



# HUMBOLDT BAY MUNICIPAL WATER DISTRICT

## Board of Directors Meeting

July 2019



# MINUTES



Minutes for Meeting of Board of Directors

June 13, 2019

A. **ROLL CALL**

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

B. **FLAG SALUTE**

President Woo led the flag salute.

C. **ACCEPT AGENDA**

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

D. **MINUTES**

Mr. Davidsen requested clarification in the minutes of May 16 about the Peninsula Community Collaborative presentation. The presentation by Ms. Sinkhorn was a proposal and not finalized. President Woo noted a typo on page 5. On motion by Director Fuller, seconded by Director Latt, the Board approved the minutes of May 16, 2019 Regular Meeting as amended and the May 30, 2019 Special Meeting 4-0.

E. **PUBLIC COMMENT**

No public comment was received.

F. **CONSENT AGENDA**

President Woo requested Item F2 Page 29 be pulled. On motion by Director Hecathorn, seconded by Director Fuller, the Board approved the Consent Agenda less Item 2.

F2. Newspaper articles of local/water interest

President Woo requested additional information on the Cease and Desist Demand regarding Lease Site 32 at Ruth Lake. Mr. Friedenbach stated the leaseholders had changed and we were not made aware of the change. The new leaseholder received building permits from Trinity County however, failed to get permission from Ruth Lake CSD or HBMWD as required in the leaseholder agreement. When the District became aware of unauthorized work being done, a Cease and Desist Demand was sent. Mr. Albers, the leaseholder's attorney has been in contact with both HBMWD and Ruth Lake CSD and work has ceased. Mr. Albers stated they will go through the proper process to get approval for the work.

On motion by Director Fuller, seconded by Director Hecathorn, the Board voted 4-0 to approve Consent Item F2.

G. **CORRESPONDENCE**

District letter opposing SB 13 prohibiting impacting fees

SB 13 prohibits impacts fees on accessory dwelling units (ACUs) smaller than 750 square feet and significantly limits the impact fees that may be charged on larger ACUs. There is concern that this may also apply to water connection fees. Mr. Friedenbach shared with the Board the draft letter he prepared expressing opposition to SB 13. On motion by Director Latt, seconded by Director Fuller, the Board voted 4-0 to send the letter expressing opposition to SB 13.



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District letter supporting ACR 89 Establishing Special Districts Week

On motion by Director Hecathorn, seconded by Director Fuller, the Board voted 4-0 to support ACR 89 that would establish Special Districts Week from September 22 to September 28<sup>th</sup> and authorized Mr. Friedenbach to send the letter of support.

District letter to Humboldt County Board of Supervisors re: Zoning Text Amendments

Mr. Friedenbach shared the letter written to the Board of Supervisors regarding zoning text amendments. The letter addressed three amendments the District is opposed to: Section 314-61.1 "Streamside Management Areas and Wetlands" scheduled to be reviewed at their June 11, 2019 meeting and Sections 314-7.1 "AE-Agriculture Exclusive Zone" and 314.7.4 "TPZ-Timberland Production Zones" scheduled to be reviewed at their June 18, 2019.

As noted in the letter, one of the items the District is opposed to at the June 11 meeting was the inclusion of the term "historical". The District believes the term is vague and could allow mining operations that operated at any time in the past on a site, whether permitted or not. Mr. Friedenbach reported that after Director Ford recommended to strike the term "historical", discussion amongst the Board of Supervisors took place and they voted 4-1 remove the word "historical". It was a good outcome for the District. He will keep the Board apprised after the next meeting. Director Latt stated the letter was well written.

District letter to Ruth Lake CSD re: Contribution towards law enforcement on Ruth Lake

Mr. Friedenbach stated the letter is informational. It communicates our \$5,000 commitment out of our current budget.

**H. CONTINUING BUSINESS**

Water Resource Planning

Local Sales

Mr. Friedenbach reported out on his meeting with Nordic Aquafarms. He stated the District is still running some water quality tests and is on schedule for the focused engineering study for the water clarifier. Nordic Aquafarms is still in their due diligence process and scheduled to complete it in August. Director Latt expressed concerns that Nordic Aquafarms is expecting our ratepayers to cover some of the costs such as the clarifier. Mr. Friedenbach stated that based on meetings he's attended, they are aware our industrial infrastructure needs work and that we will not pay for it. They are looking to the county to get funding to pay for it. The county in turn is looking at GoBiz and other funding sources to help bring the infrastructure up to standards. Currently, the District is just evaluating the quality of the water and had not discussed any pricing.

Instream Flow

Mr. Friedenbach stated the process is moving forward. A meeting is scheduled in Sacramento with State Water Resources Control Board staff and David Aladjem on July 10<sup>th</sup>.

Transport

There is nothing to report.

Cannabis Grows affecting Mad River Watershed

Mr. Friedenbach discussed the letter written by Thomas Law Group on our behalf to John Ford, and the Planning Commissioners at Humboldt County Planning and Building Department regarding the application by Michael and Arielle Brosgart, APN 516-111-064. The main concern for the District is



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the highly toxic PCP contamination in the ground. The Department of Toxic Substances Control (DTSC) was in charge of the clean-up however, appear to have abandoned the process. The District is Concerned that the ground activity will disturb the water table and allow a pathway for migration of the contaminant to the Mad River. Humboldt Baykeeper also raised concerns as well and Mr. Friedenbach shared their letter. As a result, the Brosgart's ended up pulling their application to address concerns raised. Director Fuller stated the DTSC is doing some work at the site so hopefully there will be some data soon.

