSD and HBMWD is needed for this transfer of assets. Staff is requesting guidance from the Board regarding the agreement the District should pursue given HBMWD’s investments in infrastructure and capital replacement revenue from customers within the new PCSD boundaries. These investments and revenues are described below.

Investments in Infrastructure:

In 2012, HBMWD applied for and was awarded a FEMA Hazard Mitigation Grant¹ to replace old and deteriorating Techite pipes located on Old Navy Base Road, Lincoln Avenue, Bay Street, and Lindstrom Avenue. The total project cost to replace these lines exceeded \$4.5M. Of the total cost, \$2.8M (61%) was grant funded and the remaining \$1.7M² (39%) was funded through Advanced Charges to the District’s Muni customers.

All of the replaced pipes on Bay Street and Lindstrom Avenue can be specifically allocated to the customers of the newly formed PCSD:

	TOTAL PROJECT	PORTION FUNDED BY MUNIS	PERCENT OF MUNI FUNDING
Bay St & Lindstrom Ave - Pipe Expense	\$ 630,317	\$ 242,722	14 %
Old Navy Base Rd. & Lincoln Ave - Pipe Expense	\$ 1,688,111	\$ 650,058	37%
Unallocated Expenses*	\$ 2,227,135	\$ 857,625	49%
TOTAL EXPENSES	\$ 4,545,563	\$ 1,750,405	100%

*Unallocated Expenses are difficult to separate because they are not categorized by specific location (engineering, permitting, administration and construction costs such as mobilization and traffic control).

Capital Replacement Revenue from Customers:

HBMWD has been collecting capital replacement charges via the monthly retail water bills since FY2009/10. As of August 2018, \$113,423 will have been collected from the customers being transferred to PCSD.

¹ FEMA-1731-DR-CA, Project #0035, FIPS #023-91000

² \$1,750,405 allocated: \$1,220,911 Construction Expenses, \$529,494 Engineering Expenses

Discussion:

There are several factors to consider when potentially transferring retail water customers and infrastructure to PCSD

- The amount of the funds to be requested from PCSD
- The means/timeframe to collect these funds

First, the amount to request from PCSD needs to be determined. The chart below shows different options that could be pursued by HBMWD. The factors taken into consideration include the pipe infrastructure, the resources it took to install the infrastructure³, and the capital replacement revenue previously collected from customers within the new PCSD area.

	PCSD Allocated Expenses	14% of Unallocated Expenses	PCSD Capital Replacement Revenue	Total Request to PCSD
Option A	\$242,722			\$242,722
Option B	\$242,722	\$120,067		\$362,789
Option C	\$242,722		<-\$113,423>	\$129,299
Option D	\$242,722	\$120,067	<-\$113,423>	\$249,366

Next, the terms of payment from PCSD needs to be determined. Considerations include any funds PCSD is able to contribute at the onset of the transfer, the timeframe required to recoup the costs (given the current capital replacement charges), and whether HBMWD is going to be requested to perform administrative tasks for PCSD. Based on these factors, staff finds five options to be viable:

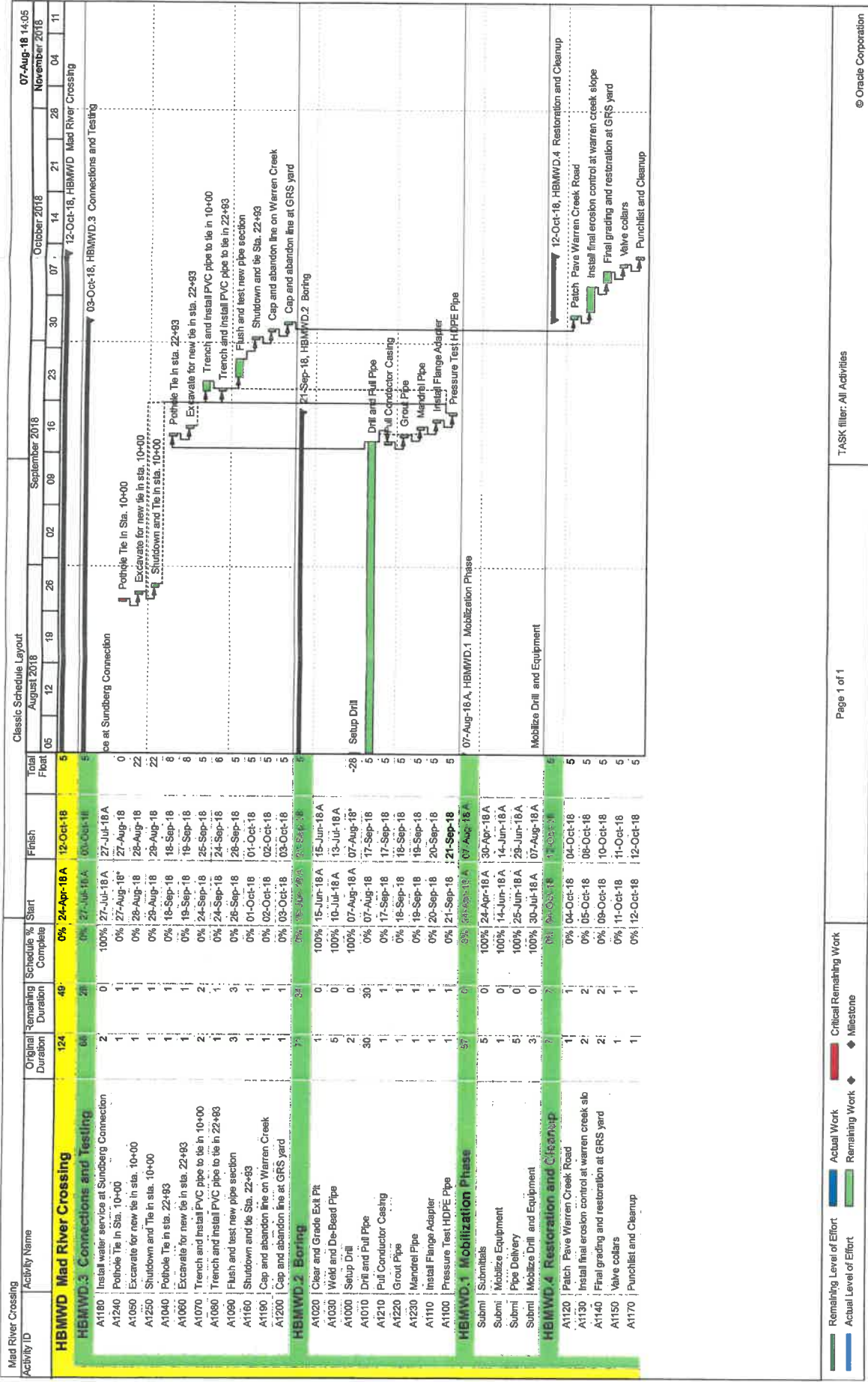
1. Payment in full at the time of asset transfer.
2. No payment at time of transfer, instead HBMWD continues to collect capital replacement revenue until funds are recouped.
3. Partial payment at time of transfer, HBMWD retains the capital replacement revenue until funds are fully recouped.
4. PCSD makes set payments over a specified timeframe (for example \$249,366 over five years = \$4,156/month).
5. Another alternative suggested by the Board.

Staff Recommendation:

Of the many options listed above, staff recommends that the Board approve a dollar amount and which payment plans staff could take into negotiations with PCSD. During negotiations, if PCSD counters with yet another option, staff would bring that offer back to the Board for further discussion.

³ 14% of the unallocated expenses based on Bay Street and Lindstrom Avenue pipe expense being 14% of the total expense for the project.

Engineering



NCRA COMMERCIAL LICENSE

THIS COMMERCIAL LICENSE ("License") is entered into as of the 15 day of July, 2018 by and between the NORTH COAST RAILROAD AUTHORITY, a legislatively created state agency ("Licensor"), and, HUMBOLDT BAY MUNICIPAL WATER DISTRICT, a California Municipal Corporation ("Licensee").

Premises

Subject to the terms and conditions set forth herein Licensor hereby Licenses to Licensee, and Licensee Licenses from Licensor, the real property and any improvements thereon located near the Cities of; Arcata, County of Humboldt, State of California ("Premises") consisting of a 57' x 25' area of land located at APN 504-201-004, together with a non-exclusive access area approximately 550' x 20' located along the Kobel/Annie Mary Branch Lead, on or near 7270 West End Road, consisting of land for the purpose of installing and maintaining an electrical switchgear facility with surrounding housing and fencing, and access, as depicted on Exhibit A, attached to this License and incorporated into it by this reference.

Effective Date

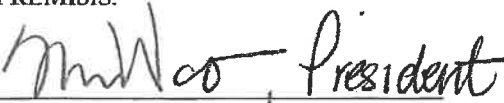
This License shall take effect on July 15, 2018 ("Effective Date"), and supersedes any prior License existing between the parties or their predecessors.

Term

This License shall be for a of term fifty (50) years ("License Term") from the Effective Date, and shall automatically renew for successive five (5) year terms thereafter, as provided in Section 11 hereof, unless sooner terminated as provided herein.

Termination for Rail Transit Activities

For the purposes of this License, "Rail Transit Activities" means that Licensor requires the premises for the actual physical construction of railroad bedding, tracks, and related improvements needed or required by Licensor for the restoration of railroad transportation services and infrastructure. Either party may terminate this License by giving a sixty (60) calendar months written notice. Licensor may require Licensee to remove any or all of Licensee's Alterations upon termination, pursuant to the Section 24 below. LICENSEE HEREBY EXPRESSLY WAIVES ANY RIGHT IT MAY HAVE TO RECEIVE BENEFITS UNDER FEDERAL AND STATE UNIFORM RELOCATION ACTS (UNITED STATES CODE, SECTION 7260, ET SEQ.) AS A RESULT OF LICENSOR'S USE OR POSSESSION OF ANY PORTION OF THE PREMISIS.



 Licensee

1. Use

The Premises shall be used by Licensee solely and exclusively for installing and maintaining an electrical switchgear facility with surrounding housing and fencing, and access, *as specified on Exhibit "A"* ("permitted Use"). Licensee shall not use the Premises for any other use other than the Permitted Use without Licensor's prior written consent, which consent may be withheld by Licensor in its sole discretion.

Restriction on Use

- g. Captions. All captions and headings in this Lease are for the purposes of reference and convenience and shall not limit or expand the provisions of this Lease.
- h. Third Party Beneficiaries. The indemnities specified in Section 9 who are not expressly parties to this Lease shall be deemed third party beneficiaries under this Lease for purposes of enforcing any rights to indemnification and insurance granted in Sections 14, 15, 16, and 17 of this Lease, and shall be entitled to seek attorney's fees and costs as provided in Section 29 above and dispute arising from the enforcement of said rights.
- i. Brokers. Licensor and Licensee are separately responsible for payment of any broker's commission or finder's fee incurred by that party's engagement or acceptance of the services of a broker or agents by said party. Licensor and Licensee agree to indemnify, defend and hold the other party harmless from and against any claims and suits made by any broker, agent or other person claiming a commission or other form of compensation against the other party by virtue of having dealt with Licensor or Licensee, as the case may be, with regard to this Lease.
- j. Counterparts. This Lease may be entered into in counterparts, each of which shall be deemed an original but both of which together shall be deemed a single agreement.

IN WITNESS WHEREOF, the parties hereto have executed, or have caused to be executed, this Lease on the day and year first above written.

Licensor:

Licensee:

North Coast Railroad Authority

Humboldt Bay Municipal Water District
828 7th Street
Eureka, CA 95501

By: Mitch Stogner
Mitch Stogner Executive Director NCRA

By: Sheri Woo
Print Name: Sheri Woo

Date: 7-26-18

Title: President

Date: 7-18-18

By: J. Bruce Rupp
Print Name: J. Bruce Rupp

Title: Secretary/Treasurer

Date: 7-18-18

Christopher Neary
APPROVED AS TO FORM:
Christopher Neary
Attorney for Authority:

*If Licensee is a corporation, two corporate officers must sign on behalf of the corporation as follows. (1) the chairman of the board, president or vice-president, and (2) the secretary, assistant secretary, chief financial officer, or assistant treasurer



July 23, 2018

H.B.M.W.D. AUG - 3 2018

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

Subject: Project Subapplication Waiting List
Hazard Mitigation Grant Program
FEMA-4308-DR-CA, February 2017 Storms
Cal OES PJ0014, HBMWD Collector Mainline Redundancy Project
Subapplicant: Humboldt Bay Municipal Water District, FIPS: 023-91000

Dear Mr. Friedenbach:

The California Governor's Office of Emergency Services (Cal OES) received and reviewed your subapplication requesting funds from the Hazard Mitigation Grant Program (HMGP). Cal OES has placed your grant subapplication on a waiting list to be submitted to the Federal Emergency Management Agency (FEMA) if funding becomes available.

Cal OES is authorized to discuss your subapplication only with the Authorized Agent, Primary Contact or Alternate Contact. If the subapplicant wants Cal OES to communicate with anyone other than the listed contacts, such as a consultant, we need written authorization on official letter head or by email.

We appreciate the time and effort you expended applying for this grant and we encourage you to continue to apply for future hazard mitigation projects.

Should you have any questions, please contact Matt Medland, Hazard Mitigation Grants Specialist, at 916-767-2974 or matt.medland@caloes.ca.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron Miller".

Ron Miller
Hazard Mitigation Grant Program Manager





HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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

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

FAX 707-443-5731 707-822-8245

EMAIL OFFICE@HBMWD.COM

Website: www.hbmwd.com

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

GENERAL MANAGER
JOHN FRIEDENBACH

LOCAL MATCH FUND COMMITMENT LETTER

June 27, 2018

California Governor's Office of Emergency Services
Hazard Mitigation Grants Program Unit
3650 Schriever Avenue
Mather, CA 95655

RE: DR-4344-0040 Subapplication Funding Match Commitment Letter

Dear State Hazard Mitigation Officer:

As part of the Hazard Mitigation Grant Program process, a local funding match of at least 25% is required. This letter serves as Humboldt Bay Municipal Water District's commitment to meet the local match fund requirements for the Hazard Mitigation Grant Program.

SOURCE OF NON-FEDERAL FUNDS:

LOCAL AGENCY FUNDING	OTHER AGENCY FUNDING	PRIVATE NON-PROFIT FUNDING	STATE AGENCY FUNDING
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NAME OF FUNDING SOURCE:

FUNDS AVAILABILITY DATE:
PROVIDE EXACT MONTH/DATE/YEAR OF AVAILABILITY OF FUNDS

FEDERAL SHARE AMOUNT REQUESTED:
MUST MATCH \$ AMOUNT PROVIDED IN SUBAPPLICATION

LOCAL SHARE AMOUNT MATCH:
MUST EQUAL A MINIMUM OF THE 25% FEDERAL SHARE REQUESTED

FUNDING TYPE:
EXAMPLES: ADMINISTRATION, CASH, CONSULTING FEES, ENGINEERING FEES, FORCE ACCOUNT LABOR, AGENCY PERSONNEL, PROGRAM INCOME, ETC.



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GENERAL MANAGER
JOHN FRIEDENBACH

ORIGINAL

LOCAL MATCH FUND COMMITMENT LETTER

April 27, 2018

California Governor's Office of Emergency Services
Hazard Mitigation Grants Program Unit
3650 Schriever Avenue
Mather, CA 95655

RE: DR-4344-0040 Subapplication Funding Match Commitment Letter

Dear State Hazard Mitigation Officer:

As part of the Hazard Mitigation Grant Program process, a local funding match of at least 25% is required. This letter serves as Humboldt Bay Municipal Water District's commitment to meet the local match fund requirements for the Hazard Mitigation Grant Program.

SOURCE OF NON-FEDERAL FUNDS:

LOCAL AGENCY FUNDING	OTHER AGENCY FUNDING	PRIVATE NON-PROFIT FUNDING	STATE AGENCY FUNDING
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NAME OF FUNDING SOURCE:

HBMWD

FUNDS AVAILABILITY DATE:

May 15, 2018

PROVIDE EXACT MONTH/DATE/YEAR OF AVAILABILITY OF FUNDS

FEDERAL SHARE AMOUNT REQUESTED:

\$2,686,500

MUST MATCH \$ AMOUNT PROVIDED IN SUBAPPLICATION

LOCAL SHARE AMOUNT MATCH:

\$895,500

MUST EQUAL A MINIMUM OF THE 25% FEDERAL SHARE REQUESTED

FUNDING TYPE:

Cash from municipal customer water rates

EXAMPLES: ADMINISTRATION, CASH, CONSULTING FEES, ENGINEERING FEES, FORCE ACCOUNT LABOR, AGENCY PERSONNEL, PROGRAM INCOME, ETC.

If additional federal funds are requested, an additional local match fund commitment letter will be required.



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GENERAL MANAGER

JOHN FRIEDENBACH

PROJECT MAINTENANCE LETTER

Humboldt Bay Municipal Water District

PO Box 95

Eureka, CA 95502-0095

RE: DR-4353-0083 Project Subapplication

Dear State Hazard Mitigation Officer:

This is to confirm that Humboldt Bay Municipal Water District (HBMWD) is committed to perform the necessary maintenance for the entire useful life of this project (50+ years) once completed. The Humboldt Bay Municipal Water District is allocating an annual budget of \$250 per year which will allow maintenance to occur as needed to ensure the items that remain after demolition of the single line crossing, including new valves, remain in good repair and operational.

ENTITY RESPONSIBLE FOR THE MAINTENANCE:	Humboldt Bay Municipal Water District
PAST MAINTENANCE TASKS INVOLVED:	HBMWD has inspected the single line crossing throughout the life of the structure approximately once every 10 years at an estimated cost of \$10,000 per inspection, meaning that maintenance costs before mitigation averaged \$1,000 per year.
FUTURE MAINTENANCE TASKS INVOLVED:	The new valves that would be installed would be placed on the District's annual valve inspection schedule. It is estimated that as a part of this annual inspection, 5 hours per year (\$250/year at \$50/hour) would be spent inspecting, exercising, and repairing the new valves.
FUTURE MAINTENANCE SCHEDULE:	Annually
FUTURE COST OF MAINTENANCE:	\$250 Annually
SOURCE OF FUTURE MAINTENANCE FUNDS:	Municipal Water Customer Rates

Please contact me at (707) 443-5018 or friedenbach@hbmwd.com with any questions.

Sincerely,

John Friedenbach
General Manager



SECTION 11e PAGE NO. 3

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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

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MICHELLE FULLER, DIRECTOR

GENERAL MANAGER

JOHN FRIEDENBACH

LOCAL MATCH FUND COMMITMENT LETTER

August 16, 2018

Humboldt Bay Municipal Water District

PO Box 95

Eureka, CA 95502-0095

RE: DR-4353-0083 Subapplication Funding Match Commitment Letter

Dear State Hazard Mitigation Officer:

As part of the Hazard Mitigation Grant Program process, a local funding match of at least 25% is required. This letter serves as Humboldt Bay Municipal Water District's (HBMWD) commitment to meet the local match fund requirements for the Hazard Mitigation Grant Program.

SOURCE OF NON-FEDERAL FUNDS:

LOCAL
AGENCY
FUNDING

OTHER
AGENCY
FUNDING

PRIVATE
NON-PROFIT
FUNDING

STATE
AGENCY
FUNDING

NAME OF FUNDING SOURCE:

Municipal customer water rates supplemented
with loan funds as needed

FUNDS AVAILABILITY DATE:

September 1, 2018

FEDERAL SHARE AMOUNT REQUESTED:

\$2,039,250

LOCAL SHARE AMOUNT MATCH:

\$679,750

FUNDING TYPE:

Municipal customer water rates

If additional federal funds are requested, an additional local match fund commitment letter will be provided.

Please contact me at 707-443-5018 or friedenbach@hbmwd.com with questions.

Sincerely,

John Friedenbach
General Manager



HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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GENERAL MANAGER

JOHN FRIEDENBACH

PROJECT MAINTENANCE LETTER

August 16, 2018

Humboldt Bay Municipal Water District
PO Box 95
Eureka, CA 95502-0095

RE: DR-4344-0370 Project Subapplication

Dear State Hazard Mitigation Officer:

This is to confirm that Humboldt Bay Municipal Water District (HBMWD) is committed to perform the necessary maintenance for the entire useful life of this project (50-years) once completed. The Humboldt Bay Municipal Water District is allocating an annual budget of \$10,000 which will allow maintenance to occur as needed to ensure the R.W. Matthews Dam Spillway remains in good repair and operational.

ENTITY RESPONSIBLE FOR THE MAINTENANCE: Humboldt Bay Municipal Water District

PAST MAINTENANCE TASKS INVOLVED:

HBMWD currently performs annual inspection and maintenance consisting of an inspection the entire spillway floor and walls and implementation of repairs as required. The annual inspection also consists of mapping and tracking all cracks and repairs in our Geographic Information System (GIS). We also have the floors and walls of the spillway surveyed every other year to make sure that the walls or floors are not moving.

FUTURE MAINTENANCE TASKS INVOLVED:

It is anticipated that future inspections and maintenance will largely consist of the same activities, with any new structures added to the annual inspection and maintenance task list.

FUTURE MAINTENANCE SCHEDULE:

Annually with topographic surveys performed biannually.

FUTURE COST OF MAINTENANCE:

\$10,000/Annually

SOURCE OF FUTURE MAINTENANCE FUNDS:

Municipal Water Customer Rates

Please contact John Friedenbach, HBMWD General Manager at 707-443-5018 or friedenbach@hbmwd.com with questions.

Sincerely,

John Friedenbach
General Manager



HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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GENERAL MANAGER
JOHN FRIEDENBACH

LOCAL MATCH FUND COMMITMENT LETTER

August 16, 2018

Humboldt Bay Municipal Water District
PO Box 95
Eureka, CA 95502-0095

RE: DR-4344-0370 Subapplication Funding Match Commitment Letter

Dear State Hazard Mitigation Officer:

As part of the Hazard Mitigation Grant Program process, a local funding match of at least 25% is required. This letter serves as Humboldt Bay Municipal Water District's (HBMWD) commitment to meet the local match fund requirements for the Hazard Mitigation Grant Program.

SOURCE OF NON-FEDERAL FUNDS:

LOCAL AGENCY FUNDING	OTHER AGENCY FUNDING	PRIVATE NON-PROFIT FUNDING	STATE AGENCY FUNDING
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NAME OF FUNDING SOURCE:

Municipal customer water rates supplemented with loan funds if needed

FUNDS AVAILABILITY DATE:

September 1, 2018
PROVIDE EXACT MONTH/DATE/YEAR OF AVAILABILITY OF FUNDS

FEDERAL SHARE AMOUNT REQUESTED:

\$5,000,000
MUST MATCH \$ AMOUNT PROVIDED IN SUBAPPLICATION

LOCAL SHARE AMOUNT MATCH:

\$1,666,667
MUST EQUAL A MINIMUM OF THE 25% FEDERAL SHARE REQUESTED

FUNDING TYPE:

Cash from Municipal customer water rates

If additional federal funds are requested, an additional local match fund commitment letter will be provided.

Please contact John Friedenbach, General Manager at 707-443-5018 or friedenbach@hbmwd.com with questions.