Peninsula Community Collaborative appurtenance beautification

Ms. Natalie Arroyo of RCAA provided an update on the Samoa concrete vault public art project. She shared that eight artist requests have been received so far. The review committee will most likely be doing the review via email the week of June 24-28 and inquired if any Board or staff would like to participated. President Woo stated she would like to be included. Ms. Arroyo also stated she recently became aware of another vault that could be painted. She was asked by Friends of the Dunes if the vault near them (vault 80) could be included as well. Mr. Friedenbach shared that this vault is near an area of the District pipeline where people walking the Friends of the Dunes trails tend to take shortcuts across the District pipeline resulting in sand removal and exposure of the pipeline. If Friends of the Dunes is willing to put up a sign requesting pedestrians stay on the marked trails, this would be helpful. Mr. Davidsen suggested other ways to reinforce the pipeline as well. Mr. Friedenbach stated if the Board wishes to consider adding vault 80, he recommends modifying the Artist Agreement to include Friends of the Dunes in reference to vault 80. On motion by Director Latt, seconded by Director Fuller, the Board voted 4-0 to approve the Samoa Peninsula Concrete Vault Public Art Project Artist Agreement with the modification and addition of a vault 80.

**I. NEW BUSINESS**

Joint Board Meeting with Ruth Lake CSD July 19, 2019

Mr. Friedenbach stated we will need to depart by 6:15 am since the road closes at 8:00 am due to construction. Director Latt stated he is currently unable to attend the meeting due to a work conflict.

Industrial Water Supply to Harbor District

The negotiating team is comprised of Directors Latt and Rupp. Superintendent Davidsen stated minimal work and cost have been invested to maintain the system. The Board agreed to table the discussion until July when Director Rupp could participate.

**J. REPORTS (from Staff)**

**1. Engineering**

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

Mr. Stevens stated the surge tower has safely been taken down in one piece. There are two change orders that are required. Change Order 1 is \$1,250 to remove sediment and pour concrete and Change Order 2 is \$6,000 to repair a rusted out "collar" at the base. This brings the new contract amount to \$63,250. He stated he does not anticipate any additional changes. Mr. Friedenbach reminded the Board this project is grant funded and there is room in the budget for these changes.

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

Mr. Stevens shared the 30% plans. He stated they are getting ready to start the permit process with PG&E. They plan to go out for bids by the end of the year.

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

This item is waitlisted for grant funding.



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Reservoir Structural Retrofit Hazard Mitigation Grant Application (\$914,250 District Match)  
 No update available.

Single Line Industrial Slough Crossing Hazard Mitigation Grant Application (\$679,750 District Match)  
 No update available.

Matthews Dam Spillway Analysis Hazard Mitigation Grant Application (\$1,666,667 District Match)  
 No update available.

Essex Emergency Chlorine Scrubber Hazard Mitigation Grant NOI (\$335,000)  
 No update available.

TRF Generator Hazard Mitigation Grant (\$460,431 District Match)-Match & Maintenance Letter

On motion by Director Fuller, seconded by Director Hecathorn, the Board voted 4-0 to approve the Local Match Fund Commitment Letter and the Project Maintenance Letter.

Status report re: other engineering work in progress

Mr. Friedenbach stated that CalOES was in town hosting 2019 Disaster Grant Reimbursement training from 1-4 pm today. Ms. Moyle and Ms. Ryan from the Eureka office are attending. He thought it was important to have someone from the District there. The Board concurred.

**2. Financial**

Financial Report

Ms. Harris provided the May Financial Report. She noted that the General Fund Reserves are recovering. The Miscellaneous revenue shows at 403%. This is due to storm damage grant funding that was received. The Grand Total All Revenue is at 95%. President Woo reviewed the bills and stated all was good. On motion by Director Hecathorn, seconded by Director Fuller, the Board voted 4-0 to approve the May financial report and vendor detail in the amount of \$486,714.37.

Resolution 2019-07 Limit for Appropriations from Taxes

The California Constitution Article XIII (b) requires the adoption of an annual resolution limiting the amount of appropriations from taxes to a certain base level plus annual increases based on per capital income and population increases. The State Department of Finance provided the District with the annual Price and Population figures for FY2019/20. Staff recommends the Board adopt Resolution 2019-07 Limit for Appropriations from Taxes. Director Hecathorn read Resolution 2019-07. The Board voted 4-0 by roll call voted to approve and adopt Resolution 2019-07.

FY 18/19 Budget Re-Allocation

Ms. Harris explained that each year as part of the budget process, staff completes a thorough analysis of the status of funds “allocated and spent” or “allocated and unspent” on budgeted Projects for the current fiscal year. Funds “allocated and unspent” are available to be reallocated as Advanced Charges to other large capital projects, hence the term project budget re-allocation.



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Staff has communicated this concept and process of Project Budget Reallocation to the Municipal Customers, and they have agreed to the process as a means of enhancing the Advance Charges funding mechanism for our larger CIP projects. There is \$1,574,343 available for reallocation this year. Staff recommends reallocation of funds for advance charges as follows: \$500,000 12kV Relocation Grant; \$350,000 Chlorine Scrubber Grant; \$385,000 Collector 2 Rehab Grant; \$225,000 TRF Emergency Generator Grant; \$60,000 3X Seismic Tank Retrofit and \$54,343 towards the 18,000 lb excavator. If the Board approves the reallocation, the top four projects will be fully funded for the District's portion of their respective grant match requirements. On motion by Director Fuller, seconded by Director Latt, the Board voted 4-0 to approved the FY18/19 budget reallocation.