Sincerely,

John Friedenbach
General Manager

PARKING ANALYSIS (BUILDINGS 1, 2, 3, & 4)

BUILDING #	TOTAL BUILDING SQ FT	TOTAL REQUIRED PARKING	TOTAL REQUIRED BICYCLE SPACES
BUILDING 1	17,277	17,277 SQ FT / 800 SQ FT = 21.5 SPACES (MIN) 12,277 SQ FT / 900 SQ FT = 13.6 SPACES (MAX)	SPACES: 19
BUILDING 2	3,400	3,400 SQ FT / 800 SQ FT = 4.25 SPACES (MIN) 3,400 SQ FT / 900 SQ FT = 3.78 SPACES (MAX)	SPACES: 3
BUILDING 3	3,400	3,400 SQ FT / 800 SQ FT = 4.25 SPACES (MIN) 3,400 SQ FT / 900 SQ FT = 3.78 SPACES (MAX)	SPACES: 4
BUILDING 4	19,521	19,521 SQ FT / 800 SQ FT = 24.4 SPACES (MIN) 19,521 SQ FT / 900 SQ FT = 21.7 SPACES (MAX)	SPACES: 22
TOTAL:	64,600	MINIMUM PARKING SPACES REQUIRED: 80 MAXIMUM PARKING SPACES REQUIRED: 159 TOTAL PROPOSED: 143 MINIMUM MOTORCYCLE SPACES REQUIRED: 5 (1 SPACE FOR EVERY 20 VEHICLE SPACES) TOTAL PROPOSED: 5	44 MINIMUM BICYCLE SPACES REQUIRED: 45 TOTAL PROPOSED: 43 (5% OF VEHICLE SPACES) TOTAL PROPOSED: 48

PARKING ANALYSIS (BUILDINGS 5 & 6)

BUILDING #	TOTAL BUILDING SQ FT	TOTAL REQUIRED PARKING	TOTAL REQUIRED BICYCLE SPACES
BUILDING 5	9,233	9,233 SQ FT / 800 SQ FT = 11.5 SPACES (MIN) 9,233 SQ FT / 900 SQ FT = 10.3 SPACES (MAX)	SPACES: 8
BUILDING 6	9,287	9,287 SQ FT / 800 SQ FT = 11.6 SPACES (MIN) 9,287 SQ FT / 900 SQ FT = 10.3 SPACES (MAX)	SPACES: 6
TOTAL:	18,520	MINIMUM PARKING SPACES REQUIRED: 22 MAXIMUM PARKING SPACES REQUIRED: 22 TOTAL PROPOSED: 28 MINIMUM MOTORCYCLE SPACES REQUIRED: 2 (1 SPACE FOR EVERY 20 VEHICLE SPACES) TOTAL PROPOSED: 2	14 MINIMUM BICYCLE SPACES REQUIRED: 14 TOTAL PROPOSED: 14 (5% OF VEHICLE SPACES) TOTAL PROPOSED: 14

MULTI-TENANT LOTS:
WHERE JOINT PARKING FACILITIES ARE PROVIDED FOR TWO OR MORE NON-RESIDENTIAL USES IN A SINGLE LOT, THE MINIMUM NUMBER OF BICYCLE SPACES SHALL BE THE GREATER OF THE FOLLOWING: 5 PERCENT OF THE SUM OF THE REQUIREMENTS FOR THE INDIVIDUAL USES COMPUTED SEPARATELY WHEN THE DEVELOPMENTS BENEFITING FROM THIS PROVISION.

MINIMUM NUMBER OF MOTORCYCLE SPACES:
A DEVELOPMENT SHALL PROVIDE MOTORCYCLE SPACES SHALL PROVIDE MOTORCYCLE PARKING SPACES CONVENIENTLY LOCATED NEAR THE MAIN ENTRANCE OF A BUILDING AND ACCESSIBLE BY THE SAME RULES THAT PROVIDE ACCESS TO THE VEHICLE PARKING SPACES IN THE LOT.

MINIMUM NUMBER OF BICYCLE SPACES:
A DEVELOPMENT SHALL PROVIDE BICYCLE SPACES SHALL BE PROVIDED FOR EACH 20 VEHICLE SPACES OR FRACTION THEREOF. (PER CITY OF ANACAPALINKING CODE, SECTION 22.08.02)

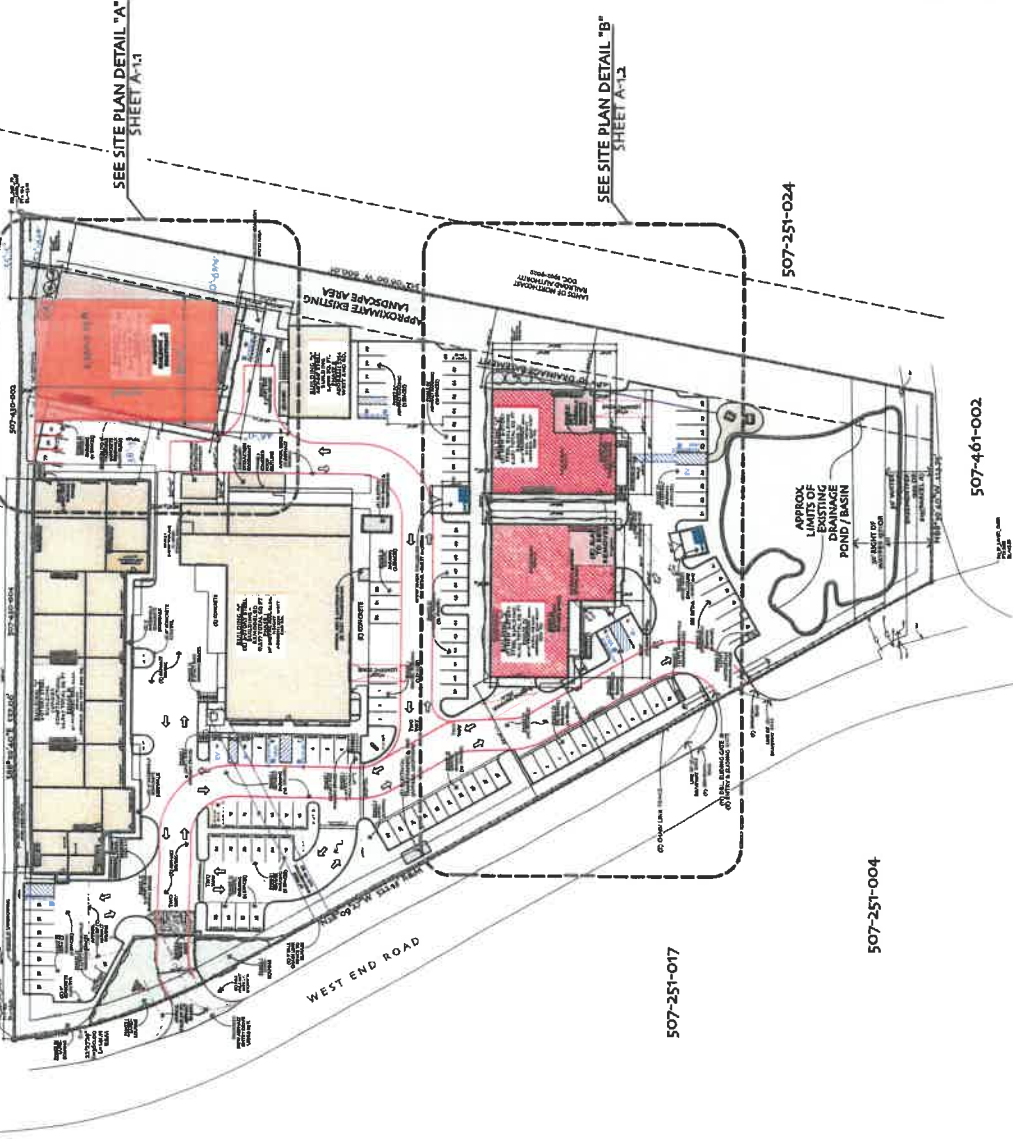
NUMBER OF BICYCLE SPACES REQUIRED PER FLOOR AREA:
(PER CITY OF ANACAPALINKING CODE, SECTION 22.08.02) (TABLE 2.0)

MINIMUM: 1 PER 500 SQ FT
MAXIMUM: 1 PER 800 SQ FT

MINIMUM NUMBER OF BICYCLE SPACES:
A MINIMUM OF 10 BICYCLE SPACES IS REQUIRED FOR LOTS WITH 3 TO 5 CARS. A MINIMUM OF 5% OF VEHICLE SPACES IS REQUIRED FOR LOTS WITH 10+ CARS. (PER CITY OF ANACAPALINKING CODE, SECTION 22.08.02) (TABLE 2.0)

TOTAL NUMBER OF ACCESSIBLE PARKING SPACES REQUIRED FOR BUILDINGS 1, 2, 3, 4, 5 & 6:
3 SPACES (SEE SECTION 11B-208.2, TABLE 2A)

TOTAL NUMBER OF ACCESSIBLE BICYCLE SPACES REQUIRED FOR BUILDINGS 5 & 6:
2 SPACES (SEE SECTION 11B-208.2, TABLE 2A)



PROPOSED SITE PLAN

SCALE: 1" = 40'-0" (23" X 34" PAPER SIZE)
1" = 80'-0" (11" X 17" PAPER SIZE)

GRAPHIC SCALE BAR
MEASURES 1 INCH ON
FULL SIZE PANS

JULIAN BERG DESIGNS
ARCHITECTURE & PLANNING
844 F STREET
ACATA, CALIFORNIA, 95521
JulianBergDesigns.com
916.494.8939



PROJECT TITLE: AXEL DEVELOPMENT • PHASE IV BUILDINGS
SHEET COMMERCIAL DEVELOPMENT • 5550 WEST END ROAD • ACATA, CA 95521
SHEET TITLE: PROPOSED SITE PLAN
ASSASSOR'S PARCEL NUMBER: 507-251-024

PROJECT NO.:
AD - 1532
DATE: 8/17/2020
DRAWN BY:
JULIAN BERG

SHEET #:
A-1

DESIGN REVIEW SET
NOT FOR CONSTRUCTION

FINANCIAL

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
Statement of Fund Balances at July 31, 2018

Account Fund Balance at Month End	AT 7-31-18	AT 7-31-17
U.S. BANK ACCOUNTS		
- Commercial Account - General Fund Account	207,203.62	957,977.60
- Money Market Account (DWR Contract for SRF Loan) ①	163,175.21	161,483.98
- Certificate of Deposit (DWR Contract for SRF Reserve) ②	547,336.94	547,336.94
- CalPERS (UAL) Pension Trust ⑧	655,177.20	0.00
Subtotal	1,572,892.97	1,666,798.52
HUMBOLDT COUNTY:		
- Investment Account	1,802,284.64	2,787,560.40
- DWFP Reserve (in accordance with Ordinance 16) ④	234,232.42	230,074.69
- MSRA Reserve (Municipal Supplemental Reserve Account) ⑤	428,703.81	422,976.28
- SRF Loan Payment ⑥	95,168.35	48,785.07
- ReMat Account ⑦	273,840.46	16,743.77
- 1% Tax Account ③	773.59	0.00
Subtotal	2,835,003.27	3,506,140.21
L.A.I.F.	1,637.56	1,641.51
Cash on Hand	650.00	650.00
TOTAL CASH	\$ 4,410,183.80	\$ 5,175,230.24
Less: Encumbrances & Reserves (Funds Dedicated for Specific Purposes and Projects)		
RESTRICTED		
Municipal Customers PF2 Prior Year Reconciliation	(34,731.45)	(398,281.58)
Year-Ended Restricted Encumbrances per Ordinance 16, Section 7.2.7	(40,750.00)	0.00
1% Tax Account ③	(773.59)	0.00
Municipal Customer Adv. Chrg. - Collector 1 Pump Motors	0.00	(100,000.00)
Municipal Customer Adv. Chrg. - 1MG Domestic Reservoir Roof	0.00	(625,000.00)
Municipal Customer Adv. Chrg. - Replace Ruth Bunkhouse	(403,365.00)	(403,500.00)
Municipal Customer Adv. Chrg. - SCADA System Upgrade	0.00	(401,000.00)
Municipal Customer Adv. Chrg. - Blue Lake/FGCSD River Crossing	0.00	(200,000.00)
Municipal Customer Adv. Chrg. - Surge Tower Replacement	0.00	(36,345.00)
Municipal Customer Adv. Chrg. - FEMA HMG - Redundant Pipeline	(260,245.00)	0.00
Municipal Customer Adv Chrg - FEMA HMG - Three Tanks Seismic Retrofits	(255,000.00)	0.00
DWR Reserve Fund for SRF Loan ②	(547,336.94)	(547,336.94)
DWR Contract Payment for SRF Loan for DWFP (Drinking Water Filtration Plant-PF1 Charges from Munis) ①	(163,175.21)	(161,483.98)
CalPERS (UAL) Pension Trust ⑧	(655,177.20)	0.00
SUBTOTAL RESTRICTED RESERVES (Net Position)	(2,360,554.39)	(2,872,947.50)
UNRESTRICTED:		
Board Restricted:		
Paik-Nicely Development	(4,158.00)	(4,158.00)
DWFP Reserve ④	(234,232.42)	(230,074.69)
MSRA Reserve (Municipal Supplemental Reserve Account) ⑤	(428,703.81)	(422,976.28)
PG&E REMAT Deposit	(27,000.00)	(27,000.00)
PG&E REMAT Reserve (County Fund) ⑦	(273,840.46)	(16,743.77)
Unrestricted Reserves		
SRF Loan Payment ⑥	(95,168.35)	(48,785.07)
Municipal Customer Accumulation for Debt Service for US Bank Ranney & Techite Project Loan Payment	(44.12)	(14,954.45)
General Fund Reserve	(986,482.25)	(1,537,590.48)
SUBTOTAL UNRESTRICTED RESERVES (Net Position)	(2,049,629.41)	(2,302,282.74)
Total Net Position	(4,410,183.80)	(5,175,230.24)

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
 AT JULY 31, 2018 (1 MONTH - 8.33%)

	JULY RECEIPTS	YTD TOTAL AT 7-31-18	BUDGET	% OF BUDGET	YTD TOTAL AT 7-31-17
MISCELLANEOUS RECEIPTS (RETURNED TO CUSTOMERS VIA PF2)					
RETAIL WATER SALES	\$ 28,461.93	\$ 28,461.93	\$318,394	9%	\$ 21,026.92
SUBTOTAL RETAIL WATER SALES	\$ 28,461.93	\$ 28,461.93	\$318,394	9%	\$ 21,026.92
GENERAL REVENUES					
INTEREST (1)	7.73	7.73	\$30,000	0%	3.71
FCSD CONTRACT FOR MAINT. & OPERATIONS	79,667.59	79,667.59	225,000	35%	54,137.14
POWER SALES NET REMAT	7,804.86	7,804.86	220,000	4%	9,835.08
MISCELLANEOUS (SEE NEXT PAGE)	\$8,842.50	\$8,842.50	50,000	18%	4,558.64
SUBTOTAL GENERAL REVENUES	\$ 96,322.68	\$ 96,322.68	\$525,000	18%	\$ 68,534.57
TAX RECEIPTS					
1% TAXES	0.00	0.00	825,000	0%	0.00
TOTAL PF 2 CREDIT	\$ 124,784.61	\$ 124,784.61	\$1,668,394	7%	\$ 89,561.49
WHOLESALE CONTRACT RECEIPTS					
INDUSTRIAL / HARBOR DISTRICT	\$0.00	\$0.00	\$0	#DIV/0!	\$0.00
TOTAL INDUSTRIAL	\$0.00	\$0.00	\$0	#DIV/0!	\$0.00
CITY OF ARCATA	\$ 89,047.91	\$ 89,047.91	\$1,321,044	7%	\$ 95,285.70
CITY OF EUREKA	213,176.33	213,176.33	3,119,229	7%	226,858.08
HUMBOLDT CSD	69,988.11	69,988.11	1,072,333	7%	76,769.37
MANILA CSD	7,180.64	7,180.64	70,168	10%	6,191.48
MCKINLEYVILLE CSD	70,741.30	70,741.30	1,066,249	7%	76,335.53
FIELDBROOK CSD	11,577.25	11,577.25	174,392	7%	12,544.36
BLUE LAKE	12,634.32	12,634.32	182,807	7%	13,446.39
TOTAL MUNIS	\$ 474,345.86	\$ 474,345.86	\$7,006,222	7%	\$ 507,430.91
REMAT REVENUE less Consultant fee (3)	11,423.85	11,423.85	300,000	4%	14,414.36
TOTAL RECEIPTS	\$ 610,554.32	\$ 610,554.32	\$8,674,616	7%	\$ 611,406.76

(1) LAIF Interest April - June

MISCELLANEOUS RECEIPTS

	JULY	YEAR TO DATE
Administrative		
<i>Parking Lot Rent</i>	\$25.00	\$25.00
<i>Employee Telephone</i>	0.00	0.00
<i>Employee Gas</i>	0.00	0.00
<i>Retirees' Reimbursement of Health Insurance Premium</i>	7,561.77	7,561.77
<i>COBRA Vision Ins & Admin Fee - Retiree</i>	236.17	236.17
<i>COBRA Dental Ins & Admin Fee - Retiree</i>	94.65	94.65
<i>Water Processing Fees</i>	30.00	30.00
<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>	0.00	0.00
<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>	277.68	277.68
<i>Bad Debt Recovery</i>	0.00	0.00
<i>Miscellaneous Payments for Copies &/or Postage Costs</i>	1.12	1.12
<i>Diesel Fuel Tax Refund</i>	0.00	0.00
<i>Park Use Fees</i>	75.00	75.00
<i>Sale of Surplus Equipment</i>	0.00	0.00
<i>Sale of Scrap Metal</i>	284.90	284.90
<i>Reimbursement for safety apparel</i>	6.00	6.00
<i>Reimbursement for District Hats</i>	0.00	0.00
<i>Refund of DMV Fees - Lithia</i>	58.00	58.00
<i>Refund - FedEx</i>	2.21	2.21
Ruth Area		
<i>Use of Ruth Cabin</i>	90.00	90.00
<i>RLCSD-Water System Permit Fees</i>	0.00	0.00
<i>Ruth Area Water Use Permit</i>	100.00	100.00
<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>	0.00	0.00
<i>Don Bridge Lease</i>	0.00	0.00
Miscellaneous		
<i>Other</i>	0.00	0.00
Total Miscellaneous Receipts	\$8,842.50	\$8,842.50
OTHER RECEIPTS or GRANTS		
<i>CalEMA Blue Lake/Fieldbrook Pipeline Crossing</i>	0.00	0.00
<i>Quagga Grant 2015/16 on behalf of RLCSD*</i>	2,689.18	2,689.18

* Not included in PF2 Credits. No charges were expended by HBMWD.
Claim for expenditures was submitted by HBMWD on behalf of RLCSD.

-4-
HUMBOLDT BAY MUNICIPAL WATER DISTRICT
TOTAL EXPENDITURES
AT JULY 31, 2018 (1 MONTHS - 8.33%)

	JULY EXPENSES	YTD TOTAL 7/31/2018	BUDGET	% OF BUDGET	TOTAL 7/31/2017
PAYROLL: See next page for detail					
Total Compensation	\$184,350.95	\$184,350.95	\$ 2,272,615	8%	\$176,825.06
Taxes/Benefits	317,156.52	317,156.52	1,647,903	19%	116,813.57
TOTAL PAYROLL	\$501,507.47	\$501,507.47	\$ 3,920,518	13%	\$293,638.63
SERVICE & SUPPLY					
O & M					
Engineering	\$1,263.00	\$1,263.00	\$ 75,000	2%	\$2,924.75
Maintenance & Repairs - General	6,320.79	6,320.79	45,000	14%	8,843.14
Materials & Supplies - General	4,360.86	4,360.86	43,000	10%	0.00
Tools & Equipment - General	2,154.95	2,154.95	5,000	43%	0.00
Safety Equip. & Training - General	250.23	250.23	20,000	1%	0.00
Maintenance & Repairs - TRF	0.00	0.00	13,000	0%	95.00
Materials & Supplies - TRF	0.00	0.00	42,000	0%	0.00
Safety Equip. & Training - TRF	0.00	0.00	2,000	0%	0.00
Lab Services	320.54	320.54	13,000	2%	0.00
Auto Maintenance	3,108.62	3,108.62	40,000	8%	1,596.37
Radio/Comm. Maintenance	783.58	783.58	10,500	7%	512.65
USGS Meter Station	0.00	0.00	7,800	0%	0.00
Ruth Lake License	0.00	0.00	1,500	0%	0.00
A&G					
Accounting Services	0.00	0.00	\$ 25,000	0%	0.00
Legal	558.00	558.00	28,000	2%	139.50
Professional Services	0.00	0.00	20,000	0%	450.00
Insurance	0.00	0.00	105,000	0%	0.00
Telephone/Internet	4,795.78	4,795.78	53,000	9%	4,862.36
Office Building Maintenance	774.10	774.10	16,500	5%	1,301.16
Office Expense	1,252.96	1,252.96	40,000	3%	3,414.20
IT & Software Maintenance	3,451.38	3,451.38	29,000	12%	0.00
Travel & Conference	434.59	434.59	22,000	2%	36.25
Dues & Subscriptions	978.94	978.94	19,000	5%	665.29
Technical Training	0.00	0.00	14,500	0%	5,188.00
General Manager Training	0.00	0.00	3,000	0%	210.00
Safety Apparel	0.00	0.00	3,000	0%	0.00
County Property Taxes	0.00	0.00	1,100	0%	0.00
Regulatory Agency Fees	4,450.36	4,450.36	114,000	4%	2,962.80
Ruth Lake Programs	0.00	0.00	5,000	0%	0.00
Miscellaneous	2,689.18	2,689.18	11,500	23%	164.37
TOTAL SERVICE/SUPPLIES W/OUT POWER	\$37,947.84	\$37,947.84	\$ 827,400	5%	\$33,365.84
POWER					
Essex Pacific Gas & Electric	\$54,469.70	\$54,469.70	609,094.00		\$54,589.75
Fuel For 2 MW Generator	0.00	0.00			0.00
Subtotal Essex Pumping	\$54,469.70	\$54,469.70	609,094.00	9%	\$54,589.75
All Other Pacific Gas & Electric	5,903.24	5,903.24	71,720		5,348.06
POWER EXPENSE SUBTOTAL	\$60,372.94	\$60,372.94	\$680,814	9%	\$59,937.81
TOTAL SERVICE/SUPPLIES WITH POWER	\$98,320.78	\$98,320.78	\$1,508,214.00	7%	\$93,303.65
PROJECTS, FIXED ASSETS & CONSULTING SERVICES	\$246,703.90	\$246,703.90	\$8,557,693.00	3%	\$71,998.71
TOTAL OPERATING	\$846,532.15	\$846,532.15	\$13,986,425.00	6%	\$458,940.99
DEBT SERVICE - SRF LOAN (1)	\$0.00	\$0.00	\$547,337.00	0%	\$0.00
TOTAL EXPENDITURES	\$846,532.15	\$846,532.15	\$14,533,762.00	6%	\$458,940.99
DEBT SERVICE - US Bank	\$0.00	\$0.00	\$162,200.00	0%	\$0.00

Humboldt Bay Municipal Water District
Salary & Employee Benefit Expenditures

July 2018

Ordinary Income/Expense	Jul 18	Budget	% of Budget	Jul 18	YTD Budget	% of Budget	Annual Budget
Expense							
SALARIES & EMPLOYEE BENEFITS							
00 - PAYROLL EXPENSE							
11 - Salaries & Wages							
01 - Wages-Regular	166,303.90	172,925.25	96.2%	166,303.90	172,925.25	96.2%	2,075,103.00
02 - Wages-Parttime	6,698.80	6,885.34	97.3%	6,698.80	6,885.34	97.3%	35,312.04
03 - Wages-Overtime	1,538.33	1,750.00	87.9%	1,538.33	1,750.00	87.9%	30,000.00
04 - Wages-Standby	6,763.38	6,750.00	100.2%	6,763.38	6,750.00	100.2%	81,000.00
05 - Wages-Holiday	489.28	516.67	94.7%	489.28	516.67	94.7%	11,000.00
07 - Shift Differential	774.76	916.66	84.5%	774.76	916.66	84.5%	11,000.00
08 - Director Compensation	1,520.00	2,170.83	70.0%	1,520.00	2,170.83	70.0%	26,049.96
09 - Secretarial Fees	262.50	262.50	100.0%	262.50	262.50	100.0%	3,150.00
Total 11 - Salaries & Wages	184,350.95	192,177.25	95.9%	184,350.95	192,177.25	95.9%	2,272,615.00
220 - Employer P/R Tax Expense	14,232.43	17,385.92	81.9%	14,232.43	17,385.92	81.9%	208,631.04
Total 00 - PAYROLL EXPENSE	198,583.38	209,563.17	94.8%	198,583.38	209,563.17	94.8%	2,481,246.04
158 - EMPLOYEE BENEFITS							
E.B. - Medical & Life							
162 - Employee Medical & Life	51,610.99	53,355.00	96.7%	51,610.99	53,355.00	96.7%	640,260.00
173 - HSA	79.18	200.00	39.6%	79.18	200.00	39.6%	34,516.00
162a - Retiree Medical	3,692.19	7,901.83	46.7%	3,692.19	7,901.83	46.7%	94,822.00
E.B. - Medical & Life - Other	0.00	342.75	0.0%	0.00	342.75	0.0%	4,113.00
Total E.B. - Medical & Life	55,382.36	61,799.58	89.6%	55,382.36	61,799.58	89.6%	773,711.00
E. B. - Dental	2,593.14	3,283.25	79.0%	2,593.14	3,283.25	79.0%	39,399.00
E. B. - Vision	555.32	612.50	90.7%	555.32	612.50	90.7%	7,350.00
E. B. - Retirement Benefits							
164 - 457b District Contribution	2,600.00	2,550.00	102.0%	2,600.00	2,550.00	102.0%	30,600.00
PERS Expenses							
161 - Emp Ben - PERS	21,185.56	23,251.00	91.1%	21,185.56	23,251.00	91.1%	279,012.00
161a - PERS-Unfunded Lia.	201,673.00	202,000.00	99.8%	201,673.00	202,000.00	99.8%	212,936.00
Total PERS Expenses	222,858.56	225,251.00	98.9%	222,858.56	225,251.00	98.9%	491,948.00
Total E. B. - Retirement Benefits	225,458.56	227,801.00	99.0%	225,458.56	227,801.00	99.0%	522,548.00
E. B. - Other Benefits							
159 - Workers' Comp. Ins.	17,622.25	19,481.49	90.5%	17,622.25	19,481.49	90.5%	77,925.96
168 - Long-Term Disability Ins.	1,237.26	1,442.92	85.7%	1,237.26	1,442.92	85.7%	17,315.00
172 - Employee EAP	75.20	85.25	88.2%	75.20	85.25	88.2%	1,023.00
Total E. B. - Other Benefits	18,934.71	21,009.66	90.1%	18,934.71	21,009.66	90.1%	96,263.96
Total 158 - EMPLOYEE BENEFITS	302,924.09	314,505.99	96.3%	302,924.09	314,505.99	96.3%	1,439,271.96
Total SALARIES & EMPLOYEE BENEFITS	501,507.47	524,069.16	95.7%	501,507.47	524,069.16	95.7%	3,920,518.00
Total Expense	501,507.47	524,069.16	95.7%	501,507.47	524,069.16	95.7%	3,920,518.00
Net Ordinary Income	-501,507.47	-524,069.16	95.7%	-501,507.47	-524,069.16	95.7%	-3,920,518.00
Net Income	-501,507.47	-524,069.16	95.7%	-501,507.47	-524,069.16	95.7%	-3,920,518.00