FY19/20 Budget Presentation

Prior to presenting the Total Proposed DRAFT Budget, Ms. Harris outlined a few items of note regarding a change from the information that has been presented thus far. One item that had come to light was the part time minimum wage increase. Minimum wage is increasing to \$13 per hour and that will result in a change of approximately \$6,700.

Director Hecathorn requested clarification based on the decreased CPI and the staff request for a COLA. Ms. Harris agreed that the CPI has slightly decreased compared to last year (2.7% versus 3.1%), however staff is recommending a 2.7% COLA for this year versus a 3.0% COLA from last year. The anomaly is McKinleyville CSD and Humboldt CSD - they both have 3.5% and 3.3% respectively COLA requests. A 2.7% COLA would cause an increase of \$57,361 or .36% of the entire budget.

Director Latt commented that while he believed using the "West Region Size Class B/C of 2.5% was a more appropriate CPI for the area, approving a 2.7% COLA would acknowledge the hard work of the District's staff and help towards retention. Director Latt felt it was the least the Board could do.

3. Operations

Mr. Davidsen presented the May Operations report. The full maintenance crew went to Ruth May 6-10 for the annual maintenance. On May 7<sup>th</sup> he met with Mr. Lakhbir Singh for the DSOD inspection of Ruth Dam, all seemed to go well. The Ruth Bunkhouse remodel is complete. Trinity County did their final inspection and requested a handrail be added to the front steps and the ADA ramp. District staff will do the work. One staff member took his water treatment test and feels he did well. Safety meeting topics included traffic control and slips, trips and falls. Director Fuller inquired if there are plans to monitor Ruth Lake for blue-green algae this summer. Mr. Davidsen stated he has a state contact and will inquire if they want to do any monitoring.

K. MANAGEMENT

On-Site Training offered by ACWA/JPIA

Mr. Friedenbach gave a summary of the training provided by ACWA/JPIA to HBMWD employees as well as 10 Humboldt Community Services District employees. The training topics were Defensive Driver and Field & Office Ergonomics. Employee feedback following training was very positive. Mr. Friedenbach shared other upcoming workshops that he thought may have value for the directors.

CSDA letter re: Ad Valorem for Humboldt County Special Districts

The Board discussed the correspondence to Humboldt County Auditor-Controller and reply from the Auditor-Controller. The issue of Ad Valorem would have minimal impact on HBMWD as it is a



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CSDA Local Chapter Meeting

Mr. Friedenbach reported out on the June Meeting held at Scotia CSD.

**L. DIRECTOR REPORTS & DISCUSSION**

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

The Directors had nothing to report out on.

**2. ACWA – JPIA**

Resolution 2019-08 Placing in Nomination J. Bruce Rupp as a Board Member of the ACWA Region 1 Board

Director Hecathorn read Resolution 2019-08 Placing in Nomination J. Bruce Rupp as a Board Member of the ACWA Region 1 Board. The Board approved the resolution 4-0 by roll call vote.

Status of water bill

This was for information only.

**3. Organizations on which HBMWD Serves: RCEA, RREDC \***

President Woo reported out on the RCEA meeting. Director Latt asked Director Woo if RCEA had taken a position on the Humboldt Wind Energy Project. President Woo stated that they had no need to as they would not be involved with it and were staying neutral.

Regarding RREDC; Director Latt reported that there had not been a meeting the previous month due to the Memorial Day Holiday and therefore he had nothing to report.

**ADJOURNMENT**

The meeting adjourned at 2:06 p.m.

Attest:

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

\_\_\_\_\_  
Barbara Hecathorn, Assistant Secretary/Treasurer



**CONSENT**

Safe Drinking Water

AB 100

Support

FLOOR ALERT

SECTION F1 PAGE NO. 1



Long Beach Water



## FLOOR ALERT

# AB 100 SAFE DRINKING WATER BUDGET TRAILER BILL SUPPORT

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The coalition of organizations on this letter **support** AB 100 as the funding solution to make sure that disadvantaged communities that do not have access to safe drinking water will have that access.

This budget trailer bill would enact the durable solution approved by the Conference Committee on the Budget for future fiscal years.

We urge your "AYE" vote on AB 100.

Robert Shaver  
General Manager  
Alameda County Water District

Darrin Monteiro  
Director, Member and Government Relations  
California Dairies, Inc

Rob Nash  
Director, Government Relations  
American Pistachio Growers

Danny Merkley  
Director of Water Resources  
California Farm Bureau Federation

Cindy Tuck  
Deputy Executive Director, Government  
Relations  
Association of California Water Agencies

Ian LeMay  
President  
California Fresh Fruit Association

David Coxey  
General Manager  
Bella Vista Water District

Danielle Blacet-Hyden  
Director for Water  
California Municipal Utilities Association

Paul Kelley  
Executive Director  
CalDesal

Tim Johnson  
President  
California Rice Commission

Peter Blake  
Executive Director  
California Cleaners Association

Rick Tomlinson  
President  
California Strawberry Commission

Casey Creamer  
President  
California Citrus Mutual

Eric Bergh  
Interim General Manager  
Calleguas Municipal Water District

Felix Riesenber, P.E.  
Assistant Public Works Director/Utilities  
City of Fairfield

Lisa Borba  
Board President  
Contra Costa Water District

John Bosler  
General Manager/CEO  
Cucamonga Valley Water District

Paul D. Jones II, P.E.  
General Manager  
Eastern Municipal Water District

Lauren Brent Bumb  
President and CEO  
El Dorado County Joint Chambers Commission