08/07/18

Humboldt Bay Municipal Water District
Overtime Pay

July 2018

	54TRF		51		52		54		56		58		TOTAL	
	Hours	Jul 18	Hours	Jul 18	Hours	Jul 18	Hours	Jul 18	Hours	Jul 18	Hours	Jul 18	Hours	Jul 18
Employee Wages, Taxes and Adjustments														
Gross Pay														
Double Time	1	53.10		0.00		78.00		6			0.00		7.00	131.10
Overtime	10	444.15	4	187.88	9.5	383.47	6	134.41	3.5	180.08	2	77.24	35.00	1,407.23
Total Gross Pay	11	497.25	4	187.88	9.5	383.47	12	212.41	3.5	180.08	2	77.24	42.00	1,538.33
Adjusted Gross Pay	11	497.25	4	187.88	9.5	383.47	12	212.41	3.5	180.08	2	77.24	42.00	1,538.33
Net Pay	11	497.25	4	187.88	9.5	383.47	12	212.41	3.5	180.08	2	77.24	42.00	1,538.33
Employer Taxes and Contributions		0.00		0.00		0.00		0.00		0.00		0.00		0.00

I. CAPITAL PROJECTS	JULY		YTD TOTAL		% OF	
	EXPENSES	7/31/2018	BUDGET	BUDGET	BUDGET	BUDGET
Replace Collector 1 - Pump 1.2	166,919.84	166,919.84	214,500		78%	
Collector Motors/Parts Inventory	0.00	0.00	103,500		0%	
Generator for Industrial Meter Building Communication Equipment	0.00	0.00	4,750		0%	
Essex Control Building Flooring Replacement	0.00	0.00	6,000		0%	
Ruth Hydro Protective Relay Replacement - Phase 2	0.00	0.00	120,000		0%	
12KV -NEPA Process Partially Funded with FEMA Grant & Adv Charges	0.00	0.00	308,013		0%	
SUBTOTAL A:	166,919.84	166,919.84	756,763		22%	
B. Projects Charged to Municipal Customers via Price Factor 2 (DWTF)						
SUBTOTAL B:	0.00	0.00	0		0	
C. Projects Funded by Other Sources (BWF)						
Blue Lake/FGCSD River Crossing Funded by Prop 84 & FEMA Grants & Adv. Charges	16,728.69	16,728.69	2,515,400		1%	
Surge Tower Replacement - CEQA, Bidding & Construction Assistance] Funded by FEMA Grant - Adv. Charges & ReMat Re	0.00	0.00	960,000		0%	
12KV -NEPA Process] Funded by FEMA Grant - Adv. Charges	0.00	0.00	1,724,037		0%	
SUBTOTAL C:	16,728.69	16,728.69	5,199,437		0%	
TOTAL CAPITAL PROJECTS:	183,648.53	183,648.53	5,956,200		3%	

While the total projects expenditures are budgeted at \$8,557,693, the actual customer charges are \$2,348,547. Capital Projects C, Professional & Consulting Services C, Industrial System Projects C and Carryover Capital Projects 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.

I. FIXED ASSETS		JULY	YTD TOTAL	% OF
A. Projects Charged to All Customers via Price Factor 2 (BWF)		EXPENSES	7/31/2018	BUDGET
Collector 1 Electrical Upgrade		0.00	0.00	185,500
Essex - Replace Two Administrative Computers		0.00	0.00	4,725
Essex - Replace Control System Computers		0.00	0.00	2,500
Essex - Control & Administrative Networks Backup - BWF Portion		0.00	0.00	7,750
Essex - Replace Computer Server Cabinet		0.00	0.00	10,250
Essex - Replace UPSs Phase 1 - Portion DWTF		0.00	0.00	24,250
Essex - Replace Operations Chairs		0.00	0.00	1,500
Essex - Operations Supervisor Ergonomic Desk		0.00	0.00	3,500
Replace Unit 1		0.00	0.00	50,000
Unit 5 (Boom Truck) - Load Moment Indicator		0.00	0.00	14,250
Unit 5 (Boom Truck) Air-Ride Seat		0.00	0.00	1,500
Portable Gantry System		0.00	0.00	4,000
Fleet Servicing Equipment		0.00	0.00	2,500
HEPA Filter Vacuum		0.00	0.00	1,500
Electrical Testing & Calibration Equipment		0.00	0.00	11,500
Utility Line Locator		0.00	0.00	6,250
Ruth HQ Washroom Remodel		0.00	0.00	2,500
Ruth Bunkhouse Furnishings		0.00	0.00	4,000
Ruth Hydro Wicket Gate Hydraulic Control Motor		0.00	0.00	2,500
Ruth Hydro Oil & Paint Storage Lockers		0.00	0.00	2,750
Eureka Office - Replace Two Administrative Computers		0.00	0.00	6,250
Eureka Office - ADA Assisted Listening System		0.00	0.00	10,000
Accounting and Financial Software		0.00	0.00	60,000
SUBTOTAL A:		0.00	0.00	419,475
B. Projects Charged to Municipal Customers via Price Factor 2 (DWTF)				
N-Poly Pump Skid Replacement		0.00	0.00	12,250
Essex - Control & Administrative Networks Backup - DWTF Portion		0.00	0.00	7,750
Essex - Replace UPSs Phase 1 - Portion BWF		0.00	0.00	9,250
SUBTOTAL B:		0.00	0.00	29,250
TOTAL FIXED ASSETS PROJECTS:		0.00	0.00	448,725

III. MAINTENANCE PROJECTS	JULY		YTD TOTAL		% OF BUDGET
	EXPENSES	7/31/2018	BUDGET	BUDGET	
A. Charged to All Customers via Price Factor 2 (BWF)					
Collector 5 Security/Vandalism Protections	0.00	0.00	7,500		0%
Pipeline Maintenance	88.40	88.40	12,750		1%
12KV Electric System Maintenance	0.00	0.00	4,000		0%
Mainline Meter Flow Calibration	0.00	0.00	10,000		0%
Technical Support & Software Updates to Include Control System	4,374.38	4,374.38	19,000		23%
Generator Service	0.00	0.00	3,500		0%
Hazard & Diseased Tree Removal	0.00	0.00	6,500		0%
Cathodic Protection	0.00	0.00	6,500		0%
Maintenance Emergency Repair	2,667.89	2,667.89	50,000		5%
Fleet Paint Repairs	0.00	0.00	5,000		0%
Replace Expired Emergency Operations Center Products	0.00	0.00	2,500		0%
Replace Fleet Emergency Safety Beacons	0.00	0.00	2,000		0%
Lead Free Brass Inventory	0.00	0.00	2,500		0%
Replace 299 Cathodic Anode Well	0.00	0.00	172,000		0%
Ruth Lake - Brush Abatement	0.00	0.00	6,500		0%
Licensed Timber Operator	0.00	0.00	5,000		0%
Log Boom Inspection	0.00	0.00	1,000		0%
Ruth Spillway Maintenance	1,683.50	1,683.50	80,000		2%
Ruth HQ - Install Power Pole	0.00	0.00	3,750		0%
Ruth HQ & Surrounding Area - Remove Dead/Dying Trees	0.00	0.00	20,000		0%
Ruth Hydro - Repair PRV Discharge Pipe	0.00	0.00	5,500		0%
Ruth Hydro - Howell Bunger Valve Inspection	0.00	0.00	1,110		0%
SUBTOTAL A:	8,814.17	8,814.17	426,610		2%
B. Projects Charged to Municipal Customers via Price Factor 2 (DWTF)					
TRF - Generator Service	0.00	0.00	500		0%
TRF Limitorque Valve Retrofit Supplies - Phase 2	0.00	0.00	10,250		0%
TRF Water Quality Instrumentation Parts Inventory	0.00	0.00	7,250		0%
TRF Water Quality Instruments	0.00	0.00	14,750		0%
TRF - Replace Chemical System Back Pressure Valves	0.00	0.00	10,500		0%
SUBTOTAL B:	0.00	0.00	43,250		0%
TOTAL MAINTENANCE PROJECTS:	8,814.17	8,814.17	469,860		2%

III. PROFESSIONAL & CONSULTING SERVICES		JULY	YTD TOTAL	% OF
A. Charged to All Customers via Price Factor 2 (BWF)		EXPENSES	7/31/2018	BUDGET
Collector 2 Arc Flash Survey and Relay Test		0.00	0.00	4,000
Collector 3 Monitoring Well Abandonment		0.00	0.00	26,100
Crane Testing/Certification		0.00	0.00	7,500
Control/SCADA Software Training		0.00	0.00	27,750
Technical Training		0.00	0.00	10,500
Backflow Tester Training		0.00	0.00	3,000
Drone Training - BWF Portion		0.00	0.00	2,500
Essex Mad River Cross-Sectional Survey		0.00	0.00	10,000
Essex Gravel Bar Maintenance and Survey		0.00	0.00	25,000
Industrial Pipeline Evaluation		0.00	0.00	26,000
Industrial and Domestic System Intertie		0.00	0.00	11,000
GIS/Facilities Information System		0.00	0.00	12,000
GIS/Facilities Information System - Ruth		0.00	0.00	4,600
Dune Monitoring Program - Component of Coastal Conservancy Climate Ready Grant		2,000.00	2,000.00	2,000
Eureka office - ADA Compliance Consultation		0.00	0.00	10,000
Public Education		0.00	0.00	5,000
SGMA - Groundwater Management Plan		0.00	0.00	5,000
PARS Pension Trust Contribution		0.00	0.00	5,000
Water Resources Planning		50,000.00	50,000.00	50,000
Grant Applications		0.00	0.00	5,000
Ruth Spillway Bridge Inspection		1,905.20	1,905.20	30,000
Ruth Spillway Maintenance Assistance		0.00	0.00	6,500
Ruth Hydro ReMat Electrical/Maintenance Inspection		0.00	0.00	15,000
Ruth Hydro FERC EAP Tabletop Exercise -Planning		0.00	0.00	2,050
FERC Dam Safety Surveillance & Monitoring Report(DSSMR)/FERC Dam Safety Review (Part 12)		0.00	0.00	2,000
FERC Chief Dam Safety Engineer		0.00	0.00	3,000
		0.00	0.00	10,000
SUBTOTAL A:		53,905.20	53,905.20	315,500
				17%
B. Projects Charged to Municipal Customers via Price Factor 2 (DWTF)				
Chlorine System Maintenance		0.00	0.00	16,750
Drone Training - DWTF Portion		0.00	0.00	2,500
SUBTOTAL B:		0.00	0.00	19,250
C. Projects Funded by Other Sources (BWF)				
In-Stream Flow Grant		0.00	0.00	693,408
SUBTOTAL C:		0.00	0.00	693,408
TOTAL PROFESSIONAL & CONSULTING SERVICES		53,905.20	53,905.20	1,028,158
				5%

IV. INDUSTRIAL SYSTEM PROJECTS			
	JULY EXPENSES	YTD TOTAL 7/31/2018	% OF BUDGET
A. Charged to All Customers via Price Factor 2 (BWF)			
- Maintain Water Supply to Industrial Pump Station (Pump Station 6) During Low-Flow Months	336.00	336.00	3%
SUBTOTAL A:	336.00	336.00	3%
C. Projects Funded by Other Sources (BWF)			
- Rebuild River Weir at PSS	0.00	0.00	0%
SUBTOTAL C:	0.00	0.00	0%
TOTAL INDUSTRIAL SYSTEM PROJECTS:	336.00	336.00	0%

CARRY-OVER PROJECTS FROM 2017/18			
	JULY EXPENSES	YTD TOTAL 7/31/2018	% OF BUDGET
I. CAPITAL PROJECTS			
A: Charged to All Customers via Price Factor 2 (BWF)			
Superintendent Office Remodel	0.00	0.00	0%
Mainline Valve Replacement	0.00	0.00	0%
TRF Video Surveillance System - BWF Portion	0.00	0.00	0%
SUBTOTAL A:	0.00	0.00	0%
B. Projects Charged to Municipal Customers via Price Factor 2 (DWTF)			
TRF Video Surveillance System - DWTF Portion	0.00	0.00	0%
SUBTOTAL B:	0.00	0.00	0%
C. Projects Funded by Other Sources (BWF)			
Replace Ruth Bunkhouse Advanced Charges	0.00	0.00	0%
SUBTOTAL C:	0.00	0.00	0%

2017/18 CARRYOVER PROJECTS TOTAL	0.00	0.00	0%
PROJECTS GRAND TOTAL:	246,703.90	246,703.90	3%
Less Projects Funded from Other Sources (Grants/Loans/Advanced Charges/Reserves)	16,728.69	16,728.69	0%
PF2 Project Total Charged to Customers excluding Debt Service (US Bank)	229,975.21	229,975.21	11%

Humboldt Bay Municipal Water District
Expenses by Vendor Detail

July 2018

08/03/18

Memo	Amount
101Netlink	
Ruth Data Link/Internet	-160.00
Total 101Netlink	-160.00
Advanced Display & Signs	
Ruth Spillway Bridge closure signs	-83.49
Total Advanced Display & Signs	-83.49
Advanced Security Systems	
Ruth Hydro Quarterly Alarm System Monitoring	-76.50
Total Advanced Security Systems	-76.50
Almquist Lumber	
paint for inventory	-178.52
Pump 1.2 Motor installation	-50.13
Spillway repair	-49.33
Total Almquist Lumber	-277.98
AT & T	
Ruth HQ	
TRF	
Essex office	
Eureka office	-38.99
Ruth Hydro	
Valve Building Samoa	
Ruth HQ	-23.04
TRF	-7.43
Essex office	-431.94
Eureka office	-6.45
Ruth Hydro	-170.62
Valve Building Samoa	-101.43
Total AT & T	-779.90
AT&T	
Eureka/Essex Landline	-35.12
Arcata/Essex Landline	-35.13
Samoa/Essex Landline	-235.65
Blue Lake Meter Signal	-60.68
Eureka Office Modem	-153.07
Eureka Office Alarm	-88.63
Samoa Booster Pump Station	-88.14
Valve Building-Samoa	-153.07
Eureka Office	-360.46
Essex Office	-904.35
TRF	-152.46
Ruth Dataline	-148.67
Total AT&T	-2,415.43
AT&T Advertising Solutions	
white page listing	-21.00
Total AT&T Advertising Solutions	-21.00
Cal-Pac Machine & Hydraulics	
Machine work for Collector 1 Pump 1.2 installation	-990.00
Total Cal-Pac Machine & Hydraulics	-990.00
City of Eureka	
Eureka office water/sewer	-73.88
Total City of Eureka	-73.88
Coastal Business Systems Inc.	
Eureka office copy and fax machine	-908.73
Total Coastal Business Systems Inc.	-908.73

Humboldt Bay Municipal Water District
Expenses by Vendor Detail

08/03/18

July 2018

Memo	Amount
Dale H. Davidsen Spillway repair	-63.92
Total Dale H. Davidsen	-63.92
Dave Perkins auto mileage reimbursement - Spillway Improvement auto mileage reimbursement auto mileage reimbursement	-21.85 -47.96 -190.70
Total Dave Perkins	-260.51
ESRI, Inc Annual GIS Software Maintenance Support for Essex Office Annual GIS Software Maintenance Support for Eureka Office	-4,061.92 -312.46
Total ESRI, Inc	-4,374.38
Eureka-Humboldt Fire Ext.,Co, Inc Essex Fire Extinguisher maintenance	-25.99
Total Eureka-Humboldt Fire Ext.,Co, Inc	-25.99
Eureka Oxygen cylinder rental	-108.20
Total Eureka Oxygen	-108.20
Eureka Readymix Repair and Upgrade Line Shed 6	-2,337.87
Total Eureka Readymix	-2,337.87
Fastenal Company Ruth Spillway repair	-97.17
Total Fastenal Company	-97.17
FEDEX ship lab samples ship Ruth Hydro Panametric sensor for repair & adjustment	-320.54 -16.08
Total FEDEX	-336.62
Ferguson Waterworks Humboldt Bay Retail Meters Fieldbrook-Glendale CSD Meters	-1,669.47 -1,669.47
Total Ferguson Waterworks	-3,338.94
FleetPride Unit 10 repair	-184.16
Total FleetPride	-184.16
Friends of the Dunes Coastal Conservancy Climate Ready Grant for Coastal Dune V...	-2,000.00
Total Friends of the Dunes	-2,000.00
Frontier Communications Ruth HQ Ruth Hydro/Ruth Dataline	-51.39 -163.70
Total Frontier Communications	-215.09
GHD (102801) Grant Submittal - Matthews Dam Spillway Investigation (102865) General Engineering - Essex (102865) General Engineering - Essex (102802) Blue Lake/Fieldbrook River Crossing (102800) Grant Submittal - Single Line Slough Crossing	-532.70 -100.50 -1,162.50 -15,718.75 -1,372.50
Total GHD	-18,886.95

Humboldt Bay Municipal Water District
Expenses by Vendor Detail

08/03/18

July 2018

Memo	Amount
Harbor Freight Tools Ruth Spillway Repair	-41.16
Total Harbor Freight Tools	-41.16
Hensel Hardware maintenance shop supplies painting supplies	-46.15 -39.99
Total Hensel Hardware	-86.14
Henwood Associates, Inc Consultant Services Agreement	-920.84
Total Henwood Associates, Inc	-920.84
Humboldt Fasteners Ruth Spillway repairs	-440.35
Total Humboldt Fasteners	-440.35
Humboldt Redwood Company, LLC Mt Pierce Lease site Mt Pierce Lease site	-266.79 -266.79
Total Humboldt Redwood Company, LLC	-533.58
Industrial Electric Collector 1 Pump 1.2 Motor replacement electrical shop supplies	-296.98 -59.53
Total Industrial Electric	-356.51
JTN Energy, LLC Consultant Services Agreement	-920.84
Total JTN Energy, LLC	-920.84
Keenan Supply maintenance supplies	-196.17
Total Keenan Supply	-196.17
Larry Raschein Travel Advance - JPIA Leadership training	-302.59
Total Larry Raschein	-302.59
Lisa Newell auto mileage reimbursement	-19.40
Total Lisa Newell	-19.40
Mario Palmero Essex safety supplies lab supplies vehicle maintenance Essex computer supplies Essex maintenance Travel Advance - JPIA Leadership training	-51.09 -18.54 -1.40 -19.19 -17.00 -132.00
Total Mario Palmero	-239.22
Matthews Paints, Inc. pressure washer repair	-145.42
Total Matthews Paints, Inc.	-145.42
Miller Farms Nursery chainsaw & weedeater maintenance replace 4000 watt Honda generator	-26.92 -2,154.95
Total Miller Farms Nursery	-2,181.87

Humboldt Bay Municipal Water District
Expenses by Vendor Detail

08/03/18

July 2018

Memo	Amount
Mission Linen	
maintenance supplies	-163.03
Uniform Rental	-451.14
Total Mission Linen	-614.17
Mitchell, Brisso, Delaney & Vrieze	
Legal Services Eureka - June 2018	-558.00
Total Mitchell, Brisso, Delaney & Vrieze	-558.00
Napa Auto Parts	
maintenance shop supplies	-113.21
Total Napa Auto Parts	-113.21
Network Management Services	
Essential Care Server Support Service for Eureka office	-214.20
Essential Care Computer Support Service for Eureka office	-291.00
Guard-IT Security Service for Eureka office	-139.99
Recover-IT Backup Solution	-438.00
Domain Management	-3.00
Total Network Management Services	-1,086.19
North Coast Railroad	
TRF Fiber Optic Lease Fee	-1,890.13
Total North Coast Railroad	-1,890.13
North Coast Unified Air Quality Mangement	
Essex Annual Permit Renewal Fee	-2,104.61
Ruth Hydro Annual Permit Renewal Fee	-455.62
Total North Coast Unified Air Quality Mangement	-2,560.23
North Valley Labor Compliance	
Blue Lake/Fieldbrook-Glendale CSD river crossing	-925.40
Total North Valley Labor Compliance	-925.40
Northern California Safety Consortium	
membership fee	-50.00
Total Northern California Safety Consortium	-50.00
O&M Industries	
Eureka office HVAC maintenance	-80.00
Total O&M Industries	-80.00
Pacific Gas & Electric Co.	
Ruth Bunkhouse	
Eureka office	-365.65
Jackson Ranch Rectifier	-15.35
299 Rectifier	-97.02
West End Road Recifier	-123.98
TRF	-4,115.17
Ruth Hydro Valve Control	-23.98
Ruth Hydro	-23.26
Samoa Booster Pump Station	-998.39
Samoa Dial Station	-26.93
Essex Pumping 6/1 - 6/30/2018	-54,469.70
Ruth Bunkhouse	-113.51
Eureka office	
Jackson Ranch Rectifier	
299 Rectifier	
West End Road Recifier	
TRF	
Ruth Hydro Valve Control	
Ruth Hydro	
Samoa Booster Pump Station	

08/03/18

Humboldt Bay Municipal Water District Expenses by Vendor Detail

July 2018

Memo	Amount
Samoa Dial Station Essex Pumping 6/1 - 6/30/2018	
Total Pacific Gas & Electric Co.	-60,372.94
Pacific Paper Co. Fieldbrook-Glendale CSD/Blue Lake River Crossing notificatio...	-84.54
Total Pacific Paper Co.	-84.54
Pacific Water Resources Replace Collector 1 Pump and Motor 1-2	-165,407.27
Total Pacific Water Resources	-165,407.27
Peterson Tractor Co. rental of generator for TRF	-2,667.89
Total Peterson Tractor Co.	-2,667.89
Pitney Bowes postage meter supplies	-61.83
Total Pitney Bowes	-61.83
PitStop Cleaning` Eureka office cleaning	-120.00
Total PitStop Cleaning`	-120.00
Platt Electric Supply Collector 1 Pump Motor 1.2 replacement	-127.54
Total Platt Electric Supply	-127.54
PPG Architectural Coatings pipeline maintenance	-43.23
Total PPG Architectural Coatings	-43.23
Recology Arcata Essex Garbage Service	-383.07
Total Recology Arcata	-383.07
Recology Humboldt County Eureka office garbage/recycling service	-85.40
Total Recology Humboldt County	-85.40
Redi-Rents, Inc Superintendent Office Remodel Collector 1 Pump 1.2 motor installation	-212.28 -47.92
Total Redi-Rents, Inc	-260.20
Renner Petroleum John Deere tractor fuel cardlock fuel - pumping & control cardlock fuel - water quality cardlock fuel - maintenance cardlock fuel - customer service Ruth bulk fuel Ruth Hydro bulk fuel Essex bulk fuel	-18.62 -395.70 -395.70 -395.70 -395.70 -423.99 -423.99 -2,986.38
Total Renner Petroleum	-5,435.78
Ruth Lake C.S.D. Quagga Grant expense reimbursement	-2,689.18
Total Ruth Lake C.S.D.	-2,689.18

08/03/18

Humboldt Bay Municipal Water District Expenses by Vendor Detail

July 2018

Memo	Amount
SHN Consulting Engineers & Geologists Aerial Photos for trench monitoring report	-336.00
Total SHN Consulting Engineers & Geologists	-336.00
Sitestar Nationwide Internet Essex Internet	-52.90
Total Sitestar Nationwide Internet	-52.90
Springville Safety/Supply safety supplies	-123.15
Total Springville Safety/Supply	-123.15
Streamline Website maintenance membership fee	-450.00
Total Streamline	-450.00
Sudden Link TRF Internet	-105.34
Eureka office Internet	-204.95
Essex Internet	-124.95
Fieldbrook-Glendale CSD Internet	-271.02
Total Sudden Link	-706.26
Sunnybrae Ace Hardware Unit 3 supplies	-27.48
Total Sunnybrae Ace Hardware	-27.48
T.P. Tire Service, Inc repair flat Unit 13	-15.00
Tire for Unit 15	-191.74
Total T.P. Tire Service, Inc	-206.74
TechnoFlo Systems Collector 2 Meter Calibration - Balance owed on invoice	-179.17
Total TechnoFlo Systems	-179.17
The Mill Yard Ruth Spillway repairs	-673.95
Repair & upgrade Line Shed 6	-38.13
Chlorine Building siding repair	-2.25
Total The Mill Yard	-714.33
The Times-Standard Essex Times-Standard subscription	-294.99
Total The Times-Standard	-294.99
Thrifty Supply pipeline maintenance	-45.17
Fieldbrook-Glendale CSD leak repair	-126.14
Total Thrifty Supply	-171.31
Times Printing Blue Book Dividers	-415.01
Total Times Printing	-415.01
Trinity County General Services Pickett Peak site lease	-250.00
Total Trinity County General Services	-250.00

Humboldt Bay Municipal Water District
Expenses by Vendor Detail

08/03/18

July 2018

Memo	Amount
Trinity County Solid Waste	
Ruth HQ dump fees	-14.75
Ruth Hydro dump fees	-14.75
Total Trinity County Solid Waste	-29.50
Underground Service Alert	
Annual Membership	-683.95
Total Underground Service Alert	-683.95
USTI, Inc	
Humboldt Bay retail eBills	-3.68
Fieldbrook-Glendale CSD eBills	-8.32
utility bill cards	-118.00
Annual Maintenance Renewal	-1,896.00
Total USTI, Inc	-2,026.00
Verizon Wireless	
General Manager	-38.03
Customer Service	-46.25
Operations 2	-0.56
Electrician	-0.18
Unit 6	-18.74
Unit 6	-18.74
Operations 1	-0.18
Total Verizon Wireless	-122.68
TOTAL	-296,806.47

HUMBOLDT BAY MUNICIPAL WATER DISTRICT
PARS Post-Employment Benefits Trust

Account Report for the Period
7/1/2017 to 6/30/2018

John Friedenbach
General Manager
Humboldt Bay Municipal Water District
828 Seventh Street
Eureka, CA 95501

H.B.M.W.D. JUL 18 2018

Account Summary

Source	Beginning Balance as of 7/1/2017	Contributions	Earnings	Expenses	Distributions	Transfers	Ending Balance as of 6/30/2018
PENSION	\$0.00	\$600,000.00	\$5,689.74	\$250.99	\$0.00	\$0.00	\$605,438.75
Totals	\$0.00	\$600,000.00	\$5,689.74	\$250.99	\$0.00	\$0.00	\$605,438.75

Investment Selection

Source	
PENSION	Moderate HighMark PLUS

Investment Objective

Source	
PENSION	The dual goals of the Moderate Strategy are growth of principal and income. It is expected that dividend and interest income will comprise a significant portion of total return, although growth through capital appreciation is equally important. The portfolio will be allocated between equity and fixed income investments.