Jim Abercrombie  
General Manager  
El Dorado Irrigation District

Angi Perry  
President and CEO  
Elk Grove Chamber of Commerce

Mark Madison  
General Manager  
Elk Grove Water District

Greg Morrison  
Government Relations Officer  
Elsinore Valley Municipal

Joani Woelfel  
Executive Director  
Far West Equipment Dealer Association

Joe Gagliardi  
President and CEO  
Folsom Chamber of Commerce

Steven Palmer, PE  
General Manager  
Georgetown Divide Public Utility District

John Friedenbach  
General Manager  
Humboldt Bay Municipal Water District

David Hull  
General Manager  
Humboldt Community Services District

Donald M. Zdeba  
General Manager  
Indian Wells Valley Water District

Shivaji Deshmukh  
General Manager  
Inland Empire Utilities Agency

David Pederson  
General Manager  
Las Virgenes Municipal water District

Derek Dolfie  
Legislative Representative  
League of California Cities

Christopher J. Garner  
General Manager  
Long Beach Water Department

Jim Anderson  
General Manager  
Malaga County Water District

Paul E. Shoenberger, P.E.  
General Manager  
Mesa Water District

Tammy Rudock  
General Manager  
Mid-Peninsula Water District

Kevin Abernathy  
President  
Milk Producers Council

Tom McCarthy  
General Manager  
Mojave Water Agency

Shawn Lewis  
Policy Director  
National Federation of Independent Businesses

Adam W. Robin  
Legislative Affairs Director  
Northern California Water Association

Mark Watton  
General Manager  
Otay Water District

Paul Helliker  
General Manager  
San Juan Water District

Dennis D. LaMoreaux  
General Manager  
Palmdale Water District

Piret Harmon  
General Manager  
Scotts Valley Water District

Tom Kennedy  
General Manager  
Rainbow Municipal Water District

Kirk R. Howie  
Chief Administrative Officer  
Three Valleys Municipal Water District

Diann Rogers  
President and CEO  
Rancho Cordova Chamber of Commerce

Tom Trott  
General Manager  
Twain Harte Community Services District

Rob Swartz  
Interim Executive Director  
Regional Water Authority

Dave Butler  
Advocate  
United Chamber Advocacy Network

Greg Thomas  
General Manager  
Rincon del Diablo Municipal Water District

Gary Arant  
General Manager  
Valley Center Municipal Water District

Wendy Gerig  
President and CEO  
Roseville Area Chamber of Commerce

Gail Delihant  
Director, CA Government Affairs  
Western Growers Association

Douglas D. Headrick  
General Manager  
San Bernardino Valley Municipal Water District

Craig Miller  
General Manager  
Western Municipal Water District

Glenn Farrel  
Government Relations Manager  
San Diego County Water Authority

Renee Pinel  
President  
Western Plant Health Association

Brad Jensen  
Director of Public Policy  
San Gabriel Valley Economic Partnership

Curt Aikens  
General Manager  
Yuba Water Agency

cc: Nick Hardeman, Chief of Staff, Office of Senate President pro Tempore Toni Atkins  
Chris Woods, Budget Director, Office of Senate President pro Tempore Toni Atkins  
Kimberly Rodriguez, Policy Director, Office of Senate President pro Tempore Toni Atkins  
Kip Lipper, Chief Policy Advisor, Energy and the Environment, Office of Senate President pro Tempore Toni Atkins  
Carrie Cornwell, Chief of Staff, Office of Assembly Speaker Anthony Rendon  
Alf Brandt, Senior Counsel, Office of Assembly Speaker Anthony Rendon  
Lindsey Dietz, Chief of Staff, Office of Senate Republican Leader Shannon Grove  
Jayme Chick, Chief of Staff, Office of Assembly Republican Leader Marie Waldron



June 25, 2019

**SAFE DRINKING WATER  
SB 101 – BUDGET TRAILER BILL  
OPPOSE**

The Honorable Philip Ting  
 Chair, Assembly Committee on Budget  
 State Capitol, Room 6026  
 Sacramento, CA 95814

Dear Chair Ting,

The organizations listed below support the safe drinking water funding agreement that came together because of the leadership of Governor Newsom, Senate President pro Tem Atkins and Assembly Speaker Rendon, the work of the Conference Committee on the Budget and action by the Legislature. The organizations listed below **support AB 100 as the budget trailer bill to enact the agreement**. However, the organizations listed below **oppose SB 101** because of the omission of important language and the inclusion of problematic language. Following are two primary examples (not a complete list).

- **SB 101 does not prioritize the funding for disadvantaged communities and low-income households.** (AB 100 appropriately includes that prioritization at Page 27, Line 26.)
- **SB 101 would greatly expand the scope of the program beyond making sure that there is access to safe drinking water.** (See SB 101, Page 17 at Line 12.)

The Governor and Legislature are enacting a historic funding solution so that disadvantaged communities that do not have access to safe drinking water will have safe drinking water. The organizations listed below oppose SB 101. They support AB 100. **They urge a "No" vote on SB 101** when it is heard by the Assembly Committee on Budget.

Sincerely,

**ORGANIZATIONS OPPOSED TO SB 101 (AND IN SUPPORT OF AB 100)**

Robert Shaver  
 General Manager  
 Alameda County Water District

Paul Kelley  
 Executive Director  
 CalDesal

Cindy Tuck  
 Deputy Executive Director for Government  
 Relations  
 Association of California Water Agencies

Peter Blake  
 Executive Director  
 California Cleaners Association

David Coxey  
 General Manager  
 Bella Vista Water District

Danielle Blacet-Hyden  
 Director for Water  
 California Municipal Utilities Association

Eric Bergh  
 Interim General Manager  
 Calleguas Municipal Water District

Felix Riesenberg, P.E.  
Assistant Public Works Director/Utilities  
City of Fairfield

John Bosler  
General Manager/CEO  
Cucamonga Valley Water District  
John Mura

General Manager  
East Valley Water District  
Water District

Lauren Brent Bumb  
President and CEO  
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Angi Perry  
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Donald M. Zdeba  
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General Manager  
Inland Empire Utilities Agency

David Pederson  
General Manager  
Las Virgenes Municipal water District

Jim Anderson  
General Manager  
Malaga County Water District

Paul E. Shoenberger, P.E.  
General Manager  
Mesa Water District

Tammy Rudock  
General Manager  
Mid-Peninsula Water District

Tom McCarthy  
General Manager  
Mojave Water Agency

Shawn Lewis  
Policy Director  
National Federation of Independent Businesses

Adam W. Robin  
Legislative Affairs Director  
Northern California Water Association

Mark Watton  
General Manager  
Otay Water District

Tom Kennedy  
General Manager  
Rainbow Municipal Water District



Diann Rogers  
President and CEO  
Rancho Cordova Chamber of Commerce

Paul Helliker  
General Manager  
San Juan Water District

Greg Thomas  
General Manager  
Rincon del Diablo Municipal Water District

Piret Harmon  
General Manager  
Scotts Valley Water District

Wendy Gerig  
President and CEO  
Roseville Area Chamber of Commerce

Kirk R. Howie  
Chief Administrative Officer  
Three Valleys Municipal Water District

Glenn Farrel  
Government Relations Manager  
San Diego County Water Authority

Tom Trott  
General Manager  
Twain Harte Community Services District

Brad Jensen  
Director of Public Policy  
San Gabriel Valley Economic Partnership

Dave Butler  
Advocate  
United Chamber Advocacy Network

Gary Arant  
General Manager  
Valley Center Municipal Water District

cc: Honorable Members, Assembly Committee on Budget  
Nick Hardeman, Chief of Staff, Office of Senate President pro Tempore Toni Atkins  
Chris Woods, Budget Director, Office of Senate President pro Tempore Toni Atkins  
Kimberly Rodriguez, Policy Director, Office of Senate President pro Tempore Toni Atkins  
Kip Lipper, Chief Policy Advisor, Energy and the Environment, Office of Senate President pro  
Tempore Toni Atkins  
Carrie Cornwell, Chief of Staff, Office of Assembly Speaker Anthony Rendon  
Alf Brandt, Senior Counsel, Office of Assembly Speaker Anthony Rendon  
Lindsey Dietz, Chief of Staff, Office of Senate Republican Leader Shannon Grove  
Jayme Chick, Chief of Staff, Office of Assembly Republican Leader Marie Waldron  
Genevieve Morelos, Consultant, Assembly Committee on Budget  
Katie Sperla, Consultant, Assembly Republican Caucus



**AB-100 Drinking water.** (2019-2020)

Date	Result	Location	Ayes	Noes	NVR	Motion
06/24/19	(PASS)	Sen Budget and Fiscal Review	16	1	1	Do pass
		<p><b>Ayes:</b> Durazo, Hurtado, Jones, Leyva, McGuire, Mitchell, Monning, Moorlach, Morrell, Nielsen, Pan, Roth, Skinner, Stern, Stone, Umberg</p> <p><b>Noes:</b> Wieckowski</p> <p><b>No Votes Recorded:</b> Beall</p>				
04/11/19	(PASS)	Assembly Floor	54	13	13	AB 100 Ting Assembly Third Reading
		<p><b>Ayes:</b> Aguiar-Curry, Bauer-Kahan, Bloom, Boerner Horvath, Bonta, Burke, Calderon, Carrillo, Cervantes, Chau, Chu, Cooper, Daly, Eggman, Frazier, Friedman, Gabriel, Cristina Garcia, Gipson, Gloria, Gonzalez, Gray, Grayson, Holden, Irwin, Jones-Sawyer, Kalra, Kamlager-Dove, Limón, Maienschein, McCarty, Medina, Mullin, Muratsuchi, Nazarian, O'Donnell, Petrie-Norris, Quirk, Quirk-Silva, Ramos, Reyes, Luz Rivas, Robert Rivas, Rodriguez, Blanca Rubio, Salas, Santiago, Smith, Mark Stone, Ting, Weber, Wicks, Wood, Rendon</p> <p><b>Noes:</b> Bigelow, Brough, Dahle, Flora, Fong, Gallagher, Kiley, Mathis, Melendez, Obernolte, Patterson, Voepel, Waldron</p> <p><b>No Votes Recorded:</b> Arambula, Berman, Chen, Chiu, Choi, Cooley, Cunningham, Diep, Eduardo Garcia, Lackey, Levine, Low, Mayes</p>				



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**SB-101 Drinking water.** (2019-2020)

Date	Action
06/24/19	From committee with author's amendments. Read second time and amended. <b>Re-referred to Com. on BUDGET.</b>
05/02/19	Referred to Com. on BUDGET.
04/11/19	In Assembly. Read first time. Held at Desk.
04/11/19	Read third time. Passed. (Ayes 27. Noes 9. Page 671.) Ordered to the Assembly.
04/09/19	Read second time. Ordered to third reading.
04/08/19	Ordered to second reading.
04/08/19	Withdrawn from committee. (Ayes 28. Noes 10. Page 582.)
01/24/19	Referred to Com. on B. & F.R.
01/11/19	From printer. May be acted upon on or after February 10.
01/10/19	Introduced. Read first time. To Com. on RLS. for assignment. To print.