Investment Return

Source	1-Month	3-Months	1-Year	Annualized Return			Plan's Inception Date
				3-Years	5-Years	10-Years	
PENSION	0.06%	0.92%	-	-	-	-	4/9/2018

Information as provided by US Bank, Trustee for PARS; Not FDIC Insured; No Bank Guarantee; May Lose Value

Past performance does not guarantee future results. Performance returns may not reflect the deduction of applicable fees, which could reduce returns. Information is deemed reliable but may be subject to change.

Investment Return: Annualized rate of return is the return on an investment over a period other than one year multiplied or divided to give a comparable one-year return.

Account balances are inclusive of Trust Administration, Trustee and Investment Management fees

OPERATIONS

Memo to: HBMWD Board of Directors
From: Dale Davidsen, Superintendent
Date: August 1, 2018
Subject: Essex/Ruth July 2018 Operational Report

SECTION 13a PAGE NO. 1

Upper Mad River, Ruth Lake, and Hydro Plant

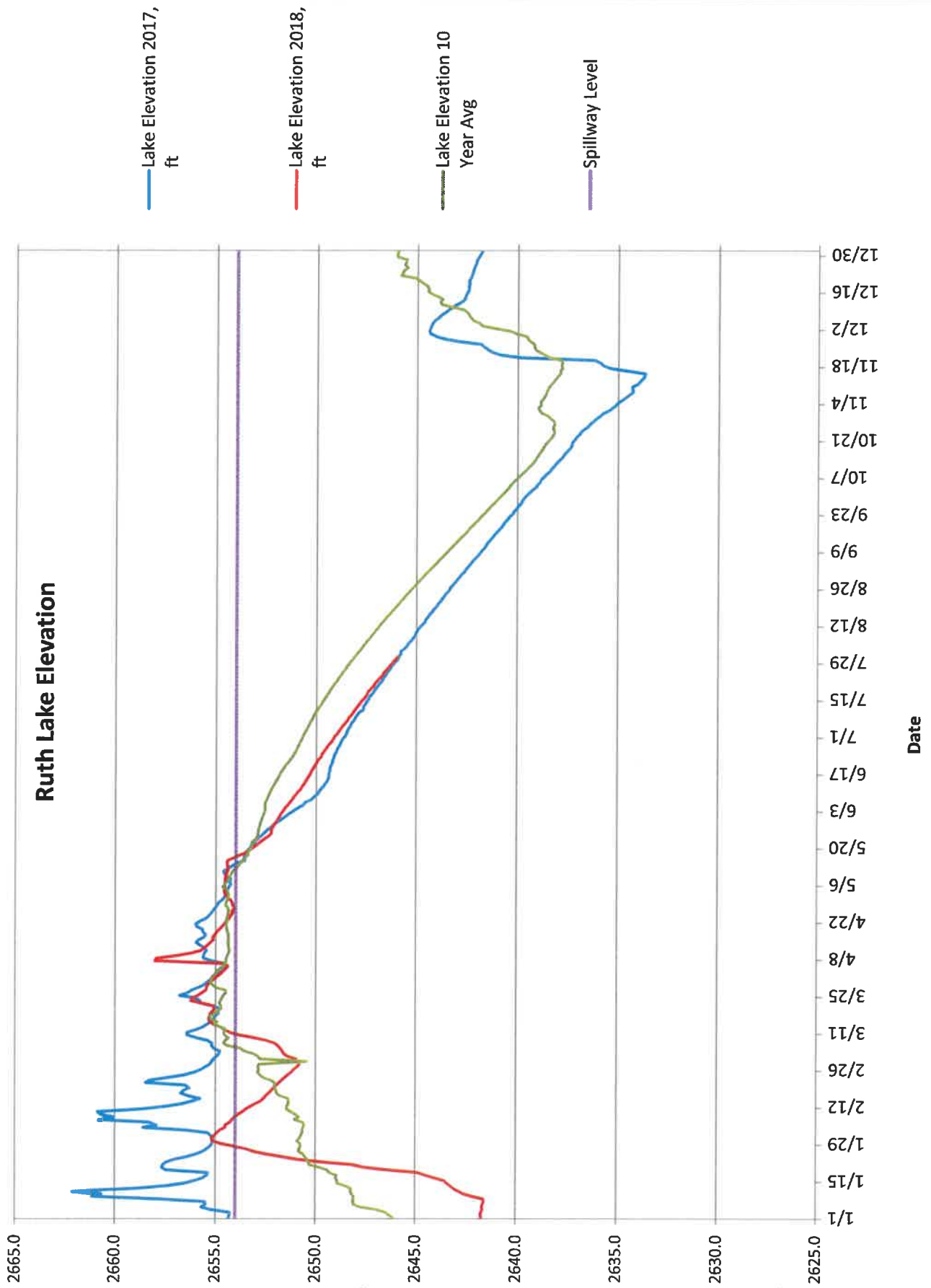
1. The flow at Mad River above Ruth Reservoir (Zenia Bridge) was 2.7 cfs on July 1st and flow steadily decreased all month to 0 cfs on July 29th.
2. The conditions at Ruth Lake for the month of July were as follows:
 - a. The lake level on July 31st was 2645.95 feet which is:
 1. 3.2 feet lower than June 30th, 2018
 2. 0.05 feet higher than July 31st, 2017
 3. 2.38 feet lower than the ten year average
 4. 4.85 feet below the spillway
3. There was 0 inches of recorded rainfall for July 2018 at Ruth Headquarters.
4. Ruth Hydro produced 192,000 KWh in July. The hydro plant was online all month with 1 shutdown and 395 KWh lost.
5. On July 1st the discharge from the lake was 54 cfs which was the high for the month. The low flow was 41 cfs on July 31st.

Lower Mad River, Winzler Control, and TRF

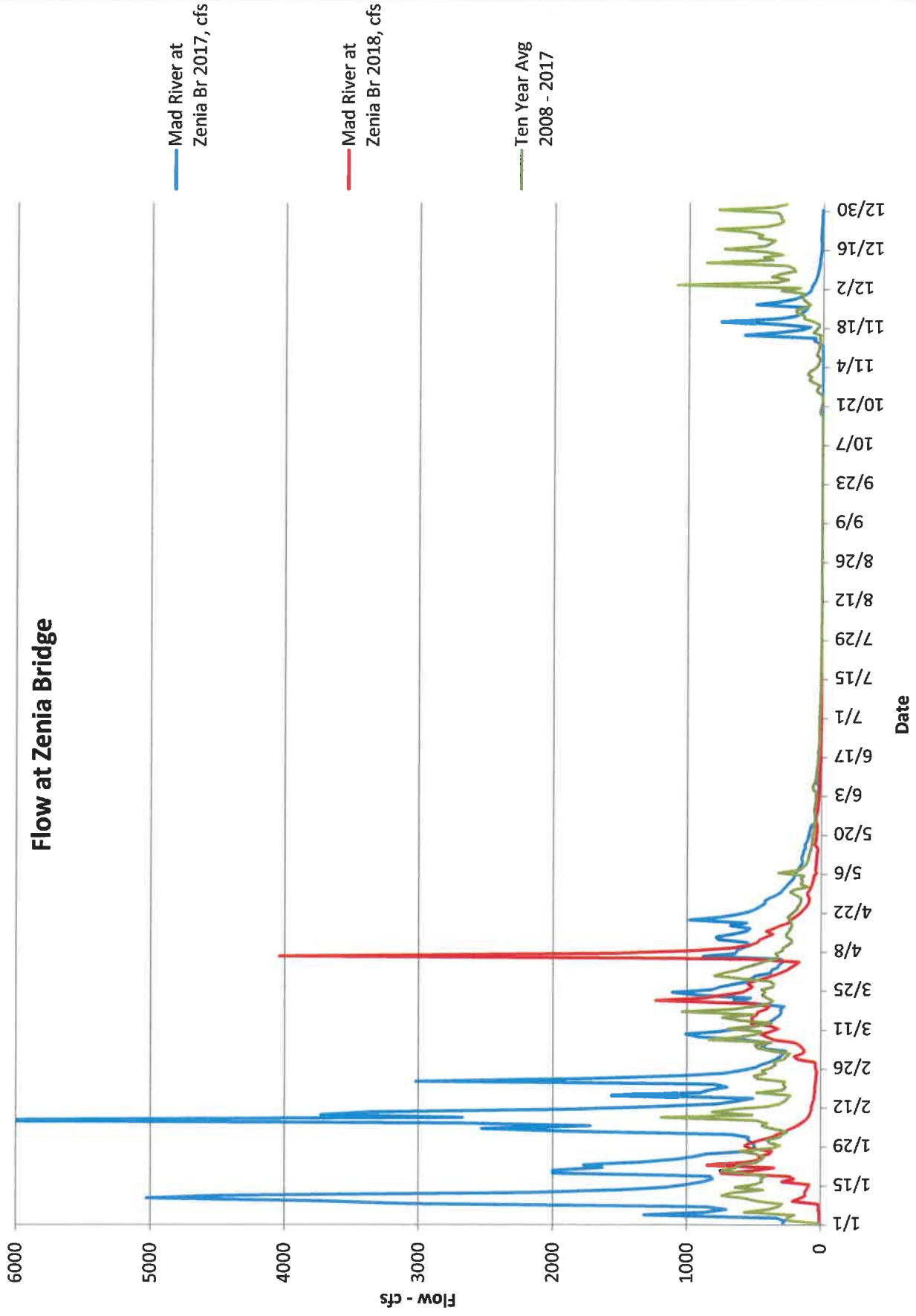
6. The river at Winzler Control Center reached a high recorded flow of 114 cfs and a level of 21.2 feet on July 1st. Over the month, the river flow decreased to 61 cfs and level of 20.8 on July 31st.
7. The domestic water conditions were as follows:
 - a. The monthly turbidity average was 0.19 NTU, which meets Public Health Secondary Standards.
 - b. For the month of July, we pumped 319.007 million gallons at an average of 10.544 MGD.
 - c. The maximum metered daily municipal customer use was 11.825 MGD on July 22nd.
8. The Turbidity Reduction Facility was offline for the summer in July.

9. July 2nd – Maintenance staff did the 90 BIT inspections
10. July 6th – Humboldt County DHHS did our annual Cal-ARP inspection.
11. July 10th – NCAQMD did the annual inspection of our generators, and mobile diesel equipment.
12. July 11th – NCAQMD inspected the generator at Ruth hydro.
13. July 17th – A maintenance crew went to Ruth to start demo on areas needing repairs on the spillway.
14. July 18th
 - a. We held our quarterly SB 198 safety meeting.
 - b. Maintenance finished installation of pump 1-2.
 - c. Poured concrete approach apron at LS 6.
15. July 23rd - 26th – Maintenance went to Ruth to do demo and prep on areas needing repairs on the spillway
16. July 30th – 90 day crane inspection
17. July 31st – Staff and Stillwater Science did the annual dredging of the channel up stream of PS 6.
18. Current and Ongoing Projects
 - a. Spillway repairs
 - b. Ruth Bunkhouse remodel – Waiting for contract and performance bonds from contractor
 - c. Assist with Mad River Crossing Project as needed.

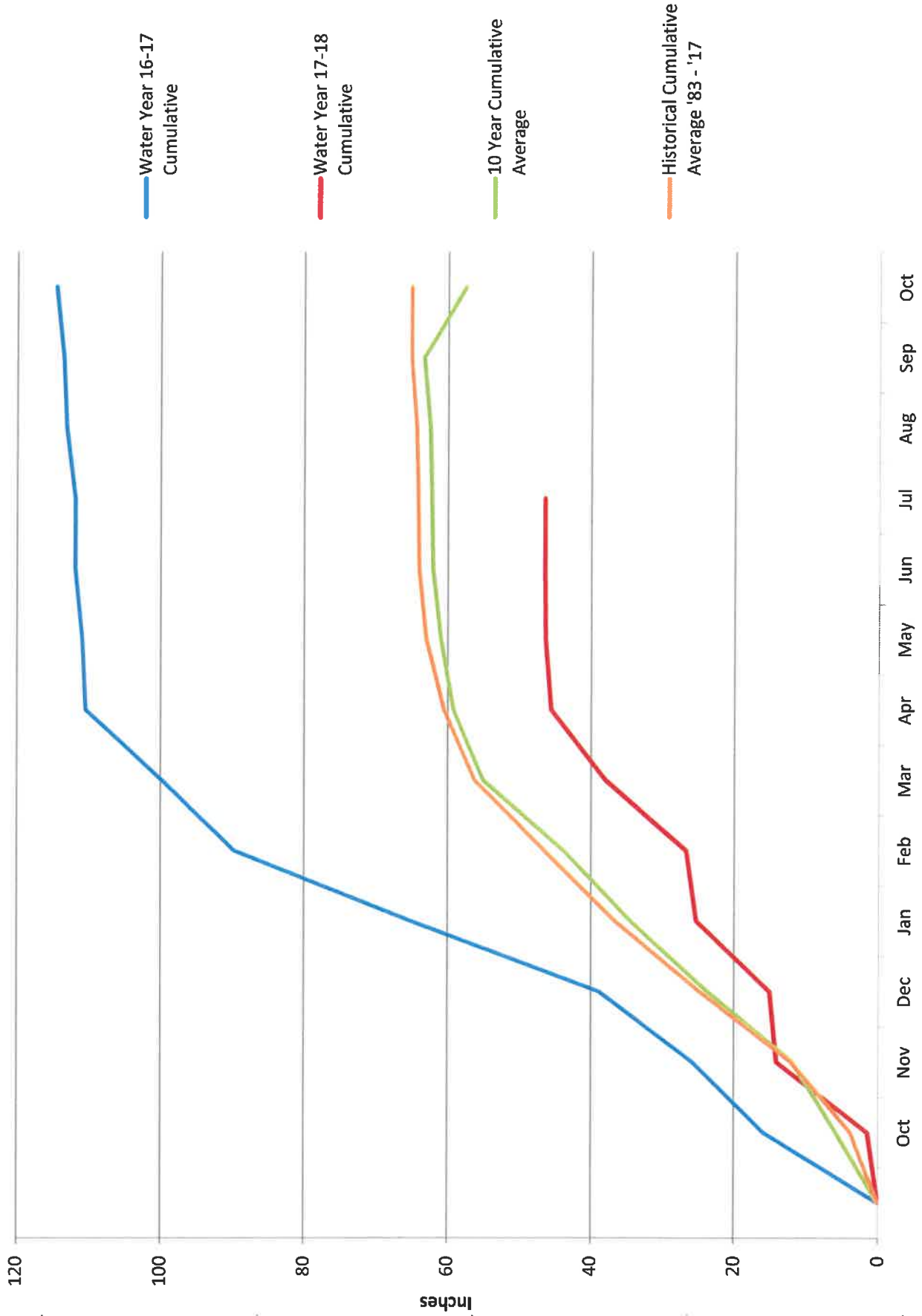
Ruth Lake Elevation

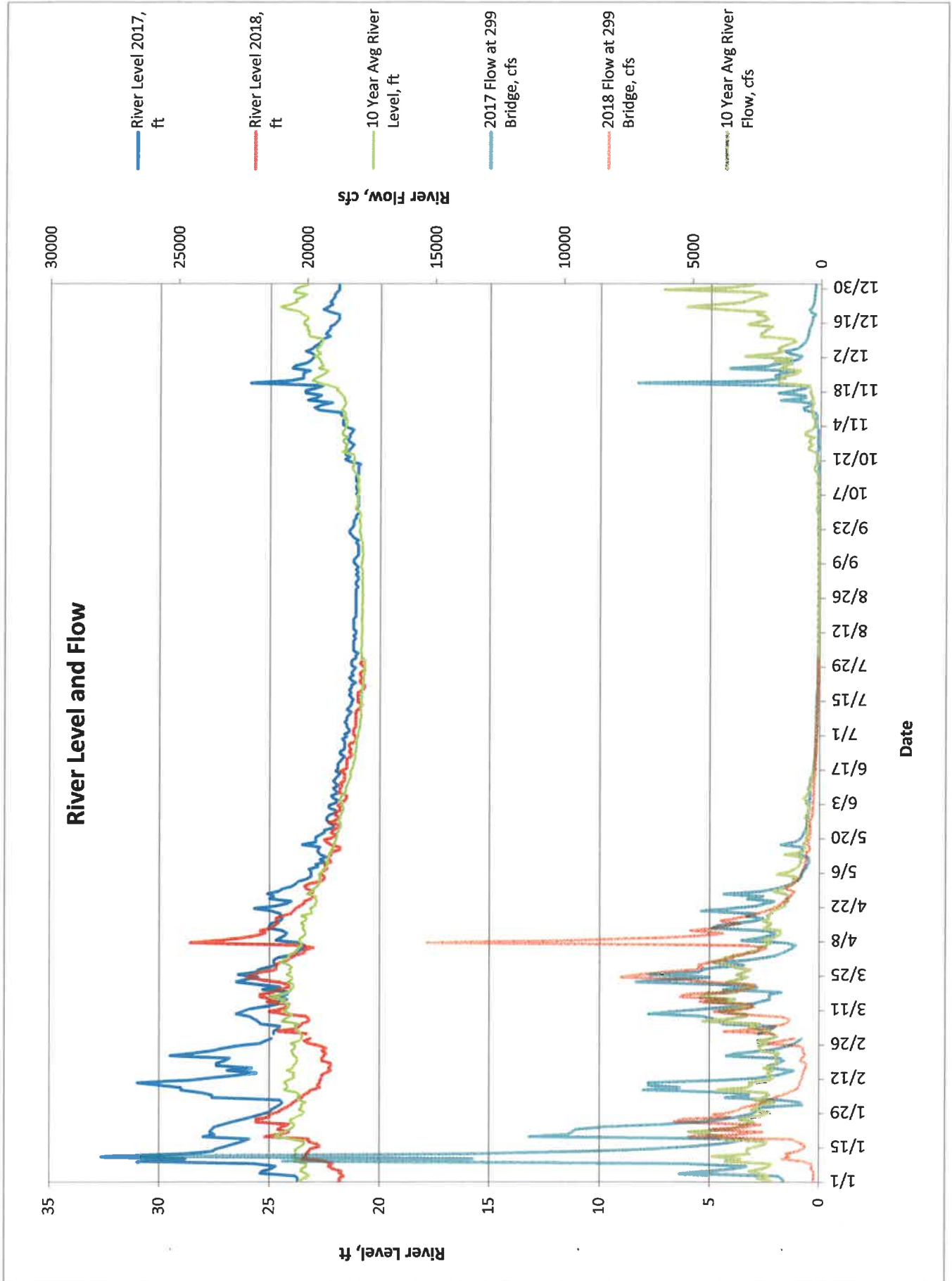


Flow at Zenia Bridge



Ruth Rainfall - Water Year 2017-2018





RIVERBANK WATER SUPPLY SYSTEMS MAXIMIZING AMERICA'S ALLUVIAL AQUIFERS

**DESIGN, CONSTRUCTION, OPERATION AND MAINTENANCE
OF RIVERBANK WATER SUPPLY SYSTEMS**

AN INFORMATION EXCHANGE CONFERENCE



Wednesday, August 8th, 2018 (9:00am – 5:00pm)
(Optional field tour – Tuesday, August 7th, 2018 (2:00pm – 5:00pm))

Hosted by Sonoma County Water Agency
Conference venue: Westside Water Education Facility
9703 Wohler Road, Healdsburg, CA 95448
(Parking details will be provided soon)



Convened by: American Ground Water Trust
[A (501)(c)(3) education non-profit organization] www.agwt.org

Optional field tour opportunity

The Sonoma County Water Agency operates six radial Collector wells located adjacent to the Russian River which can provide an estimated average day peak month capacity of 92 million gallons per day. The tour will include the Wohler & Mirabel diversion facilities, inflatable dam, state of the art fish ladder and viewing chamber, infiltration ponds, and a tour inside Collector Well 6 which is capable of pumping 35 mgd. The field tour will start at the Westside Water Education Facility at 2:00pm and end at 5pm.. Tour sign-up is only available if registered for the August 8th conference.

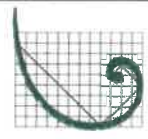
Continuing Education

The AGWT will issue Certificates of Attendance:
Approved for CA Drinking Water Operators – 7 contact hours – Aug. 8th
Approved for CA Drinking Water Operators – 3 contact hours – Aug. 7th Field Tour

Thank you to our Sponsors:



ROSCOE MOSS COMPANY



ERM



DBS & A
Daniel B. Stephens & Associates, Inc.



BUILDING CRAFTS, INC.
Contractors | Engineers

DESCRIPTION:

An intense one-day information-exchange program about science, design, engineering and operational issues related to extracting groundwater from unconsolidated aquifers using riverbed and riverbank alluvial aquifers to naturally filter the source water. The program will showcase case studies from experts in design, construction and operation of riverbank filtration facilities in the Western United States. Discussion will include the characteristics of alluvial aquifer hydrogeology and variable hydrology in the west that influences design and operation of riverbank filtration facilities. Presentations will include examples of current research and studies regarding the effectiveness of riverbank filtration to remove pathogens and other contaminants of concern and the rehabilitation of aging infrastructure.

WHO SHOULD ATTEND

This program is for water resources managers and water supply consultants, engineers, designers and planners. In addition to those interested in the state-of-the-art technical aspects of Riverbank Filtration, the program is of direct relevance to, local & state government officials involved in all aspects of water supply decisions and long-term planning. With increasing hydrological uncertainty, particularly with regard to surface water turbidity, the role of developing aquifers adjacent to rivers and lakes can provide great benefits in treatment costs and supply dependability.