From Lost Coast Outpost 6/28/19

## Board of Local Energy Agency Unanimously Directs Staff to Pursue Agreement With Terra-Gen Wind Project



*Simulated view of proposed wind turbines from Rio Dell. | Image from the Draft Environmental Impact Report.*

The board of the Redwood Coast Energy Authority (RCEA) on Thursday unanimously directed staff to negotiate a power purchase agreement with renewable energy company Terra-Gen, along with two other green-electricity producers.

If signed by the board later this summer, the agreement would put to rest at least one criticism being tossed around by skeptics of Terra-Gen's proposed Humboldt Wind Energy project — namely, that the power produced by the ridge-top turbines wouldn't even be consumed locally.

Under the proposal, RCEA, the local joint powers authority that manages Humboldt County's community choice power aggregation program, would enter into a 15-year contract to purchase up to 90 megawatts, or about two-thirds of the capacity from Terra-Gen's planned Humboldt Wind energy project, which includes up to 60 turbines atop Monument and Bear River Ridges near Scotia.

The board also directed staff to negotiate two other renewable energy contracts. One would be a 12-year deal for up to 50 megawatts via a Fresno County solar energy project being developed by San Francisco-based Candela Renewables LLC, and the other would be a 15-year agreement for the full 5.5-megawatt capacity of Snow Mountain Hydro LLC's existing Cove hydropower project in Shasta County.

RCEA Executive Director Matthew Marshall said the agency issued a request for proposals a while back, and the review team awarded preference points for local and regional projects. However, of the 13 proposals received just a handful, including the one from Snow Mountain Hydro, came from within a two-county radius, and Terra-Gen's was the only one from within Humboldt County.

The review team consisted of RCEA staff members along with experts from The Energy Authority (TEA), Schatz Energy Research Center, TRC Advanced Energy Services, and the Humboldt County Planning Department.

"I think that the timing of this project is pretty much perfect," Marshall said in reference to the Humboldt Wind Energy proposal. The state is currently requiring electricity providers to enter into long-term contracts for renewable power — an initiative aimed at boosting investment in green energy — and with the constraints of Humboldt County's electricity grid, Marshall said, RCEA needed to find a new, local source if it hopes to achieve its goal of providing 100 percent renewable electricity to Humboldt County consumers by 2030.

"The timing is hitting us in stride," Marshall said.

In recent weeks, many have voiced concerns about the Humboldt Wind Energy project, especially residents of Ferndale and Rio Dell. In fact, the Rio Dell City Council issued a "strongly worded response" to the draft environmental impact report, officially opposing the project. They argue that it was being "fast-tracked" in a way that precluded appropriate technical studies and public input.

And yet Thursday's board vote was unanimous, meaning both the Ferndale representative (City Councilmember Robin Smith) and the Rio Dell representative (City Councilmember Frank Wilson) gave their approval to pursue a contract.

The *Outpost's* attempts to reach those two on Friday were unsuccessful, but Board Chair Michael Winkler, a vocal proponent of the wind farm, said he and his fellow board members felt the project would be "beneficial enough to customers and to Humboldt County" that a contract is worth pursuing, "despite strong opposition from some in their communities."

Winkler said that if all the contracts are approved, RCEA would begin receiving power from Snow Mountain Hydro in 2021, Terra-Gen in 2022 (when the turbines are expected to start running) and Candela Solar in 2023.

"All together, assuming everything goes as planned, about 80 percent of the electricity delivered to customers from RCEA would come from two biomass plants, the Terra-Gen project and [various] solar projects," Winkler said.

RCEA's long-term plans involve procuring energy from an offshore wind project.

"Wind is our greatest resource here," Marshall said, noting that Humboldt is not the sunniest place in the state.

And while the proposed offshore wind farm is still several years off, at least, Winkler said the technology will eventually make the agency an exporter of electricity while allowing local projects to switch from petroleum-based fuels to green energy.

Marshall said staff will now begin negotiating terms for final power purchase agreements with the three companies, and they hope to bring the matter back for board consideration at the August meeting.

Mad River Union 6/19/2019

❖ LAND OF SAND & FOG

# Artists are also wanted out on the Samoa Peninsula

**PENINSULA COMMUNITY COLLABORATIVE SAMOA PENINSULA** - The Peninsula Community Collaborative (PCC), in partnership with the Humboldt Bay Municipal Water District (Water District) and Friends of the Dunes, invite local artists to propose mural designs for highly-visible concrete structures (vaults) on the Samoa Peninsula which are located along New Navy Base Road and within the dunes.

Local artists have the opportunity to develop their own designs and create public art on seven concrete vaults on the Peninsula.

These vaults are visible from the public road and/ or local trails frequented by residents and beach visitors alike.

Preference will be given to designs that include themes appropriate to the landscape and history of the Peninsula, including nature themes, bay/ocean/ water themes, mills/aquaculture/maritime themes, recreation, et cetera.

Each selected artist will be paid a stipend of \$500 to paint one cylindrical concrete vault and agree to an artist agreement with the water district. Interested artists can contact Carla

Avila-Martinez at [carla@nrsrcaa.org](mailto:carla@nrsrcaa.org) or (707) 269-2055 to request an application. Applications are due Friday, June 21 at 5 p.m.

Selected artists will have from July 8 to Aug. 4 to paint their vault. Artists can choose to paint their vault during the Eureka Street Art Festival (July 27 to Aug. 3) and provide the opportunity for the community and festival attendees to observe the mural process.

The festival will help cross-promote this effort and encourage people to check out the art, regardless of whether it is painted during the festival or just before it.