8:00 – 9:00 REGISTRATION (Coffee, pastries and network with exhibitors)

9:00 – 9:15

BACKGROUND TO THE PROGRAM

Andrew Stone, American Ground Water Trust, Concord, NH

9:15 – 9:50

SONOMA COUNTY WATER AGENCY'S RESOURCE PLANNING AND WATER MANAGEMENT INITIATIVES

Jay Jasperse, Chief Engineer, Director of Groundwater Management, Sonoma County Water Agency, Santa Rosa, CA

9:50 – 10:25

CLASSIFICATION OF RIVERBANK FILTRATION WELLS AS GROUNDWATER

Dale Davidsen, Superintendent, Humboldt Bay Municipal Water District, Eureka, CA and Craig Thompson, Senior Engineer, West Yost Associates, Davis, CA

10:25 – 11:00

RIVERBANK FILTRATION IMPROVING SOURCE WATER QUALITY: A REGULATORY PERSPECTIVE

Dr. Chittanranjan Ray, Director, Nebraska Water Center, Lincoln, NE

11:00 – 11:15 BREAK

11:15 – 11:50

WATER QUALITY FOCUS ON RBF CASE STUDIES IN THE PACIFIC NORTHWEST

Henry C. Hunt, Sr. Project Manager, Ranney Collector Wells, Layne, Columbus, OH

11:50 – 12:25

USING A MODIFIED RIVERBANK FILTRATION METHOD TO PURIFY STORM WATER TO INCREASE MANAGED AQUIFER RECHARGE RATES

Adam Hutchinson, Recharge Planning Manager, Orange County Water District, Fountain Valley, CA

12:25 – 1:00

CARMICHAEL'S GRAVITY BASED RBF TUNNEL SYSTEM FOR SUPPLY FROM THE AMERICAN RIVER

Chris Nelson, Public Information Officer, Carmichael Water District, Carmichael, CA

1:00 – 1:50 LUNCH (Included) Sponsored by

1:50 – 2:25

RBF RUSSIAN RIVER COLLABORATIVE RESEARCH PROGRAMS WITH US GEOLOGICAL SURVEY & LAWRENCE BERKELEY NATIONAL LABORATORY (Geophysics, flow modeling, pathogen studies, riverbed clogging and aquifer recharge)

Marcus Trotta, Hydrogeologist, Sonoma County Water Agency, Santa Rosa, CA

2:25 – 3:00

SONOMA COUNTY COLLECTOR WELL CAPACITY EVALUATION PROGRAM

Jim Warner, Senior Partner, ERM West, Walnut Creek, CA

3:00 – 3:35

APPLICATIONS OF SLANT WELLS TO RIVERBANK FILTRATION

Brian A. Villalobos, Principal Geohydrologist, Geoscience Support Services Inc., La Verne, CA

3:35 – 4:10

LAKE HAVASU CITY, AZ - RIVER BANK FILTRATION

Kevin Bral, Senior Principal Technologist, CH2M/Jacobs Engineering, Englewood, CO

4:10 – 4:45

HYDROGEOLOGIC AND SURFACE WATER/GROUNDWATER CHARACTERIZATION OF THE RUSSIAN RIVER FOR SONOMA COUNTY AND THE PLANNED SCOPE OF WORK FOR AN RBF SYSTEM FOR THE CITY OF SANTA CRUZ

Nick Pogoncheff, Principal, PES Environmental, Novato, CA

4:45 – 5:00 WRAP-UP and ADJOURN

REGISTRATION: MAXIMIZING AMERICA'S ALLUVIAL AQUIFERS

(Register online at agwt.org/events)

General Registration (August 8th)	\$275	<input type="checkbox"/>
Employee of AGWT Corp Member (August 8th)	\$240	<input type="checkbox"/>
Full-Time Student (ID required at Registration) (August 8th)	\$80	<input type="checkbox"/>
PDF of Presentations (Post Conference) – (Attendee Pricing)	\$30	<input type="checkbox"/>
Exhibit Table (Personal Registration also Required)	\$250	<input type="checkbox"/>
Tour – RBF (Aug 7) (Must be registered for Aug 8th)	\$50	<input type="checkbox"/>
Tour – RBF (Aug 7) (Must be registered for Aug 8th) (Student)	\$20	<input type="checkbox"/>

HOW TO REGISTER
 → Mail: American Ground Water Trust, 50 Pleasant Street, Concord, NH 03301
 → Phone: (800) 423-7748 (9am-4pm eastern)
 → Fax: (603) 228-6557
 → Register on line <http://www.agwt.org/events> or [click here \(if using online\)](#)
 Cancellation policy – see website

PAYMENT CHECK [payable: American Ground Water Trust] **Total \$**.....

AMEX Visa MasterCard PO

Credit Card or PO No. _____ Expiration _____
 Cardholder Name _____
 Registration Name _____
 Title/Position _____
 Company/ Organization _____
 Address _____
 City _____ State _____ Zip _____
 Phone _____
 E-Mail _____



AMERICAN GROUND WATER TRUST
Independent authority on groundwater
 (Non-profit, 501 (c)(3) education organization)
Ground Water Information, Awareness & Education Since 1986
 *This is what we do*
 ~ Promote efficient and effective ground water management
 ~ Communicate the environmental and economic value of ground water
 ~ Showcase ground water science and technology solutions
 ~ Increase citizen, community and decision-maker awareness
 ~ Facilitate stakeholder participation in water resource decisions



Humboldt Bay Municipal Water District

Ruth Hydro Production Report – Since June 1983

PG&E June 1983 through May 14, 2017

	Total KWH Production	Average Monthly KWH Production
On Peak	11,630,086	28,575
Part Peak	58,575,072	143,919
Off Peak	83,856,378	206,035
Super Off Peak	26,796,680	65,840
Grand Total	180,858,216	444,369
	Pre REMAT Total Revenues	\$8,790,377.99
	No. of Months of Operation	407.5
	Average \$/Kwh	0.0486

REMAT June 2017 to June 2018

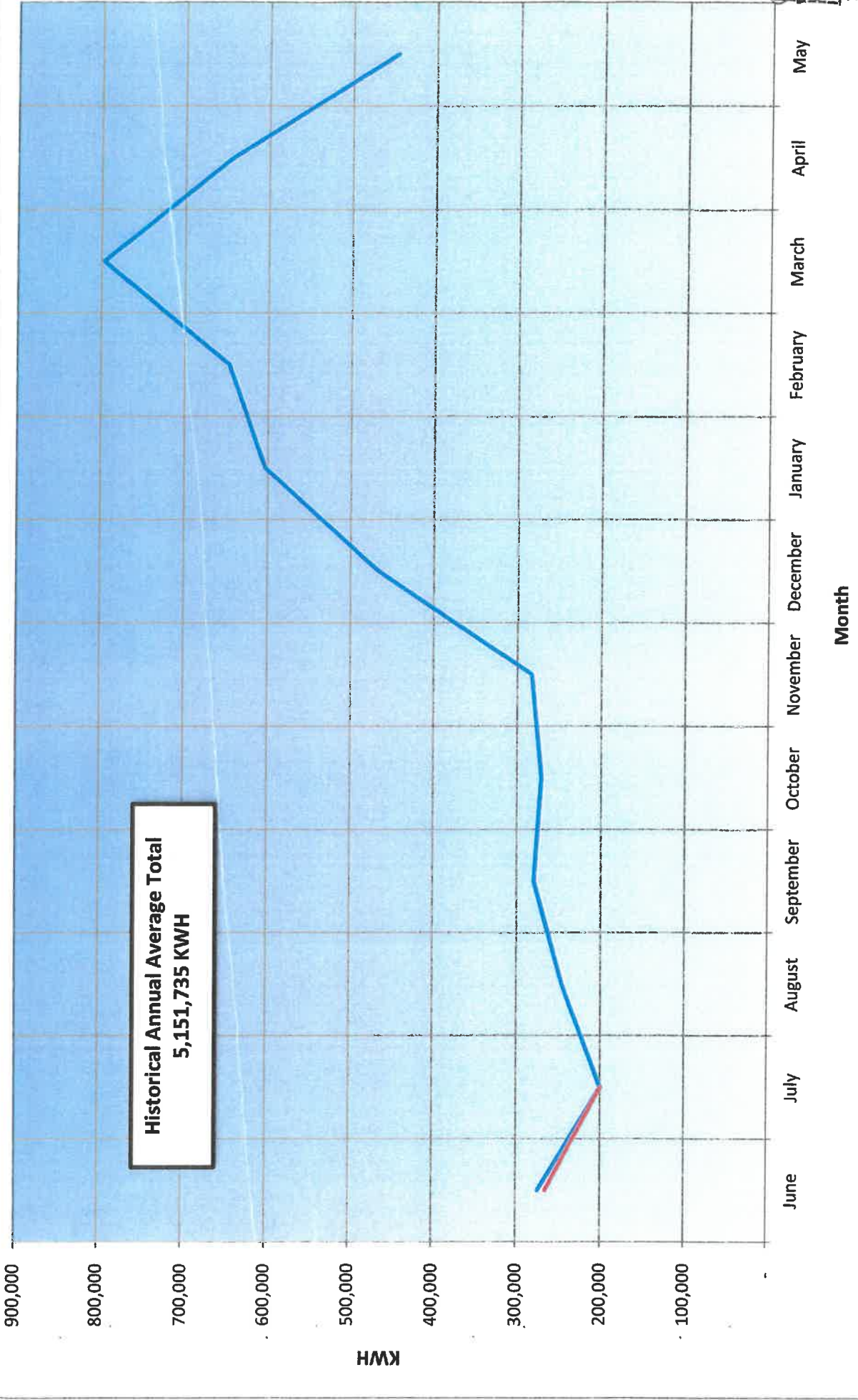
Hydro Production Payment - Beginning June 2017

2017/2018	Production KWH			Totals		REMAT #of Mos	Total No. of Months of	Cumulative REMAT Revenues	Grand Total Revenues to Date	Avg \$/Kwh REMAT
	Month	Day	Shoulder	Night	Total KWH					
May	96,070.1	113,974.6	179,458.6	389,503.3	\$ 30,388.07	0.5	407.5	\$ 30,388.07	\$ 8,820,766.06	\$ 0.0932
June	81,535.2	96,802.0	155,848.2	334,185.4	\$ 26,120.87	1	408	\$ 56,508.94	\$ 8,846,886.93	\$ 0.0932
July	37,839.9	43,978.6	69,926.9	151,745.4	\$ 14,146.42	2	409	\$ 70,655.36	\$ 8,861,033.35	\$ 0.0932
Aug	39,075.2	45,418.9	71,539.6	156,033.7	\$ 14,543.49	3	410	\$ 85,198.85	\$ 8,875,576.84	\$ 0.0932
Sept	36,363.2	42,226.0	66,220.2	144,809.4	\$ 13,497.57	4	411	\$ 98,696.42	\$ 8,889,074.41	\$ 0.0932
Oct	48,570.2	56,566.9	87,605.6	192,742.7	\$ 18,457.96	5	412	\$ 117,154.38	\$ 8,907,532.37	\$ 0.0958
Nov	77,434.5	88,110.3	138,532.3	304,077.1	\$ 29,180.65	6	413	\$ 146,335.03	\$ 8,936,713.02	\$ 0.0960
Dec	83,746.8	100,034.0	158,937.6	342,718.4	\$ 32,775.44	7	414	\$ 179,110.47	\$ 8,969,488.46	\$ 0.0956
Jan	115,215.3	130,408.9	198,873.2	444,497.4	\$ 42,647.97	8	415	\$ 221,758.44	\$ 9,012,136.43	\$ 0.0959
Feb	180,500.0	214,085.6	343,849.9	738,435.5	\$ 70,673.06	9	416	\$ 292,431.50	\$ 9,082,809.49	\$ 0.0957
Mar	228,557.2	265,473.5	412,331.2	906,361.9	\$ 70,797.29	10	417	\$ 363,228.79	\$ 9,153,606.78	\$ 0.0781
Apr	225,414.8	266,539.0	422,950.4	914,904.2	\$ 71,453.25	11	418	\$ 434,682.04	\$ 9,225,060.03	\$ 0.0781
May	84,193.8	93,770.3	150,906.1	328,870.3	\$ 25,887.78	12	418	\$ 460,569.82	\$ 9,250,947.81	\$ 0.0787

Hydro Production Payment - Beginning June 2018

2018/2019	Production KWH			Totals		REMAT #of Mos	Total No. of Months of	Cumulative REMAT Revenues	Grand Total Revenues to Date	Avg \$/Kwh REMAT
Month	Day	Shoulder	Night	Total KWH	Monthly Revenues					
June	65,605.4	77,313.5	122,281.8	265,200.7	\$ 20,713.83	13	420	\$ 481,283.65	\$ 9,271,661.64	\$ 0.0781

Historical vs. Actual Cumulative Production Gosselin Hydroelectric Plant at Ruth lake



Historical Annual Average Total
5,151,735 KWH

— Historical PG&E Average Kwh
— Current FY Production REMAT

SELLER:

Humboldt Bay Municipal Water District
 828 7th Street
 Eureka, CA 95501
 Attention: General Manager

Electric Statement

Invoice prepared	2018-07-02 17:37:41
Invoice period	2018-06
Contract reference	33R403RM
Executed	2016-10-16
Payment due	2018-07-30
Meter id	LOWGAP_7_QFUNTS
Channel	WH3_REC
Project	Matthews Dam Hydro

PURCHASER:

Pacific Gas and Electric Company
 P.O. Box 770000
 Mail Code N12E
 San Francisco, CA 94177
 Attention: Azmat Mukhtar
 (ASM3@pge.com), Mgr. Bilateral
 Settlements

Summary Invoice

Charge	Gen (kWh)	Sold (kWh)	TOD factor	TOD \$/kWh	Energy (\$)
Day	65,605.4	65,605.4	1.270	0.11332210	7,434.54
Shoulder	77,313.5	77,313.5	0.280	0.02498440	1,931.63
Night	122,281.8	122,281.8	1.040	0.09279920	11,347.65
Totals	265,200.7	265,200.7	0.875	0.07810622	20,713.83

Calculation of PG&E ReMat & Muni Funds FY2017/18
 June 1-30, 2018

PERIOD	KWH	\$/KWH	ReMat Payment Received	Muni PG&E Base Rate	Rebate To Muni's	JTN Energy	Henwood Assoc., Inc.	Balance To ReMat Fund (County)
DAY/PEAK	65,605.40	0.11332210	7,434.54	0.02943	\$ 7,804.86	\$ 742.56	\$ 742.56	\$ 11,423.85
SHOULDER/MID-DAY	77,313.50	0.0249844	1,931.63					
NIGHT	122,281.80	0.09279920	11,347.65					
	265,200.70		\$ 20,713.83					

Verify

Professional Services related to ReMat Contract \$0.0056 Contract is split 50/50*

Current Blended Rate Per Kwh \$ 0.08

*Separate checks are issued to JTN Energy & Henwood Associates, Inc. AFTER payment for month is received from PG & E
 G/Accounting/ReMat Analysis/ReMat Revenue & Payment

Confidential: Documents submitted under D.06-06-066 and/or PU Code §454.5(g), and PU Code §583

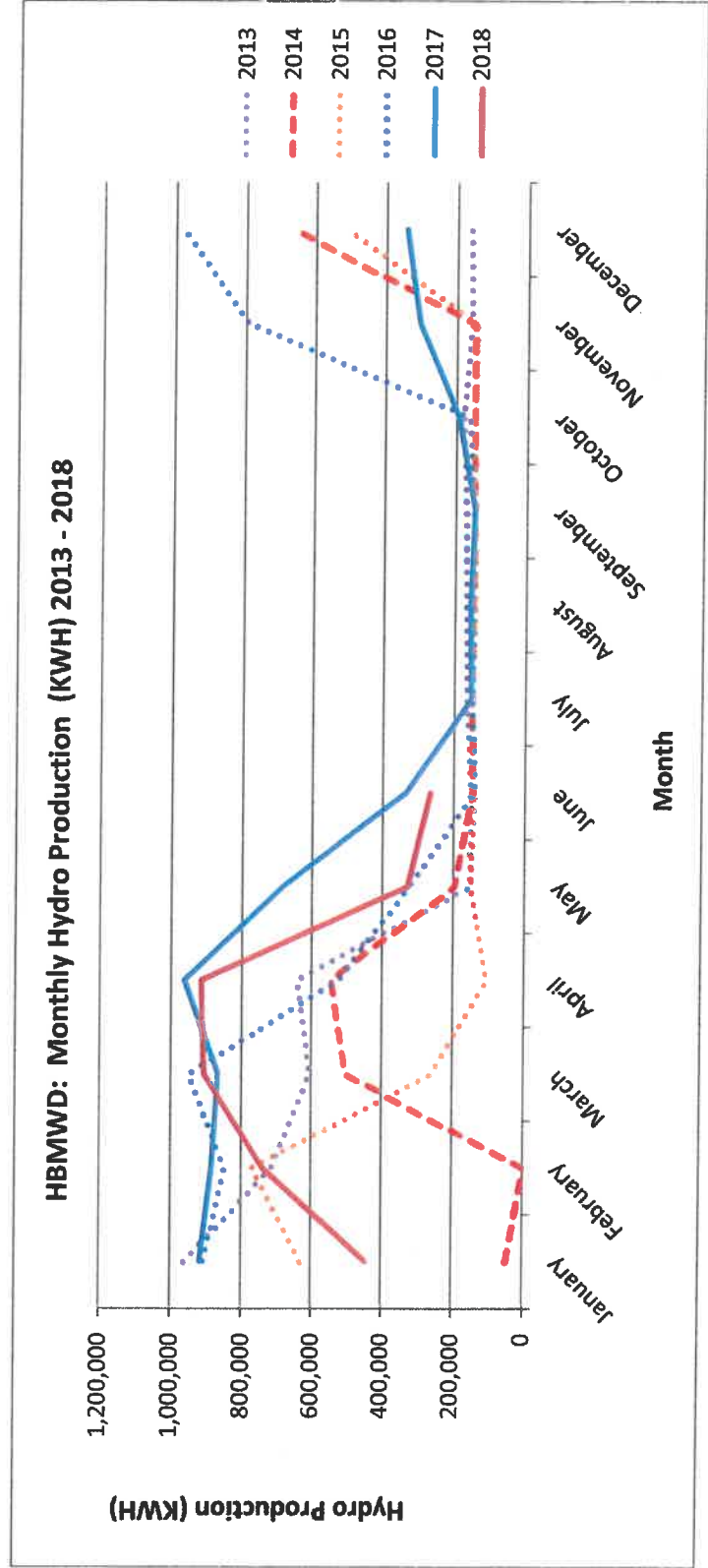
 <p>Purchase / Sales Invoice Invoice Number: 124025</p> <p>Delivery Period Start: 06/01/2018 Delivery Period End: 06/30/2018 Invoice Date: 07/11/2018 Due Date: 07/31/2018</p> <p>Log Number: 33R403RM Account Code: 2320311 Meter Channel: R403RT Contract Start: 05/15/2017</p>	<p>From: Pacific Gas and Electric Company 77 Beale Street San Francisco, CA 94105</p> <p>Contract Manager: Kristy Leung Phone: 415-973-7657 Email: kell@pge.com</p> <p>Settlement Analyst: Marshall Hutzelman Phone: 415-973-8032 Fax: 415-973-9505 Email: MKHi@pge.com</p>	<p>To: HUMBOLDT BAY MUNICIPAL WATER DISTRICT P. O. Box 95 Eureka, CA 95501</p> <p>Project Name: MATTHEWS DAM HYDRO Payment Method: CHECK Vendor Number: 1024538</p> <p>Contact: Steve Marshall Phone: 707-822-2918 Fax: Email: ops@hbmwd.com</p>
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Payment Name	Quantity	Unit	Amount
Energy Payment 06/01/2018 - 06/30/2018	265.201	MWh	\$-20,713.82
Deemed Delivered Payment	0.000	MWh	\$0.00
Annual Excess Energy Payment	0.000	MWh	\$0.00
GEP Penalty	0.000	MWh	\$0.00
CAISO Pass Thru T+12	0.000	MWh	\$0.00
CAISO Pass Thru T+55	0.000	MWh	\$0.00
CAISO Pass Thru T+194	0.000	MWh	\$0.00
Net Total			\$-20,713.82

Total Amount Due to HUMBOLDT BAY MUNICIPAL WATER DISTRICT on Due Date: 07/31/2018 USD \$ 20,713.82

**Humboldt Bay Municipal Water District
Monthly Hydro Electric Production (KWH) for CY2013 - 2018**

Month	2013	2014	2015	2016	2017	2018
January	962,724	47,002	632,611	907,103	916,562	444,497
February	713,055	0	769,170	848,575	884,477	738,436
March	605,327	501,812	261,555	950,250	866,400	906,362
April	642,402	545,893	106,258	523,573	962,033	914,904
May	152,795	196,968	151,803	323,636	682,547	328,870
June	152,044	147,630	143,055	142,248	334,185	265,201
July	164,775	149,503	150,599	147,564	151,745	
August	168,428	148,220	140,977	147,531	156,034	
September	169,768	145,020	145,468	148,770	144,809	
October	178,812	148,715	147,574	159,930	192,743	
November	157,195	148,816	145,196	793,097	304,077	
December	160,936	665,823	510,915	978,889	342,718	
Total Annual	4,228,261	2,845,402	3,305,181	6,071,166	1,801,039	1,182,933



Humboldt Bay Municipal Water District
Ruth Bunkhouse Remodel Project**BID**

Proposal of True North Constructors Inc.
(hereinafter called "Bidder"), organized and existing under the laws of the State of California,
doing business as a Corporation *.

To the Humboldt Bay Municipal Water District, a political subdivision of the State of California
(hereinafter called "Owner").

In compliance with your Advertisement for Bids, Bidder hereby proposes to perform all work for
the construction of the Ruth Bunkhouse Remodel Project in strict accordance with the Contract
Documents, within the time set forth therein, and at the prices stated below.

In the event of a difference between a price quoted in words and a price quoted in figures for the
same quotation, the words shall be the amount bid. In the event that the product of a unit price
and an estimated quantity does not equal the extended amount quoted, the unit price shall govern
and the corrected product of the unit price and the estimated quantity shall be deemed to be the
amount bid. If the sum of two or more items in a bidding schedule does not equal the total
amounts quoted, the individual items amounts shall govern and the corrected total shall be
deemed to be the amount bid.

By submission of this bid, each bidder certifies, and in the case of a joint bid, each party certifies
as to his own organization, that his bid has been arrived at independently, without consultation,
communication, or agreement as to any matter relating to this bid with any other bidder or with
any competitor.

Bidder hereby agrees to commence work under this Contract on or before a date to be specified
in the Notice to Proceed and to fully complete the project and pay the liquidated damages as
provided in Articles III and IV of the General Conditions.

Bidder agrees to perform all the work described in the Contract Documents for the following unit
prices or lump sum.

NOTE: Bids shall include sales tax and all other applicable taxes and fees.

*Insert "a corporation," "a partnership," or "an individual" as applicable.

Humboldt Bay Municipal Water District
Ruth Bunkhouse Remodel Project

BID PROPOSAL

BASE BID SCHEDULE

Fill out Excel Spreadsheet, Pages B-9 & B-10 (Include Schedule of Values with Bid)

TOTAL OF BASE BID (From Spreadsheet) (\$ 475,000.00)

TOTAL OF BASE BID IN WORDS (\$ four hundred seventy five thousand dollars)

Award will be made to the lowest, responsive, responsible BIDDER. The low bidder shall be determined based on the above BASE BID SCHEDULE

~~The objective of the project is to install 700 LF of screen. If the Contractor is not able to install approximately 700 LF of screen in five laterals due to obstructions encountered, additional alternate lateral(s) shall be installed. One alternative lateral location is shown on the Contract Plans. If addition locations are required beyond the one shown, these locations will be determined through consultation with the Owner and the Engineer. The BIDDER agrees to install any additional laterals for the unit prices given in the ADDITIVE BID SCHEDULE below.~~

Receipt of the following Addendum is acknowledged:

Addendum 1 noted

The representations made herein are made under penalty of perjury.

Respectfully submitted:



Signature

President

Title

1010975

License Number

8/5/18

Date

2/29/2020

License Expiration Date

(SEAL - If Bid is by Corporation)



Humboldt Bay Municipal Water District
Ruth Bunkhouse Remodel Project

Bond #706521P
Premium: \$8,125 subject to adjustment
based on final contract price

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: That

TRUE NORTH CONSTRUCTORS, INC.