# Trinidad backs water study as Rancheria hotel project looms

Mayor: 'We cannot extract water to the point of it running dry'



Trinidad Mayor Steve Ladwig, far left, had trouble centering the discussion around the city's future water supply amid attendees fretting about the forthcoming hotel project. (Shomik Mukherjee — The Times-Standard)

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

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The Trinidad City Council on Wednesday afternoon unanimously approved a study of the city's water needs, an effort the council framed as necessary preparation for the general future but which most in the public interpreted as a precautionary step ahead of a major hotel development that could rely on the city's water supply.

The study would include five separate tasks, including an assessment of the city's current water source, the Luffenholtz Creek; a search for alternative sources of water supply; and developing new city policies to address potential draught.

In total, the study would cost just less than \$60,000, funds that could come from Trinidad's water fund reserves rather than its operating budget. The council asked its staff to explore alternate sources of funding for the assessment.

While a proposal developed by GHD, the city's engineering firm, makes no mention of the Trinidad Rancheria tribe's proposed 100-room hotel project, council members struggled to focus the discussion around water alone.

"This isn't about the hotel," said councilmember Dwight Miller. "This is about whether we have enough water."

But more than a dozen who spoke at public comment redirected the discussion back to the Rancheria's controversial hotel project. Earlier this month, the project received an objection from the state Coastal Commission.

Among the commission's misgivings was whether the Rancheria could truly rely on Trinidad's water supply absent a city-approved study confirming as much.

"With all due respect, I have to tell you — I'm not buying the idea this is being done as part of a big general overall picture for this region," said one speaker. "Let's be honest: This is being driven by a request for water by the hotel."

While it objected to the plan, the Coastal Commission asked the Rancheria to resubmit the project for consideration as soon as it figures out outstanding issues, including water supply.

"Whether the city says yes or not to, the water is going to be a huge pivotal point for this (hotel's) process," the speaker said.

Another speaker, Richard Johnson, urged the council to work quickly and effectively.

"It's very, very important we understand the timeline of this going forward," said Johnson, a member of the citizen's group Humboldt Alliance for Responsible Planning, a functional watchdog of the hotel in its early planning.

"My concern is we will put the cart before the horse ... that we won't have the facts and data and public review ready in time for when a decision (on the hotel) needs to be made," he said.

But Trinidad Mayor Steve Ladwig and other council members emphasized that "with or without" the hotel, studying the Luffenholtz Creek's effectiveness as a water source is crucial for a distant future with an uncertain environment.

"We cannot extract water to the point of it running dry," Ladwig said. "During low flows, the city simply cannot get to a point where we can't expect water."



Lost Coast Outpost 6/27/2019

# Humboldt County Joins North Coast Coalition Seeking to Take Over the Potter Valley Project, Which Diverts Water from the Eel River



*Scott Dam at Lake Pillsbury — a key component of the Potter Valley Project. | Photo courtesy PG&E.*

The following press release was issued by Craig Tucker, a private consultant who works with the county on river-related matter:

On Friday, June 28th, a diverse partnership between a conservation organization and several public agencies will file a joint Notice of Intent (NOI) with the Federal Energy Regulatory Commission (FERC) stating that they plan to apply for a permit to take over operations of the Potter Valley Project (Project).

**California Trout (CalTrout), Mendocino Inland Water and Power Commission, Sonoma County Water Agency (Sonoma Water) and the County of Humboldt** are working together to set a path forward for the Project that will meet the needs of water users throughout the region while improving conditions for native species in the Eel River watershed. The move comes after PG&E announced in January that it would not seek a new license for continued operation of the Project.

The NOI highlights the goals of the Potter Valley Project ad hoc committee, convened by Congressman Jared Huffman (D-San Rafael), and includes restoration of fisheries and a dependable supply of water in both the Eel and Russian River basins. One key tenet of the filing is that it includes a plan to create a new regional entity that could assume operations of the Project once a new license is granted.

“I am glad to see this major step toward a broad coalition pursuing a two-basin solution, consistent with the co-equal goals and principles we have developed through my Potter Valley Project ad hoc group,” said Rep. Huffman. “This is the type of multi-stakeholder collaboration that I have been advocating for these past two years, and I remain committed to working with stakeholders in both basins to seize this historic opportunity to modify the Potter Valley Project to provide fish passage and habitat solutions while also ensuring greater certainty and reliability for regional water supplies.”

Since 2018, Congressman Huffman has led an effort to identify a two-basin solution that would dictate future operations of the Project. Rep. Huffman’s effort included forming an ad hoc committee made up of local and regional stakeholders. The NOI that will be filed tomorrow signals a start to the process of filing a joint application to take over operations of the Project under the principles defined through the ad hoc committee’s work.

The Project is a hydroelectric facility that, in addition to generating a small amount of electricity, delivers water from the Eel River basin into the Russian River basin. It is currently owned and operated by PG&E, which announced in January 2019 that it would not seek a new hydroelectric license from FERC for the Project. The main facilities are two dams on the Eel River, a diversion tunnel and a hydroelectric plant.

On March 1, 2019, FERC issued a Notice Soliciting Applications for any party interested in filing an application for a new license for the Project after PG&E declined to apply to renew its license. The deadline for filing an application (NOI) is July 1st, 2019.

Sonoma County Supervisor and Sonoma Water Director James Gore said, "Submitting a Notice of Intent with our Planning Agreement partners on the Potter Valley Project is the best option toward a two-basin solution that ensures water supply reliability, continues and protects critical habitat and fisheries restoration, provides some certainty in the FERC process, and continues the collaborative process given all of the diverse interests in the region."