(Name of Contractor)

5812 Green Acres Dr., Anderson, CA 96007

(Address of Contractor)

a California Corporation, hereinafter called Principal, and
(Corporation, Partnership, or Individual)

DEVELOPERS SURETY AND INDEMNITY COMPANY

(Name of Surety)

17771 Cowan, #100, Irvine, CA 92614

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

Humboldt Bay Municipal Water District

828 Seventh Street, Eureka, California 95501

(Address of Owner)

hereinafter called Owner, in the penal sum of

Four Hundred Seventy Five Thousand and No/100--- (\$ 475,000.00) in lawful
money of the United States, for the payment of which sum well and truly to be made, we bind
ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a
certain contract with the Owner, dated 16th DAY OF August, 2018, a copy of
which is hereto attached and made a part hereof for the construction of:

Ruth Bunkhouse Remodel Project

NOW, THEREFORE, If the Principal shall well, truly and faithfully perform its duties, all the
undertaking, covenants, terms, conditions, and agreements of said contract during the original
term thereof, and any extensions thereof which may be granted by the Owner, with or without
notice to the Surety and during one year (minimum) guaranty period, and if he shall satisfy all
claims and demands incurred under such contract, and shall fully indemnify and save harmless
the Owner from all costs and damages which it may suffer by reason of failure to do so, and shall
reimburse and repay the Owner all outlay and expense which the Owner may incur in making
good any default, then this obligation shall be void; otherwise to remain in full force and effect.
PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees

Humboldt Bay Municipal Water District

Ruth Bunkhouse Remodel Project

that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder of the Specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the Specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in 4 counterparts, each one of which shall be deemed an original, this 16th day of August, 2018.

ATTEST:

TRUE NORTH CONSTRUCTORS, INC.
Principal

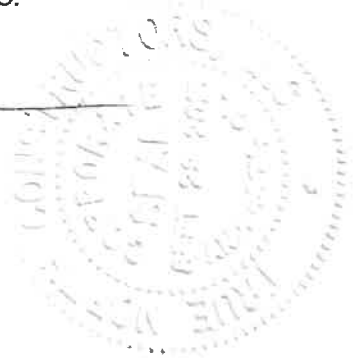
(Principal) Secretary

(SEAL)

By [Signature]

5812 Green Acres Drive

(Address)
Anderson, CA 96007



Witness as to Principal

(Address)

DEVELOPERS SURETY AND INDEMNITY COMPANY
Surety

ATTEST:

SEE NOTARY ACKNOWLEDGEMENT

Witness as to Surety

By [Signature]

Attorney-in-Fact
17771 Cowan, #100

(Address)
Irvine, CA 92614



(Address)

NOTE: Date of Bond must not be prior to date of Contract. If Contractor is Partnership, all partners should execute Bond.

IMPORTANT: Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

POWER OF ATTORNEY FOR
DEVELOPERS SURETY AND INDEMNITY COMPANY
INDEMNITY COMPANY OF CALIFORNIA
PO Box 19725, IRVINE, CA 92623 (949) 263-3300

KNOW ALL BY THESE PRESENTS that except as expressly limited, DEVELOPERS SURETY AND INDEMNITY COMPANY and INDEMNITY COMPANY OF CALIFORNIA, do each hereby make, constitute and appoint:

Jody A. Johnson, Joseph Quillon Gibson, jointly or severally

as their true and lawful Attorney(s)-in-Fact, to make, execute, deliver and acknowledge, for and on behalf of said corporations, as sureties, bonds, undertakings and contracts of suretyship giving and granting unto said Attorney(s)-in-Fact full power and authority to do and to perform every act necessary, requisite or proper to be done in connection therewith as each of said corporations could do, but reserving to each of said corporations full power of substitution and revocation, and all of the acts of said Attorney(s)-in-Fact, pursuant to these presents, are hereby ratified and confirmed.

This Power of Attorney is granted and is signed by facsimile under and by authority of the following resolutions adopted by the respective Boards of Directors of DEVELOPERS SURETY AND INDEMNITY COMPANY and INDEMNITY COMPANY OF CALIFORNIA, effective as of January 1st, 2008.

RESOLVED, that a combination of any two of the Chairman of the Board, the President, Executive Vice-President, Senior Vice-President or any Vice President of the corporations be, and that each of them hereby is, authorized to execute this Power of Attorney, qualifying the attorney(s) named in the Power of Attorney to execute, on behalf of the corporations, bonds, undertakings and contracts of suretyship; and that the Secretary or any Assistant Secretary of either of the corporations be, and each of them hereby is, authorized to attest the execution of any such Power of Attorney;

RESOLVED, FURTHER, that the signatures of such officers may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures shall be valid and binding upon the corporations when so affixed and in the future with respect to any bond, undertaking or contract of suretyship to which it is attached.

IN WITNESS WHEREOF, DEVELOPERS SURETY AND INDEMNITY COMPANY and INDEMNITY COMPANY OF CALIFORNIA have severally caused these presents to be signed by their respective officers and attested by their respective Secretary or Assistant Secretary this 6th day of February, 2017.

By: Daniel Young
Daniel Young, Senior Vice-President

By: Mark Lansdon
Mark Lansdon, Vice-President



A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Orange

On February 6, 2017 before me, Lucille Raymond, Notary Public
Date Here Insert Name and Title of the Officer

personally appeared Daniel Young and Mark Lansdon
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



Place Notary Seal Above

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

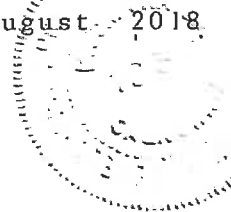
WITNESS my hand and official seal.
Signature Lucille Raymond
Lucille Raymond, Notary Public

CERTIFICATE

The undersigned, as Secretary or Assistant Secretary of DEVELOPERS SURETY AND INDEMNITY COMPANY or INDEMNITY COMPANY OF CALIFORNIA, does hereby certify that the foregoing Power of Attorney remains in full force and has not been revoked and, furthermore, that the provisions of the resolutions of the respective Boards of Directors of said corporations set forth in the Power of Attorney are in force as of the date of this Certificate.

This Certificate is executed in the City of Irvine, California, this 16th day of August, 2018.

By: Cassie J. Bemisford
Cassie J. Bemisford, Assistant Secretary



Humboldt Bay Municipal Water District
Ruth Bunkhouse Remodel Project

Bond #706521P
Premium: Included in FP Bond

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

TRUE NORTH CONSTRUCTORS, INC.

(Name of Contractor)

5812 Green Acres Dr., Anderson, CA 96007

(Address of Contractor)

a California Corporation, hereinafter called Principal, and
(Corporation, Partnership, or Individual)

DEVELOPERS SURETY AND INDEMNITY COMPANY

(Name of Surety)

17771 Cowan #100, Irvine, CA 92614

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

Humboldt Bay Municipal Water District

828 Seventh Street, Eureka, California 95501

(Address of Owner)

hereinafter called Owner, in the penal sum of

Four Hundred Seventy Five Thousand and No/100--- (\$475,000.00), in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the Owner, dated 16th DAY OF August, 2018, a copy hereto attached and made a part hereof for the construction of:

Ruth Bunkhouse Remodel Project

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such work, and all insurance premiums of said work, and for all wages and fringe benefits of labor, performed in such work, whether by subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

Humboldt Bay Municipal Water District
Ruth Bunkhouse Remodel Project

PROVIDED, FURTHER, that the said Surety for value received hereby stipulated and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in 4 counterparts, each one of which shall be deemed an original, this 16th day of August, 2018.

ATTEST:

TRUE NORTH CONSTRUCTORS, INC.

Principal

(Principal) Secretary

By [Signature]

5812 Green Acres Dr.

Address

Anderson, CA 96007

Witness as to Principal

Address

DEVELOPERS SURETY AND INDEMNITY COMPANY

Surety

ATTEST:

By [Signature]

Attorney-in-Fact Jody A. Johnson

17771 Cowan #100

Address

Witness as to Surety

Address

Irvine, CA 92614

NOTE: Date of bond must not be prior to date of Contract. If Contractor is Partnership, all partners should execute bond.

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

POWER OF ATTORNEY FOR
DEVELOPERS SURETY AND INDEMNITY COMPANY
INDEMNITY COMPANY OF CALIFORNIA
PO Box 19725, IRVINE, CA 92623 (949) 263-3300

KNOW ALL BY THESE PRESENTS that except as expressly limited, DEVELOPERS SURETY AND INDEMNITY COMPANY and INDEMNITY COMPANY OF CALIFORNIA, do each hereby make, constitute and appoint:

Jody A. Johnson, Joseph Quillon Gibson, jointly or severally

as their true and lawful Attorney(s)-in-Fact, to make, execute, deliver and acknowledge, for and on behalf of said corporations, as sureties, bonds, undertakings and contracts of suretyship giving and granting unto said Attorney(s)-in-Fact full power and authority to do and to perform every act necessary, requisite or proper to be done in connection therewith as each of said corporations could do, but reserving to each of said corporations full power of substitution and revocation, and all of the acts of said Attorney(s)-in-Fact, pursuant to these presents, are hereby ratified and confirmed.

This Power of Attorney is granted and is signed by facsimile under and by authority of the following resolutions adopted by the respective Boards of Directors of DEVELOPERS SURETY AND INDEMNITY COMPANY and INDEMNITY COMPANY OF CALIFORNIA, effective as of January 1st, 2008.

RESOLVED, that a combination of any two of the Chairman of the Board, the President, Executive Vice-President, Senior Vice-President or any Vice President of the corporations be, and that each of them hereby is, authorized to execute this Power of Attorney, qualifying the attorney(s) named in the Power of Attorney to execute, on behalf of the corporations, bonds, undertakings and contracts of suretyship; and that the Secretary or any Assistant Secretary of either of the corporations be, and each of them hereby is, authorized to attest the execution of any such Power of Attorney;

RESOLVED, FURTHER, that the signatures of such officers may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures shall be valid and binding upon the corporations when so affixed and in the future with respect to any bond, undertaking or contract of suretyship to which it is attached.

IN WITNESS WHEREOF, DEVELOPERS SURETY AND INDEMNITY COMPANY and INDEMNITY COMPANY OF CALIFORNIA have severally caused these presents to be signed by their respective officers and attested by their respective Secretary or Assistant Secretary this 6th day of February, 2017.

By: Daniel Young
Daniel Young, Senior Vice-President

By: Mark Lansdon
Mark Lansdon, Vice-President



A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Orange

On February 6, 2017 before me, Lucille Raymond, Notary Public
Date Here Insert Name and Title of the Officer

personally appeared Daniel Young and Mark Lansdon
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Lucille Raymond
Lucille Raymond, Notary Public



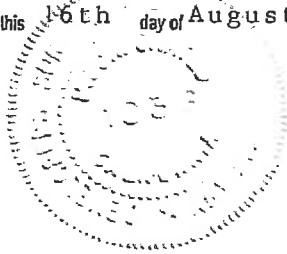
Place Notary Seal Above

CERTIFICATE

The undersigned, as Secretary or Assistant Secretary of DEVELOPERS SURETY AND INDEMNITY COMPANY or INDEMNITY COMPANY OF CALIFORNIA, does hereby certify that the foregoing Power of Attorney remains in full force and has not been revoked and, furthermore, that the provisions of the resolutions of the respective Boards of Directors of said corporations set forth in the Power of Attorney are in force as of the date of this Certificate.

This Certificate is executed in the City of Irvine, California, this 6th day of August, 2018.

By: Cassie J. Bernisford
Cassie J. Bernisford, Assistant Secretary



MANAGEMENT



August 2018

August will be a busy month in Sacramento. When the Legislature reconvenes on August 6, legislators will immediately prepare for fiscal committee hearings that will be held through August 17. Floor session will begin on August 20 and bills must pass both houses by August 31 if they are to move to the Governor's desk to be signed or vetoed. CSDA will carefully monitor and act on all state legislation that affects special districts.

Read on for the latest details on legislation impacting special districts and visit csda.net/take-action to learn more.



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➤ GOVERNANCE AND ACCOUNTABILITY

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

JPA Legislation Amended to Remove Local Government Opposition

Assembly Member Freddie Rodriguez has amended Assembly Bill 1912 to remove local government opposition, including that of CSDA, the League of California Cities, and the California State Association of Counties. While AB 1912 still places new liabilities on JPA member agencies that had not existed before, the new requirements in AB 1912 are significantly more manageable than the original version and help protect employees from losing their pension if a JPA were to fail.

Following the failure of the East San Gabriel Valley Human Services Consortium Joint Powers Authority that had \$19.4 million in unfunded pension liabilities, nearly 200 employees and retirees had their pensions reduced by roughly 60 percent. In response, Assembly Member Rodriguez, Chair of the Assembly Public Employees, Retirement, and Social Security Committee, introduced Assembly Bill 1912.

As originally drafted, AB 1912 would have assigned prospective and retroactive joint and several liability to Joint Powers Authority (JPA) member agencies with regards to a JPA's pension liabilities. This significant change in law would have resulted in substantial financial reporting issues and may have resulted in the downgrading of credit ratings of JPA member agencies, impacting bond ratings, and potentially even violating constitutional debt limits.

However, as amended on July 3, the bill now requires apportioned liability of pension obligations be assigned to JPA member agencies, and only prior to a JPA dissolving, ceasing operations, or terminating its contract with the retirement system. The result is that most member agencies will never have to report the pension liabilities of their JPAs, as long as the JPAs continue to operate. Additionally, the apportionment of the liabilities would be determined first by the member agencies. If they cannot agree on the apportionment, then CalPERS would determine the apportionment. If the member agencies don't agree with CalPERS' determination, then the apportionment would go to binding arbitration.

Prospectively, AB 1912 will require an agreement with regard to the apportionment of liability upon entering into a contract with a pension system. However, CalPERS is already requiring joint and several liability on new JPA contracts, with or without this bill.

Should you have any questions about AB 1912 or CSDA's position on the bill, please contact CSDA Senior Legislative Representative Dillon Gibbons at dillong@csda.net.



➤ INFRASTRUCTURE, INNOVATION, AND INVESTMENT

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

Bill Mandates Additional CEQA Notices and Public Outreach for Projects in Disadvantaged Communities

AB 2447 (Reyes) is set to be heard the first week of August in the Senate Appropriations Committee. The bill requires additional public outreach before concluding a CEQA review in a disadvantaged community. CSDA is opposed to the bill.

AB 2447 requires a lead agency that is preparing an EIR or a negative declaration under CEQA for a project with an industrial or similar land use to mail notices to disadvantaged communities within one half mile of the project and hold a public scoping meeting.

CEQA already has robust notification requirements. A lead agency must provide public notice prior to certification of the environmental impact report or adoption of a negative declaration within a reasonable period in the following manners:

- Posting notice on and off site of where the project is to be conducted;
- Publicizing the notice in a newspaper of general circulation;
- Providing the notice to any individuals and organizations that have requested it;
- Directly mailing the notice to the owners and occupants of contiguous property.

AB 2447 would additionally require the lead agency to:

- Mail the notice to the owners and occupants of property within one-half mile of a project (identified in OEHN's list).
- Provide the notice in any languages spoken by 3,000 individuals or five percent of the community's population.
- Call a scoping meeting to describe and take comments on the project. The scoping meeting would have to be recorded and held within one mile of the project site, or if no meeting space is available, within one half mile of a transit stop.

These new requirements will substantially increase the cost for a lead agency performing a CEQA review to pay for additional postage, staff time, translation services, and recording costs.

CEQA currently requires a scoping meeting only on projects of statewide, regional or area-wide significance or projects that affect highways or other facilities from the Department of Transportation. Current law gives flexibility to lead agencies on what defines a project as 'significant'. AB 2447 would not only require a scoping meeting be held for many additional projects, but the meetings would have to be held in the community, potentially adding significant costs to securing a meeting space. Special districts conducting projects in rural and suburban areas would face a significant challenge locating a meeting space within a half mile of public transit.

If you have any questions, or comments on how AB 2447 would affect your district, please contact CSDA's Legislative Representative Rylan Gervase at rylang@csda.net.



➤ REVENUE, FINANCES, AND TAXATION

CSDA's long range policy priority on revenue, finances, and taxation is to ensure adequate funding for special districts' safe and reliable core local service delivery. Protect special districts' resources from the shift or diversion of revenues without the consent of the affected districts. Promote the financial independence of special districts and afford them access to revenue opportunities equal to that of other types of local agencies.

CSDA Positions on 2018 Ballot Measures

This year, CSDA tracked several measures and adopted positions on four of them. Of the four for which CSDA has a position, one was approved by the voters on the June ballot, one was withdrawn by its sponsor, and two will go before voters in November. Let's review the two propositions that will appear on the November 6, 2018 ballot.

Proposition 5: Base Value Property Tax Portability

Proposition 5 or the "People's Initiative to Protect Proposition 13 Savings," is of particular interest to special districts that receive a share of ad valorem property tax revenue. It will generally allow those who are over 55 years old or severely disabled to transfer their property tax base to a replacement residence, with some adjustments depending on the value of the purchase, without regard for value, location, or frequency.

It provides formulas for those cases where the replacement dwelling purchase price is below or above the sale value of the original dwelling, as well as those dwellings destroyed in a disaster.

Under Proposition 13, ad valorem property taxes are generally capped at one percent, and the property's taxable value increases by no more than two percent per year. Generally, if the property is sold and changes hands, it is then reassessed at full market value.

According to the Legislative Analyst's Office, this measure would reduce property tax revenues for special districts and other local governments by \$1 billion annually over the long-term. It would also cost schools an additional \$1 billion annually over the long-term. CSDA has adopted an oppose position on this measure.

For questions about Proposition 3, please contact CSDA Legislative Representative Anthony Tannehill at anthonyt@csla.net.

Proposition 3: Water Quality Bond

Proposition 3, "The Water Supply and Water Quality Act of 2018," would authorize \$8.777 billion in general obligation bonds for state and local projects in categories like safe drinking water, Sustainable Groundwater Management (SGMA) implementation, watershed restoration, fish and wildlife habitat conservation, and infrastructure repair.

Proposition 3 is a citizen's initiative water bond that will appear on the November 2018 ballot. There is only an 18% overlap in funding categories with Proposition 68, which was passed on the June 2018 ballot.

California's recent catastrophic drought and subsequent flooding shows the need for increased funding for water infrastructure and flood protection projects. Proposition 3 will provide millions to local agencies for water infrastructure and environmental protection. Of interest to special districts is the money for clean water projects, watershed protection, and groundwater management. This funding will help special districts improve the quality of services provided to the public and meet state mandates. CSDA is supporting the measure.

For questions about Proposition 3, please contact CSDA Legislative Representative Rylan Gervase at rylang@csla.net.



➤ HUMAN RESOURCES AND PERSONNEL

CSDA's long range policy priority on human resources and personnel is to promote policies related to hiring, management, and benefits and retirement that afford flexibility, contain costs, and enhance the ability to recruit and retain highly qualified, career-minded employees to public service. As public agency employers, support policies that foster productive relationships between management and employees, both represented and non-represented.

CSDA Supports Sexual Harassment Prevention Training Legislation

In response to much publicized sexual harassment allegations throughout almost every sector of business throughout the nation, the California State Legislature introduced more than a dozen bills to address the issue of sexual harassment in the workplace. While some of the bills address liability issues and look to increase penalties on harassment, CSDA has taken a support position on Senate Bill 1343 (Mitchell), which aims to prevent sexual harassment before it begins through mandatory employee training.

Specifically, SB 1343 will require, beginning January 1, 2020, that all employers with five or more employees provide sexual harassment prevention training to all of their employees within six months of their hire and at least once every two years going forward. Additionally, for temporary or seasonal employees, employers will need to provide sexual harassment prevention training within the first two-weeks of the employees hire date. The training for employees in supervisory roles will need to be at least two-hours long, while the training for non-supervisory employees must be at least one-hour long. To assist employers with compliance, the bill requires the Department of Fair Employment and Housing to develop online training courses and make them available on their website free of charge.

SB 1413 is currently in the Assembly Appropriations Committee and to this point has received unanimous bipartisan support throughout the legislative process. Should you have any questions about the requirements of SB 1413, or CSDA's position on the bill, please contact CSDA Senior Legislative Representative Dillon Gibbons at dillong@csda.net.

➤ DISTRICTS MAKE THE DIFFERENCE

Districts Make the Difference was created to increase public awareness and understanding of special districts across California. The campaign website, www.districtsmakethedifference.org provides a public place to learn more about special districts and the positive effect they have on their communities, while also serving as a resource for districts to download useful materials, collateral, and information.

Promote the Student Video Contest!

It's time to start promoting the Districts Make the Difference 2018 Student Video Contest! The contest **submission period begins on August 27**. Summer is the perfect time for high school and college students to create a 60-second video highlighting how special districts truly make the difference in communities throughout California.

Students have the opportunity to win a scholarship for their video. The first place winner will be awarded \$2,000 with \$1,000 awarded to the second place winner and \$500 awarded to the third place winner. Also, if a student is from the area of a participating chapter, their video will be automatically entered in the local chapter division of the contest.

Students can start working on their videos prior to the submission period which will run **August 27 to September 30**. Interesting and creative videos take some time to create so encourage students to start working on their videos now. After the submission period closes, CSDA officials will select the top five finalists and feature those videos on the Districts Make the Difference website. The public will then vote for their favorite video throughout the month of November.

Do you know a student who may be interested? Do you know a teacher, principal, superintendent, or school board member that can help promote the contest? Spread the word!



There are promotional materials including a flyer, social media graphics, and sample website content available at www.DistrictsMakeTheDifference.org/video-contest.org to help you promote the contest.

The contest rules, [application](#), and the [2017 winning videos](#) are also available at the Districts Make the Difference website.

Promote the contest today and your district may have a starring role in one of the winning student videos!



www.DistrictsMakeTheDifference.org

Learn more about our public outreach campaign at www.DistrictsMakeTheDifference.org and engage with us on social media:

- Like us on Facebook.com/CASpecialDistricts
- Follow us on Twitter @CA_Districts
- Use the hashtag #DistrictsMakeTheDifference when posting your stories on social media.
- Download the logo to your homepage and link to www.DistrictsMakeTheDifference.org

If you have any questions about the video contest or how to better utilize CSDA's public outreach campaign, please contact CSDA's Public Affairs Team at pr@csda.net.

➤ OTHER WAYS TO TAKE ACTION

Have an Idea for Creating a New Law, or Removing an Old Law?

Is your district facing an issue that could potentially be resolved through statewide legislation? Do you have an idea to create, improve, or eliminate a law affecting special districts throughout the state? CSDA is inviting our members to submit ideas for legislation that could potentially be selected as a CSDA sponsored bill for the 2019 legislative session. Share your legislative proposal by completing and submitting the 2019 Legislative Proposal Submission Form at www.csdaforms.wufoo.com/forms/2019-legislative-proposal-submission-form/, along with any supporting materials, to CSDA Legislative Analyst – Attorney Mustafa Hessabi at mustafah@csda.net. You can also fax your submission to (916) 520-2466.

Legislative proposals should focus on furthering the interest of all types of special districts, regardless of geographic region or type(s) of service provided. All submissions are reviewed by CSDA staff and assessed for political implications, potential consequences, cost of implementation and more. Selected proposals will then be presented to the CSDA Legislative Committee for final approval.

This year, CSDA's sponsored bill is SB 929 (McGuire), which would require every independent special district, beginning January 1, 2020, to maintain an Internet web site, with exceptions for districts when a hardship exists. This legislation has passed out of the Senate and is currently awaiting a vote on the Assembly floor.

The deadline to submit a proposal is **September 28, 2018**. For any questions, please contact Mustafa Hessabi at mustafah@csda.net.



Learn

The 2018 CSDA Annual Conference and Exhibitor Showcase [website](#) is now live, and registration is open! Additionally, directly download the [brochure](#) for detailed information on the conference. The conference will take place Sept. 24 – 27, 2018 at the Renaissance Indian Wells Resort and Spa. [Register here!](#)

Engage

For a limited time, CSDA is giving 20% off the first year of dues to new members. Ask for the special application and join before August 31. Contact member services specialist, Anna Palmer, at 877.924.2732 or annap@csla.net for a summary of benefits and a dues schedule.

Give Feedback

Join an Expert Feedback Teams to provide CSDA staff with invaluable insights on policy issues. Email marcusd@csla.net to inquire about joining one of the following teams:

- Budget, Finance and Taxation
- Environment
- Formation and Reorganization
- Human Resources and Personnel
- Governance
- Public Works and Contracting

Stay Informed

In addition to the many ways you can **TAKE ACTION** with CSDA's advocacy efforts, CSDA offers a variety of tools to keep you up-to-date and assist you in your district's legislative and public outreach. Make sure you're reading these resources:

- CSDA's weekly e-Newsletter
- Districts in the News
- CSDA's CA Special District Magazine

Email advocacy@csla.net for help accessing these additional member resources.



Humboldt Bay Municipal Water District Office
 828 7th Street
 Eureka, CA, 95501
Customer Report

Utility & Rate:	PG&E, A1	Program:	Energy Watch 2016-2018
Business Type:	Office - Small (OFS)	Audit Type:	Assessment Phase 1
Survey Date:	July 23, 2018	Audit #:	5401
Report Date:	July 31, 2018		

Presented To: John Friedenbach	T: 707-443-5018	M:	Email: friedenbach@hbmwd.com
Title: Business Manager	Address: Humboldt Bay Municipal Water District Office, 828 7th Street, Eureka, CA 95501		

Site Contact: John Friedenbach	T: 707-443-5018	M:	Email: friedenbach@hbmwd.com
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Project Summary - Assessment Phase 1

Total Installed Cost:	\$816.51
Instant Rebate:	- <u>\$709.24</u>
Your Final Cost:	\$107.27

Estimated Savings: \$715.56 per year

Simple Payback:	0.1 years
Return On Investment:	667%
Rebate % of Total Cost:	87%
Estimated Monthly Savings:	\$59.63
Estimated Energy Savings:	3,949 kWh/yr
Power Reduction:	1.683 kW
CO₂ Emissions Reduction:	2,123 lbs/yr

(Calculations based on average cost of \$0.24 per kWh and 18COM_IHDI_HTR rebate.)

The instant rebate is based on proposed energy savings. If the actual installation and/or energy savings vary from as specified here within, or should PG&E determine a separate allowable rebate amount, RCEW reserves the right to recalculate the rebate post completion.

<p>Program Mgr: Ben Mattio Redwood Coast Energy Authority 633 3rd Street Eureka, CA 95501 Tel (707) 269-1700 Fax (707) 269-1777 bmattio@redwoodenergy.org</p>	<p>Project Mgr: Derek Hilson Redwood Coast Energy Authority 633 3rd Street Eureka, CA 95501 Tel 707.269.1700 Fax 707.269.1777 dhilson@redwoodenergy.org</p>
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The Redwood Coast Energy Watch is funded by California utility ratepayers under the auspices of the California Public Utilities Commission.

Feasibility Study of Roof Mounted Solar Photovoltaic Options for the Humboldt Bay Municipal Water District Offices

August 2018

Executive Summary

The Humboldt Bay Municipal Water District (HBMWD) applied to participate in Redwood Coast Energy Authority's (RCEA's) Public Agency Solar Program (PASP) in April of 2018. RCEA has worked with HBMWD staff since then to develop a plan for energy efficiency upgrades and a solar PV installation at their administrative offices at 828 7th Street.

RCEA recommends that HBMWD move to implement the proposed project solution which would include:

- The addition of an electric vehicle (EV) charging station for public use, additional energy use would be offset by lighting efficiency.
- An LED lighting efficiency upgrade office-wide reducing annual electric consumption by 18%.
- A 14.7 kW DC roof top solar PV array that would offset 90% of the 7th Street office loads and 97% of the electricity bills.

RCEA finds that the proposed PV project would meet the requirements of the California Energy Commission (CEC) 1% interest loan for feasible energy efficiency and renewable energy projects. RCEA recommends that HBMWD apply for the CEC 1% loan for project funding

The analysis throughout this report includes the estimated energy use and cost increases from the addition of an EV charging station and the energy use and cost savings from an LED lighting upgrade. RCEA's analysis shows that implementation of these projects would deliver significant financial benefits to HBMWD while decreasing their overall electric load and providing greenhouse gas (GHG) reduction benefits. Table 1 below shows a summary of the potential benefits.

Table 1 Summary of RCEA's proposed solution for HBMWD's energy efficiency and renewable energy projects.

Lighting Efficiency and PV System Summary	
Reduced Annual Electricity Consumption (kWh)	1,267
PV System Size (kW DC)	14.72
Annual Energy Production (kWh)	19,246
Estimated System Cost (\$)	\$44,454
First Year Bill Savings (\$)	\$4,644
Estimated Energy Offset from PV (%)	90%
Estimated Bill Offset from PV (%)	97%
Simple System Payback (Years)	10.1
Discounted System Payback at 5% Discount Rate (Years)	12.9
NPV of Savings at 25 Years (\$)	\$46,652
Savings to Investment Ratio	1.05
Discounted ROI at 5% Discount Rate (%)	5%
Lifetime Avoided CO ₂ emissions (Metric Tons)	29

Introduction

RCEA began working with HBMWD as part of RCEA’s Public Agency Solar Program in May of 2018. After an initial kick-off meeting with HBMWD staff, RCEA began its analysis of the energy consumption, efficiency opportunities, and solar photovoltaic installation opportunities at HBMWD’s offices at 828 7th Street in Eureka. This report will focus on RCEA’s electric load analysis, lighting efficiency opportunities, the addition of an electric vehicle charging station, the results of the solar site assessment, analysis of project options, and financial analysis

During the initial kick-off meeting, HBMWD requested that RCEA analyze four potential project scenarios:

- Estimate the savings available from lighting efficiency upgrades only.
- Estimate the electric load after lighting efficiency upgrades with the addition of an electric vehicle charging station at the Eureka office.
- Size a new solar array to offset remaining loads plus the additional load from the charging equipment.
- Develop a solar array size that maximizes the energy production on HBMWD’s office roof space within PG&E’s allowable parameters (110% of existing load).

Electric Load Analysis

RCEA performed an electric load analysis of HBMWD’s administrative office using utility data from the previous 12 months of electric consumption covering the period from June 2017 to May 2018. HBMWD receives electric service from PG&E and is enrolled in RCEA’s Community Choice Aggregation program. The administrative offices are on an A-1 time-of-use electric rate schedule for Small General Service. Table 2 below shows PG&E’s and RCEA’s A-1 rates and time-of-use periods used throughout this analysis.

Table 2 Electric rates and time-of-use periods for PG&E’s and RCEA’s A-1 electric schedule.

A-1 Electric Rates					
Season	PG&E Delivery Rate	RCEA Generation Rate	Months	Days	Time
Summer Peak	\$0.12816	\$0.13564	May-Oct	Mon-Fri	12pm-6pm
Summer Part-Peak	\$0.12816	\$0.11270	May-Oct	Mon-Fri	8:30am-12:00pm AND 6:00pm-9:30pm
Summer Off-Peak	\$0.12816	\$0.08617	May-Oct	Mon-Fri Sat- Sun	9:30pm-8:30am All Day
Winter Part-Peak	\$0.11022	\$0.11252	Nov-Apr	Mon-Fri	8:30am-9:30pm
Winter Off-Peak	\$0.11022	\$0.09223	Nov-Apr	Mon-Fri Sat- Sun	9:30pm-8:30am All Day

HBMWD’s administrative office is a small to medium sized office space approximately 3,500 square feet in area. The office’s main electric loads are interior lighting, air conditioning, and plug loads associated with office equipment. Exterior lighting, exhaust fans and small kitchen appliances make up the bulk of the remaining electric load. Table 3 below shows a summary of the electric consumption at HBMWD’s 7th Street offices.

Table 3 Annual electricity use summary for HBMWD administrative offices

HBMWD Annual Energy Summary	
Annual Electric Consumption (kWh)	21,488
Annual Electricity Costs (\$)	\$ 4,931
Average Electricity Rate (\$/kWh)	\$ 0.23

Consumption at this site varies between 1,400 and 2,400 kWh/month with a bill range between \$350 and \$560/month. Figure 1 below shows monthly electric consumption and bill amounts for HBMWD's offices over the last year.

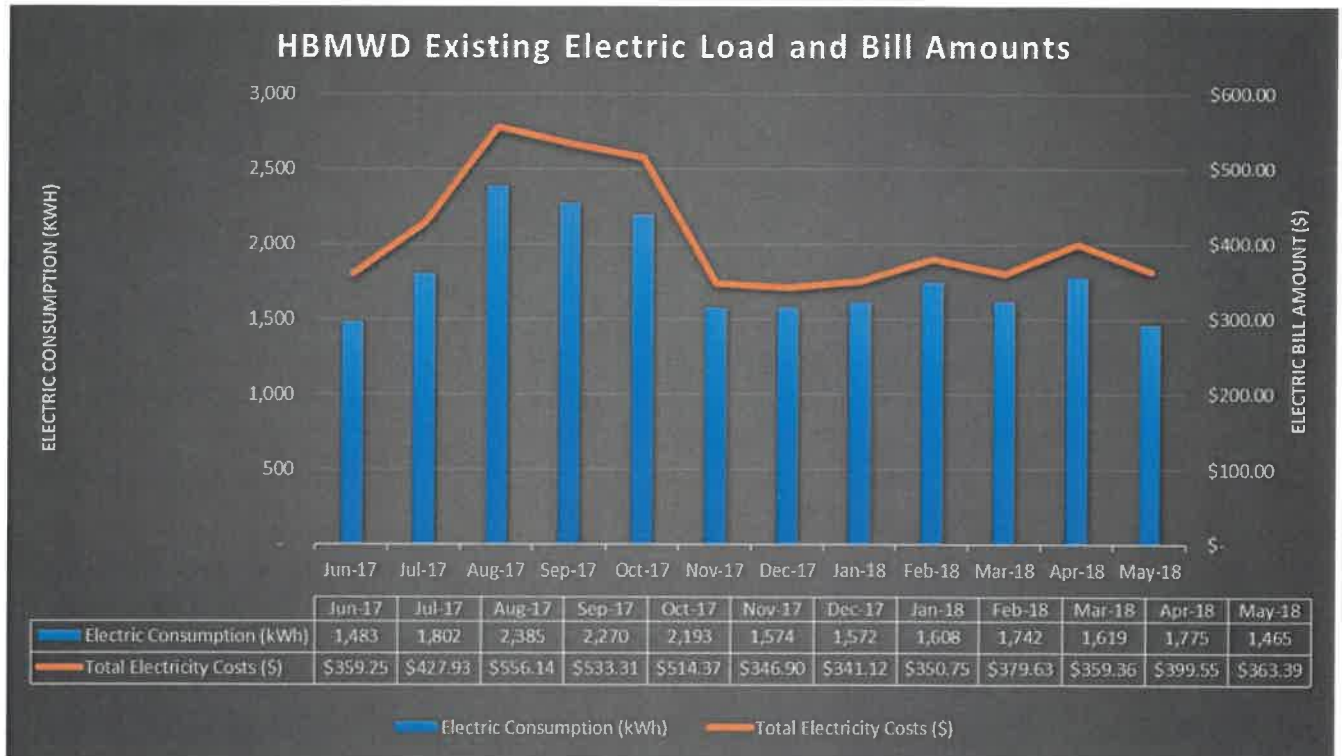


Figure 1 Recent monthly electric consumption and bill amounts for HBMWD's 7th Street offices.

Efficiency Opportunities: LED Lighting Upgrade

HBMWD has significant opportunities for energy and financial savings by enacting an LED lighting efficiency upgrade. The existing interior T-8 fluorescent lighting should be upgraded to LED lighting. RCEA performed a lighting efficiency analysis at the 7th Street offices on July 23, 2018. An LED lighting upgrade could save HBMWD approximately 18% of their annual electric bill. Table 4 below shows a summary of the available savings from an LED lighting upgrade.

Table 4 RCEA's estimate of savings available from LED lighting upgrade.

Summary of Savings from Lighting Upgrade	
Annual Energy Savings (kWh)	3949
Annual Energy Offset (%)	18%
Annual Bill Savings (\$)	\$716
Monthly Bill Savings (\$)	\$60

The exterior lighting has been upgraded to high efficiency LED lighting, RCEA does not see opportunities for savings in this area. Future efficiency projects could include upgrading the existing 80% efficient HVAC unit with a higher efficiency unit.

Electric Vehicle Charging

RCEA has estimated the electrical impact of adding an electric vehicle (EV) charging station at HBMWD’s offices. RCEA used data from a charging station installed at the North Coast Unified Air Quality Management District (NCUAQMD) to estimate and model the impacts of adding similar equipment at HBMWD’s 7th Street offices. The EV charging station at NCUAQMD was chosen due to the similarities to HBMWD’s needs. NCUAQMD and HBMWD are both public agencies, they are located within a mile of each other in Eureka, and neither currently have staff that drive EVs so the charging will be primarily for public use. Table 5 below shows the additional loads and costs from adding EV charging.

Table 5 Estimated added electricity consumption and costs from adding EV charging at HBMWD's offices.

Summary of Added Load and Costs From EV Charging	
Annual Energy Consumption (kWh)	2493
Annual Energy Increase (%)	12%
Annual Bill Increase	\$588
Monthly Bill Increase	\$49

The added electrical load and cost from EV charging would be offset by the savings from the LED lighting upgrade, however, this does not account for the equipment and installation costs for the EV charging station. Installing the EV charging equipment will likely require upgrades to the existing electrical infrastructure. Table 6 below shows the estimated costs associated with installing a pole mounted, single head EV charging station at the 7th Street office.

Table 6 Estimated costs of installing an Electric Vehicle charging station.

Estimated EV Charging Equipment and Installation Costs	
Total Equipment Costs	\$2,924
Engineering/Permitting	\$3,000
Civil Drawings	\$1,000
Signage/Striping	\$650
Installation labor & materials (trenching, conduit, electrical, etc.)	\$5,000
Total Equipment and Installation Costs	\$12,574

The CEC 1% interest loan program is only for energy efficiency and or renewable energy projects that **decrease** electrical load at a site. Electric Vehicle charging equipment is not eligible for this funding source. The costs above are for information purposes only and are not included in future financial analysis, payback period estimation or loan analysis.

Solar Photovoltaic (PV) Site Analysis

RCEA performed a detailed solar site analysis at HBMWD’s 7th Street offices on July 23rd, 2018. The offices are housed in a single-story building with a flat roof and has an azimuth of 170°, or 10° east of due south. The flat roof is in good condition and the east end of the roof could accommodate a solar

array that would offset all the offices electric loads. The existing roof framing consists of 2" x 10" rafters spaced at 16 inches on center. A structural assessment of the roof should be performed by a licensed structural engineer. Installing a solar array on the flat roof will require sealing and flashing of roofing penetrations in a way that will maintain the roof warranty.

A shading analysis was performed using a Solar Pathfinder tool which showed that the parapet roof could cause significant late afternoon shading of the array. The useful installation area should be at least 24' to the east of the parapet roof. California Fire Marshal guidance for solar PV installations require 4' setbacks from roof eaves and ridges. After accounting for shading effects and Fire Marshal setbacks the available area for installation of a solar PV array would be approximately 1,000 square feet. Figure 2 below shows the available area for installation on the roof of HBMWD's 7th Street offices outlined in blue.

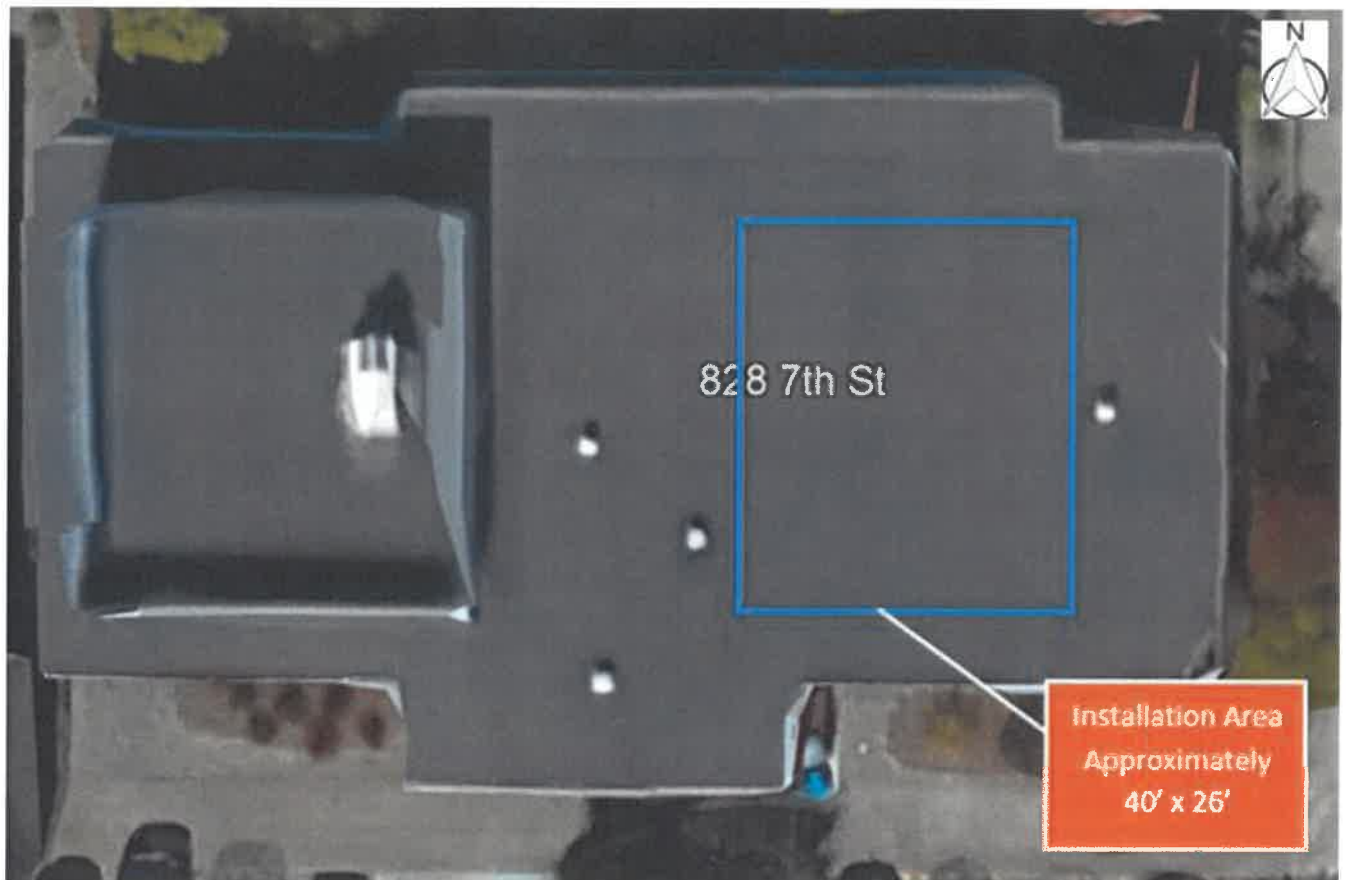


Figure 2 Available roof area for solar PV installation at HBMWD's Eureka offices.

Project Solution: 97% Bill Offset

RCEA used industry standard methods and calculations to size a PV array that would offset approximately 90% of HBMWD’s electric consumption and 97% of HBMWD’s office electric bills. Table 7 below shows the assumptions and inputs used in RCEA’s solar PV system sizing calculations.

Table 7 Inputs and assumptions used for solar PV array sizing.

PV System Sizing Inputs	
Array Orientation (Azimuth)	170°
Array Tilt	20°
Average Daily Insolation (kWh/m2/day)	4.43
Inverter Efficiency (%)	97%
De-rate Factor (Soiling, Wire Loss, Mismatch) (%)	10%
Average Operating Cell Temperature (°C)	40
Temperature Coefficient of Power (/°C)	0.0037
Module DC Rating (Watts)	320
Manufacturer Power Guarantee (%)	98%

The estimated annual consumption assumes the LED lighting upgrade will be made and an EV charging station will be added. Using the assumptions in the table above, RCEA calculated that 14.7 kW DC solar PV array would offset 97% of HBMWD’s electricity costs at the 7th Street offices. Figure 3 below shows the estimated electric usage and solar production under the above assumptions.

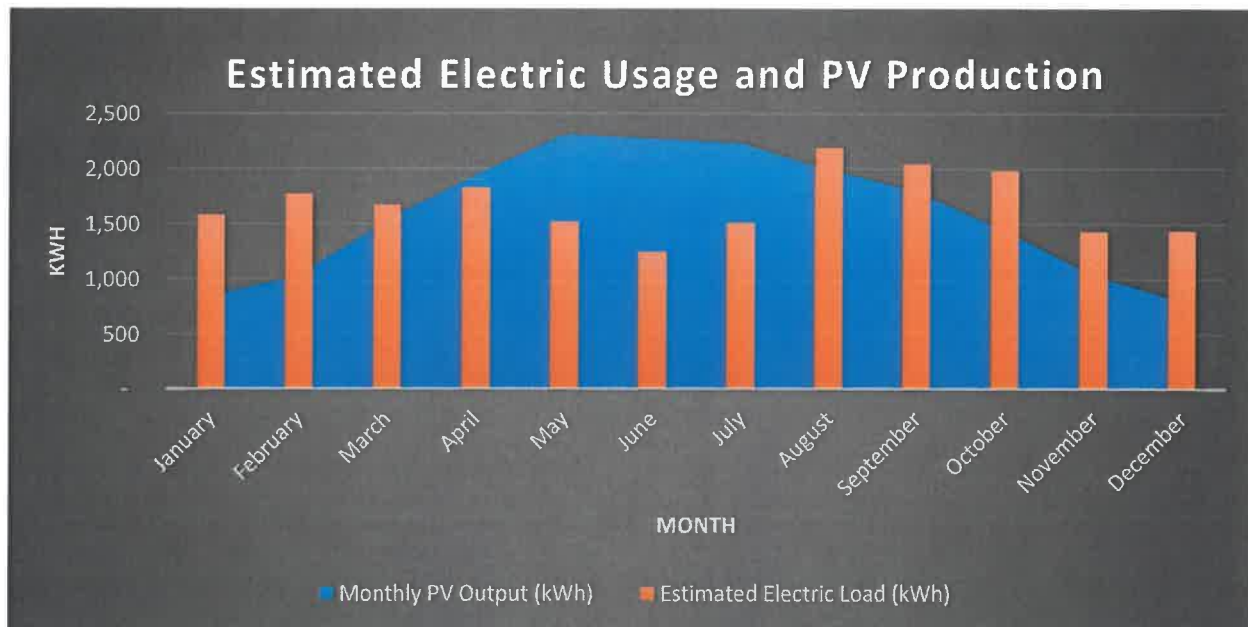


Figure 3 Estimated electric usage and solar PV production at HBMWD’s 7th Street offices with LED lighting upgrade, new EV charging and 14.7 kW DC solar array.

RCEA’s has recent history with solar PV installations for public schools in California’s Proposition 39 program. The average installed price of a PV system, including all labor, materials, engineering, permitting and design has been about \$3.02/DC watt. This would yield a system cost of approximately \$44,454. Table 8 below shows a break down of the estimated costs for the proposed PV system.

Table 8 Estimated costs for a 14.7 kW DC solar PV array.

PV System Cost Estimate	
PV Modules	\$ 11,114
Inverters	\$ 5,779
Electrical/Structural Balance of Systems	\$ 6,668
Labor	\$ 8,891
Engineering and Design	\$ 4,445
Permitting and Interconnection	\$ 1,334
Overhead and Profit	\$ 6,224
Total Cost	\$ 44,454

Table 9 below shows a summary of the proposed solar PV system including system size, annual production estimate, kilowatt hour offset, and bill offset.

Table 9 PV system summary for proposed array at HBMWD's 7th Street offices.

PV System Summary	
PV System Size (kW DC)	14.72
Annual Energy Production (kWh AC)	19,246
Annual kWh Offset (%)	90%
Annual Bill Offset (%)	97%

Any solar PV installation will operate under a Net Energy Metering (NEM) agreement. NEM allows the PV system owner to receive energy credits when the system produces more energy than the building consumes and is charged their normal rates when the PV system produces less energy than the building consumes. RCEA performs a monthly "true-up" of generation charges as part of their billing, so energy production credits and debits are reconciled each month. PG&E performs an annual "true-up" of transmission and distribution charges that reconciles energy credits and debits on yearly basis. In addition, PG&E charges a meter fee of \$.65/day, this charge cannot be offset with the PV energy. A typical annual billing cycle is shown in figure 4 below to demonstrate how credits and debits are accounted for under PG&E's and RCEA's Net Energy Metering (NEM) arrangements.

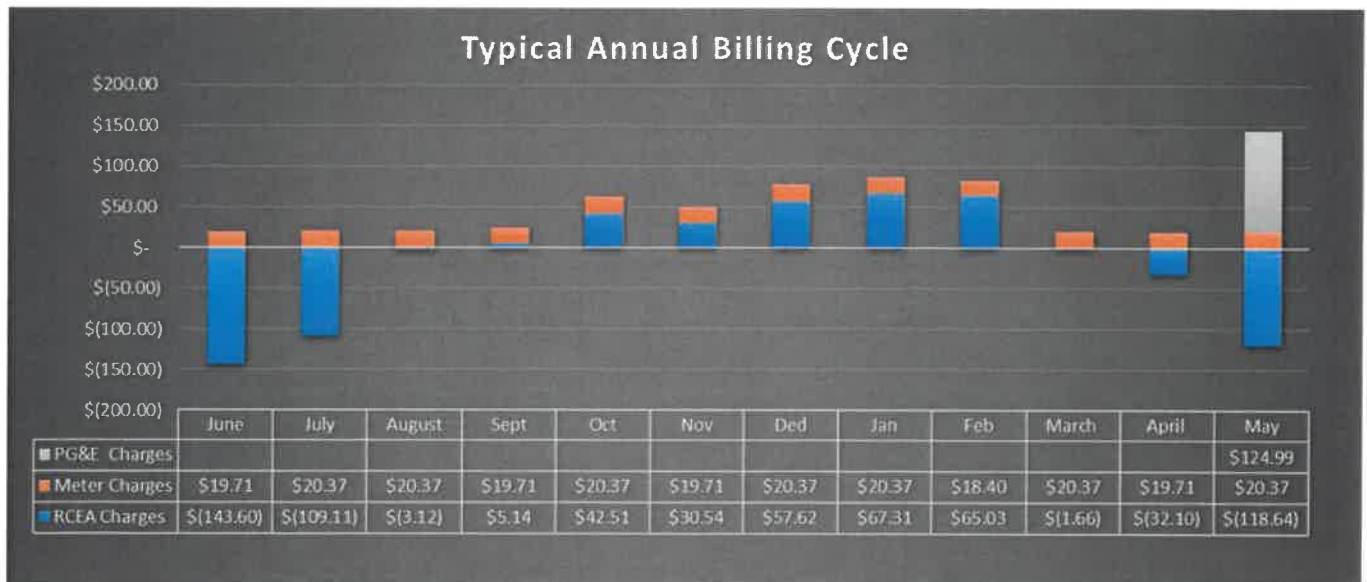


Figure 4 An example of a typical annual NEM billing cycle with energy credits and debits.

Project Alternative: Maximizing Energy Production

At HBMWD’s request, RCEA also analyzed the option of installing the largest possible solar PV array that could fit on the roof of their offices and would still meet PG&E’s interconnection requirements. The maximum system size allowed by PG&E’s interconnection rules is a system that would offset 110% of the documented electric consumption over the previous 12 months. RCEA estimates that a 17.2 kW DC PV array would be the maximum system size that would fit on the roof and meet PG&E requirements. Oversizing the system results in a lower rate of economic return because any kilowatt hours that are generated that exceed the site’s consumption would only earn monetary compensation at RCEA’s unbundled generation rates which are roughly 40% of the total bundled rate. The economic benefits of the over-sized system will be included in the financial analysis below.

Financial Analysis

RCEA performed a financial analysis for two project options. Option 1 includes LED lighting efficiency upgrades and a solar PV array sized to provide 97% annual bill offset. Option 2 includes the same LED lighting with an array that is sized to the maximum allowable limit based on roof size and PG&E interconnection requirements. Because the cost of installing an EV charging station would not be eligible for CEC 1% interest loans, these costs were not included in this analysis. Table 10 below shows the assumptions that were used in RCEA’s economic modeling.

Table 10 Assumptions made in RCEA's economic analysis of project options.

Financial Analysis Assumptions	
Inflation rate	2%
Discount rate	5%
Electricity escalation rate	3%
Added maintenance	0.3%
Annual PV production degradation rate	0.5%
Percentage of electricity cost not due to peak demand	85%
Cost to replace inverter at year 15	\$0.30/watt
System price	\$3.02/watt

Table 11 below shows the results of RCEA’s economic analysis. The two project options described above are compared side by side based on several key performance indicators.

Table 11 Comparison of solar PV project options for HBMWD's 7th Street offices.

Solar PV Project Scenarios		
Technology and Scenario	100% Bill Offset w/ LED Lighting and EV Charging	Maximum System Size-110% of Existing Consumption
PV System Size (kW DC)	14.72	17.28
Annual Energy Production (kWh)	19,246	22,593
Estimated System Cost (\$)	\$44,454	\$52,186
First Year Bill Savings (\$)	\$4,644	\$5,166
Simple System Payback (Years)	10.1	10.7
Discounted System Payback (Years)	12.9	15.7
NPV of Savings at 25 Years (\$)	\$46,652	\$50,087
Savings to Investment Ratio	1.05	0.96
Discounted ROI (%)	5%	-4%

Findings and Recommendations

Based on the analysis of the potential project options outlined above, RCEA recommends that HBMWD move forward with a roughly 14.7 kW DC solar PV installation that would provide a 97% bill offset. RCEA does not recommend oversizing the array to 110% kWh offset because of decreased financial payback metrics outlined above. RCEA's initial analysis finds that the proposed project would qualify for the CEC's 1% interest loan program for feasible energy efficiency and renewable energy projects.

A 14.7 kW DC array installed at HBMWD's 7th Street offices would provide the following benefits:

- Offset of 90% of the site's annual electricity consumption
- Offset of 97% of the site's annual electricity bill
- A simple payback period of 10.1 years
- A Net Present Value of savings of \$46,652
- A 5% return on investment
- Lifetime avoided CO₂ equivalent emissions of 29 metric tons (67,000 lbs.)

Next Steps

This project would qualify for a California Energy Commission (CEC) 1% interest loan for feasible energy efficiency and renewable energy projects. Projects with a simple payback period of less than 17 years are eligible for the 1% interest loan. If HBMWD's board resolves to move forward with the solar PV project, RCEA will be able to prepare the technical documents required of the CEC loan application. The next steps for HBMWD to pursue if this project is to move forward are:

- Secure Board approval
- Begin planning and basic design
- Prepare CEC1% loan application with RCEA assistance

Public Agency



Pilot Solar Program

Governing Board Resolution

Resolution No. _____

Resolution of _____
(Public Agency)

WHEREAS, the Redwood Coast Energy Authority's Public Agency Solar Program provides technical assistance; and

WHEREAS, _____
(Public Agency)

Authorizes _____ to apply for technical assistance;
(Public Agency)

and **WHEREAS** the _____ recognizes that the
(Public Agency)

Redwood Coast Energy Authority has limited funds available to provide technical assistance and that priority consideration will be given to those Public Agencies that have a desire and willingness to seek funding to implement feasible recommended energy-efficiency and renewable energy generation measure(s);

Now Therefore Be it Resolved, that _____
(Public Agency)

is willing to seek funding to implement viable energy-saving or renewable energy generation measure(s) and therefore requests technical and project assistance to identify such measures as may be economically feasible.

Be it Also Resolved, that _____
(Title of Public Agency Official)

is hereby authorized and empowered to execute in the name of _____
(Public Agency)

all necessary documents to implement and carry out the purposes of this resolution.

Passed, Approved, and Adopted this _____ day of _____, _____
(Month) (Year)

Signatures of Public Agency Governing Members

_____	_____
_____	_____
_____	_____
_____	_____

ACWA



ACWA 2018 Fall Conference & Exhibition

November 27 - 30, 2018 | Manchester Grand Hyatt San Diego

REGISTRATION, MEALS AND HOTEL PRICING SHEET



REGISTER ONLINE

Register online by **November 9, 2018** at www.acwa.com to take advantage of the advance pricing.



REGISTER ON SOMEONE'S BEHALF

Select from a list of people affiliated with your company in your account. If the registrant is not listed, you will need to create a Portal profile for the registrant before registering.

REGISTRATION OPTIONS <i>Advantage pricing applies to ACWA public agency members, associates & affiliates. Standard pricing applies to non-members of ACWA.</i>	ADVANCE DEADLINE: 11/9/18		ONSITE	
	ADVANTAGE	STANDARD	ADVANTAGE	STANDARD
Full Conference Registration & Meals Package	\$699	N/A	N/A	N/A
Full Conference Registration Only (meals sold separately)	\$555	\$830	\$575	\$850
One-Day Conference Registration (meals sold separately) Wednesday: Registration includes Welcome Reception on Tuesday evening -OR- Thursday: Registration includes ability to purchase a ticket for Friday breakfast	\$320	\$470	\$340	\$490
Guest Conference Registration (meals sold separately) Guest registration is not available to anyone with a professional reason to attend.	\$45	\$45	\$45	\$45
MEAL FUNCTIONS	ADVANCE		ONSITE	
Wednesday Opening Breakfast - November 28	\$45		\$50	
Wednesday Luncheon - November 28	\$50		\$55	
Thursday Networking Continental Breakfast - November 29	\$35		\$40	
Thursday Luncheon - November 29	\$50		\$55	
Thursday Dinner - November 29	\$65		\$70	
Friday Breakfast - November 30	\$45		\$50	

HOTEL INFORMATION

You must be registered for the ACWA conference in order to receive hotel reservation information and conference special room rate. **Conference special rate is available August 20 - November 5**, based on availability.

<p>HOTEL Manchester Grand Hyatt San Diego 1 Market Place, San Diego, CA 92101</p> <p>RATES FOR BOTH HOTELS Single/Double \$199 per night* * Subject to taxes & fees</p> <p>Deadline for group rate is November 5, 2018</p>	<p>IMPORTANT DATES For those registering for conference prior to August 20, hotel information will be provided via e-mail on August 20.</p> <p>For those registering for conference from August 20 to November 5, your confirmation e-mail will include hotel reservation information and an opportunity to receive a conference special hotel rate.</p>
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QUESTIONS?
Contact us at (888) 666-2292

Cancellation deadline: November 9, 2018 4:30 p.m. (PST)
Conference terms and conditions available at acwa.com in the event section.

RREDC/RCEA



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

SECTION 44a PAGE NO. 1

BOARD OF DIRECTORS SPECIAL MEETING AGENDA

Humboldt Bay Municipal Water District Office
828 7th Street, Eureka, CA 95501

July 23, 2018
Monday, 3:45 p.m.

In compliance with the Americans with Disabilities Act, if you need assistance to participate in this meeting, please contact the Clerk of the Board at the phone number, email or physical address listed above at least 72 hours in advance.

Pursuant to Government Code section 54957.5, all writings or documents relating to any item on this agenda which have been provided to a majority of the Board of Directors, including those received less than 72 hours prior to the RCEA Board meeting, will be made available to the public in the agenda binder located in the RCEA lobby during normal business hours, and at www.redwoodenergy.org.

PLEASE NOTE: Speakers wishing to distribute materials to the Board at the meeting are asked to provide 12 copies to the Clerk of the Board.

OPEN SESSION Call to Order

1. 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 and 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.

COMMUNITY CHOICE ENERGY (CCE) BUSINESS (Confirm CCE Quorum)

Items under this section of the agenda relate to CCE-specific business matters that fall under RCEA's CCE voting provisions, with only CCE-participating jurisdictions voting on these matters with weighted voting as established in the RCEA joint powers agreement.

2. NEW CCE BUSINESS

2.1 Integrated Resource Plan (IRP)

Approve 2018 Integrated Resource Plan, with changes made as indicated in attached version, and authorize submittal to the California Public Utilities Commission.

END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS

3. ADJOURNMENT

NEXT REGULAR MEETING
Monday, August 20, 2018, 3:15 p.m.
Humboldt Bay Municipal Water District Office
828 7th Street, Eureka, CA 95501



Redwood Coast Energy Authority
633 3rd Street, Eureka, CA 95501
Phone: (707) 269-1700 Toll-Free (800) 931-RCEA Fax: (707) 269-1777
E-mail: info@redwoodenergy.org Web: www.redwoodenergy.org

SECTION 4a PAGE NO. 2

BOARD OF DIRECTORS MEETING AGENDA

Humboldt Bay Municipal Water District Office
828 7th Street, Eureka, CA 95501

July 16, 2018
Monday, 3:15 p.m.

In compliance with the Americans with Disabilities Act, if you need assistance to participate in this meeting, please contact the Clerk of the Board at the phone number, email or physical address listed above at least 72 hours in advance.

Pursuant to Government Code section 54957.5, all writings or documents relating to any item on this agenda which have been provided to a majority of the Board of Directors, including those received less than 72 hours prior to the RCEA Board meeting, will be made available to the public in the agenda binder located in the RCEA lobby during normal business hours, and at www.redwoodenergy.org.

PLEASE NOTE: Speakers wishing to distribute materials to the Board at the meeting are asked to provide 12 copies to the Clerk of the Board.

OPEN SESSION Call to Order

1. REPORTS FROM MEMBER ENTITIES

2. ORAL COMMUNICATIONS

This time is provided for people to address the Board or submit written communications on matters not on the agenda. At the conclusion of all oral and 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.

3. 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.

3.1 Approve Minutes of June 18, 2018, Board Meeting.

4. REMOVED FROM CONSENT CALENDAR ITEMS

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

5. OLD BUSINESS

5.1 Offshore Wind Update

Schedule a Special Meeting of the Redwood Coast Energy Authority Board of Directors for the end of July 2018 to discuss and approve the Humboldt Offshore Wind Energy Development cooperation agreement.

6. NEW BUSINESS

6.1 Humboldt Redwood Company Power Purchase Agreement

Consent to assignment of the existing biomass power purchase agreement (PPA) from Humboldt Resource Company, LLC to Humboldt Sawmill Company, LLC, and authorize the Executive Director to execute all necessary documents.

COMMUNITY CHOICE ENERGY (CCE) BUSINESS (Confirm CCE Quorum)

Items under this section of the agenda relate to CCE-specific business matters that fall under RCEA's CCE voting provisions, with only CCE-participating jurisdictions voting on these matters with weighted voting as established in the RCEA joint powers agreement.

7. OLD CCE BUSINESS

7.1 Energy Risk Management Plan Quarterly Report

Accept Energy Risk Management Plan quarterly report.

8. NEW CCE BUSINESS

8.1 Integrated Resource Plan (IRP)

Approve 2018 Integrated Resource Plan and authorize submittal to the California Public Utilities Commission.

END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS

9. STAFF REPORTS

- 9.1 Demand Side Management Director**
- July 10, 2018, Community Advisory Committee Meeting

10. ADJOURNMENT

NEXT REGULAR MEETING
Monday, August 20, 2018, 3:15 p.m.
Humboldt Bay Municipal Water District Office
828 7th Street, Eureka, CA 95501



Redwood Coast Energy Authority

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

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SECTION L4a PAGE NO. 4

DRAFT BOARD OF DIRECTORS MEETING MINUTES

**Humboldt Bay Municipal Water District Office
828 7th Street, Eureka, CA 95501**

**June 18, 2018
Monday, 3:15 p.m.**

A regular meeting of the Board of Directors of the Redwood Coast Energy Authority was held on the above date at 3:15 p.m. with Chair Woo presiding. Notice of this meeting was posted on June 14, 2018. PRESENT: Chair Woo, Vice Chair Winkler, Directors Allison, Ricca, Wilson, Sweeney, Miller. ABSENT: Directors Fennell, Glaser. STAFF PRESENT: Business Development & Planning Director Biondini, General Counsel Diamond, Finance and Human Resources Director Edmiston, Power Resources Director Engel, Power Resources Specialist Gwynn, Executive Director Marshall, Account Services Manager Slackerelli, Community Strategies Manager Stephenson.

REPORTS FROM MEMBER ENTITIES

Vice Chair Winkler attended a documentary film screening on companies that clear-cut forests to make wood pellets, which he said differs from local biomass energy production. Mr. Winkler reported having a good dialog with the film producers, Ellen Golla, and Wendy Ring which included supporting the concept of RCEA working on switching people from wood stoves to electric heat pumps.

ORAL COMMUNICATIONS

Chair Woo invited public comment. No one came forward to speak. Chair Woo closed public comment.

CONSENT CALENDAR

3.1 Approve Minutes of May 21, 2018, Board Meeting.

3.2 Approve Disbursements Report.

3.3 Accept Financial Reports.

Chair Woo invited public comment. No one came forward to speak. Chair Woo closed public comment.

M/S: Winkler, Ricca: Approve consent calendar items.

The motion passed on a unanimous voice vote. Ayes: Allison, Miller, Ricca, Sweeney, Wilson, Winkler, Woo. Noes: None. Absent: Fennell, Glaser. Abstentions: None.

OLD BUSINESS

5.1 Offshore Wind Development

Executive Director Marshall summarized the offshore wind project's next steps and provided an overview of the agreement's objectives, phases of the project's life cycle through decommissioning and removal, detailed descriptions of Phase 1, and the lease area for which RCEA proposes to bid.

Mr. Marshall described the special purpose vehicle (SPV) to be created during Phase 1, which is typically a limited liability company that owns and operates a project and enables transparent, trackable cost-sharing between project development partners. SPV creation is a standard industry practice for energy development projects. RCEA's possible roles in the SPV include having some form of owner-equity share or retaining a decision-making role without ownership. RCEA's role will be evaluated and decided during Phase 1.

Mr. Marshall stated the project team has agreed that RCEA should be the Bureau of Ocean Energy Management (BOEM) lease applicant, with the intent that the lease would be transferred to the SPV after acquiring site control. The proposed cooperative agreement supports the lease application. The project partners are narrowing down the final lease area to request, and are reaching out to commercial fishermen, local tribes and environmental groups to get additional input before finalizing the lease area.

Director Allison inquired whether the team could renew or expand the lease should the project succeed. Mr. Marshall replied that RCEA or other developers could apply for additional blocks. He added that the demonstration project design was based on current electrical grid capacity although the lease area could accommodate some, but not much, additional production. Expansion would require transmission upgrades such as an undersea cable to the Bay Area or upgrading the existing lines east out of the county.

Chair Woo invited public comment. Alison Talbott of PG&E was curious why Principle Power sank and then raised its pilot offshore wind platform prior to being redeployed to Scotland.

Jim Zoellick of the Schatz Energy Research Center asked what would happen if another entity secured the lease, and whether RCEA's offshore wind project could still move forward.

Chair Woo closed public comment.

Executive Director Marshall explained that Principle Power obtained permission to sink its platform for wet storage, which the technology's durability makes possible and was more cost effective than transport to dry land storage. Mr. Marshall stated it is possible RCEA will not be granted the BOEM lease, in which case the Board might consider purchasing power from the successful bidders. RCEA's offshore wind request for qualifications generated numerous capable responses. Mr. Marshall stated that, regardless of the lease bid outcome, RCEA's efforts are helping catalyze offshore wind energy development locally.

M/S: Sweeney, Miller: Authorize staff to submit an outer-continental shelf offshore wind unsolicited lease request to the Bureau of Ocean Energy Management, contingent on final review and approval by RCEA Legal Counsel and the Board Offshore Wind Project Phase 1 Subcommittee.

The motion passed on a unanimous voice vote. Ayes: Allison, Miller, Ricca, Sweeney, Wilson, Winkler, Woo. Noes: None. Absent: Fennell, Glaser. Abstentions: None.

Executive Director Marshall requested the Board establish an ad hoc subcommittee of up to four Directors to provide input and guidance to staff, bring recommendations to the Board,

and engage with staff between regular Board meetings. The subcommittee would perform these duties during Phase 1 of the project, after which the subcommittee would be dissolved. Directors Allison and Vice Chair Winkler and Chair Woo expressed interest in serving on the subcommittee. It was suggested that Director Fennell, who served enthusiastically on the Offshore Wind Request for Qualifications Subcommittee, would be an excellent member.

Chair Woo invited public comment. No one came forward to speak. Chair Woo closed public comment.

M/S: Miller, Sweeney: Establish Offshore Wind Project Phase 1 Board Subcommittee comprised of Directors Austin Allison, Estelle Fennell, Vice Chair Michael Winkler and Chair Sheri Woo.

The motion passed on a unanimous voice vote. Ayes: Allison, Miller, Ricca, Sweeney, Wilson, Winkler, Woo. Noes: None. Absent: Fennell, Glaser. Abstentions: None.

Counsel Diamond reported that she is researching if and/or how a public agency can participate in the offshore wind project's special purpose vehicle (SPV) and the cooperative agreement language provides guidance for and allows latitude in negotiating the SPV. The Board will consider the cooperative agreement at a subsequent meeting and Ms. Diamond requested input or direction from the Board at this stage. Hearing no comment from the Board, Chair Woo stated she looked forward to hearing Counsel Diamond's recommendations.

Chair Woo invited public comment. No one came forward to speak. Chair Woo closed public comment.

As the Offshore Wind Energy Development Cooperation Agreement was not ready for the Board's consideration, Executive Director Marshall requested the Board Chair potentially call a special meeting during early July to consider the agreement. He requested the Board Clerk poll the Directors to find a suitable meeting date.

NEW BUSINESS

6.1 Fiscal Year 2018-19 Budget

Executive Director Marshall presented a staff report and presentation on the fiscal year (FY) 2018-2019 budget. The budget does not include Community Choice Energy (CCE) funded programs, which the Board will approve, following Community Advisory Committee review and input, at a subsequent meeting. The Board will be asked to approve budget adjustments based on the programs it selects for funding.

Mr. Marshall provided an overview of the different transaction structures that RCEA engages in for wholesale power procurement. He stated that a Board Finance Subcommittee would be able to study the process in greater depth.

Chair Woo thanked Executive Director Marshall for compiling the budget report and invited public comment.

Dr. Norman Bell, an RCEA Community Advisory Committee member but in this instance speaking as a member of the public, noted that biomass is both the most expensive renewable energy RCEA purchases and the most controversial for the people with which he communicates. He requested the Board keep biomass' non-renewable aspects and carbon footprint in mind when making power purchase decisions.

Jim Zoellick of the Schatz Energy Research Center inquired whether the 12% increase in revenue and cost was related to wholesale power cost or load increases.

Member of the public Ellen Golla asked how much of wholesale power's 84% of the budget and 57% of the customer rate is going to biomass. Ms. Golla stated there is a difference between renewable and clean, and that biomass may be renewable but it is not clean.

Chair Woo closed public comment.

Director Miller inquired if RCEA is considering a 100 percent solar option and Director Wilson requested seeing RCEA's power procurement portfolio's energy sources by dollar amount and percentage.

Executive Director Marshall responded that the 12% revenue increases were caused by increases in customer enrollment in the Community Choice Energy Program, including the addition of Ferndale at the beginning of 2018, as well as wholesale energy cost changes. He stated he will provide Ms. Golla and the Board additional detail and a pie chart of the power procurement portfolio reflecting percentage and dollar values.

Chair Woo noted that no energy production is free of environmental or public health impacts and even solar arrays can impact birds. Director Wilson added that Bay Area windmills have changed fog patterns and inland areas dry more quickly. He stated that the biomass energy industry will persist locally because it makes sense for Humboldt County to process its own waste locally while also contributing to the economy. Vice Chair Winkler stated he would like to see a program incentivizing homeowners' switch from wood stoves to electric heat pumps as wood stoves produce uncontrolled pollution in neighborhoods and emit more harmful fine particles than wood waste power plants.

M/S: Wilson, Miller: Adopt RCEA Fiscal Year 2018-19 Budget.

The motion passed on a unanimous voice vote. Ayes: Allison, Miller, Ricca, Sweeney, Wilson, Winkler, Woo. Noes: None. Absent: Fennell, Glaser. Abstentions: None.

Executive Director Marshall requested that the Board establish an ad hoc finance subcommittee of no more than four Directors to study this fiscal year's budget, assist in setting next year's budget and provide input on information the Board requires to assess the proposed budget. The subcommittee would disband after next year's budget is adopted.

Chair Woo, Director Wilson and Vice Chair Winkler volunteered to serve on the subcommittee.

Chair Woo invited public comment. No one came forward to speak. Chair Woo closed public comment.



Redwood Region Economic Development Commission
Prosperity Center 520 E Street, Eureka, California 95501
Phone 707.445.9651 Fax 707.445.9652 www.rredc.com

REDWOOD REGION ECONOMIC DEVELOPMENT COMMISSION

Regular meeting of the Board of Directors

At the Prosperity Center 520 E Street, Eureka

July 23, 2018 at 6:30 pm

AGENDA

- I. Call to Order & Flag Salute**
- II. Approval of Agenda and Minutes**
 - A. Approval of Agenda for July 23, 2018
 - B. Approval of Minutes of the Board of Directors Meeting June 25, 2018
- III. Public Input for non-agenda items**
- IV. Consent Calendar**
 - A. Acceptance of Agency-wide Financial Report: No report pending closing of Fiscal Year
- V. Reports – No Action Required**
 - A. Loan Portfolio Report: No report pending closing of Fiscal Year
 - B. Executive Director's Report
- VI. Old Business**
 - A. Update on the Redwood Region Housing Forum
 - B. Update on Development of Humboldt County Comprehensive Economic Development Strategy (CEDS)
- VII. New Business**
- VIII. Member Reports**
- IX. Agenda/Program Requests for future Board of Directors Meetings**
- X. 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.



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Humboldt Bay Harbor, Recreation and Conservation District · Humboldt Bay Municipal Water District
County of Humboldt · Hoopa Valley Tribe · Redwoods Community College District