The four project partners are working within a Project Planning Agreement which details the funding, studies and legislative action required to move forward with a joint NOI, including:

The Planning Agreement: All four entities have signed onto the [Project Planning Agreement](#).

The Notice of Intent will be conditioned upon the completion of a Feasibility Study, including the creation of a regional entity, which will ultimately become the license applicant. All four entities will contribute \$100,000 each toward funding the Feasibility Study. The Planning Agreement does not commit any entity to acquire or hold the license.

"CalTrout is committed to ensuring that future operations of the Potter Valley Project create the conditions under which native Eel River steelhead and salmon can thrive in the context of a two-basin solution," said California Trout Executive Director Curtis Knight. "The Eel River was once an incredibly productive watershed, and it holds

tremendous promise for returning salmon and steelhead to abundance. Our objective is to identify a long-term, sustainable and realistic plan for the future of the Project.”

Janet Pauli, chair of the Mendocino County Inland Water and Power Commission, said “The Mendocino County Inland Water and Power Commission is pleased to be a partner with CalTrout, Sonoma Water and Humboldt County in a process that will result in a new license for the Potter Valley Project. Completion of the NOI underscores our commitment to work together to undertake a feasibility study that will outline a licensing proposal. The co-equal goals of securing water supply reliability and comprehensive fishery restoration in both the Eel and Russian Rivers are the driving force behind this unique regional collaboration. I am confident that, by working with our partners, we will succeed in attaining both of these important goals.”

Humboldt County Supervisor Estelle Fennell was similarly pleased. “We believe that we can find a win-win solution where we advance Eel River fisheries restoration to the benefit of Humboldt’s Tribal, sport, and commercial fishermen while being sensitive to the water supply needs of communities in Humboldt as well as our neighbors to the south,” said Supervisor Fennell.

For more information about the Potter Valley Project and Congressman Huffman’s ad hoc committee working toward a two-basin solution, please visit <http://pottervalleyproject.org>.

## Newsom Catches Heat for Using Climate Funds on Drinking Water Plan

Kevin Stark KQED Science

Jun 19, 2019

California lawmakers are poised to fund the cleanup of dirty drinking water in the state's poorest communities — a problem most everyone agrees needs to be addressed.

'I would caution that every worthy cause should not be financed through this fund.' State Sen. Bob Wieckowski, D-Fremont

Not everyone, however, agrees on where the money should come from to pay for it.

The issue? The Legislature wants to use revenue from California's cap-and-trade climate change program, which was created to reduce greenhouse gases in the atmosphere by making companies pay for the right to emit them.

The money the program generates is required by law to go toward programs that reduce the planet-warming gases. While that mandate hasn't stopped lawmakers in the past from allocating funds to projects that are, arguably, only marginally related to greenhouse gas reduction, it could leave the funding for water cleanup open to a legal challenge.

State attorneys made that clear to the Legislature last year in a legal opinion asserting cap-and-trade money can, for the time being, only be spent "for purposes that reasonably relate to the reduction of [greenhouse gas] emissions."

The Legislative Counsel prepared the opinion for state Sen. Bob Wieckowski, the chair of the subcommittee that oversees the cap-and-trade program.

He voiced his frustration with the state's plan to spend the funds on water cleanup on the Senate floor last week, saying it "further weakens the integrity of our Greenhouse Gas Reduction Fund."

"AB 32 requires the Governor and the Legislature to only use revenues from the auctions of Cap and Trade for programs that reduce carbon emissions into our atmosphere," Wieckowski said. AB 32 is California's landmark climate change law, which sets targets for reductions in the state's greenhouse gas emissions.

"Obviously, this does not bode well for future GGRF budgets," he said.

While AB 32 was set to expire in 2020, the Legislature passed an extension through 2030 two years ago.

That bill, AB 398, also removes the limits on how cap-and-trade money is spent as of Jan. 1, 2021, according to the Legislative Counsel's opinion. The analysis attributes the freeing of those funds to the way AB 398 was written and because of its passage by a supermajority, both of which transformed cap-and-trade revenue from a fee, designated for specific use, into a tax, available for general spending.

Wieckowski said on the Senate floor he was worried about how cap-and-trade money might be "broadened to include other uses" after 2021.

"I would caution that every worthy cause should not be financed through this fund," he said. "We have been instructed by the scientific community that our window is closing, and we may even be at the point of no return on permanent, irreversible climate consequences."

But the Newsom administration doesn't see it that way.

Kate Gordon, director of the Governor's Office of Planning and Research, said it's time for California to stop thinking about climate issues in a "segregated budget box" with separate policies for reducing emissions and addressing climate impacts.

She said the administration is looking to integrate climate considerations into housing, fire management and water policy. "I don't think that's a bad thing," she said.

"The governor's focus on putting new funds into the infill infrastructure fund is a climate policy, because it's about building housing in denser areas so people drive less," she said. "That's climate policy. How do we think about fire management as a climate policy? How do we think about water movement as a climate policy?"

### **Clean Drinking Water**

Across California, about a million people lack access to safe drinking water, even though the state has spent \$3 billion since 2010 to solve the problem.

For years, state lawmakers have fought over plans to address the issue.

Earlier this year, Gov. Gavin Newsom proposed a tax on water bills that would fund programs to rebuild broken drinking water infrastructure in some of the state's poorest communities.

But the Legislature didn't approve the plan, with some lawmakers worried that their constituents wouldn't accept a new monthly tax given the state's huge budget surplus. (The political peril entailed in voting for new taxes was driven home last June, when Orange County voters recalled Democratic state Sen. Josh Newman after his vote to increase the gas tax.)

So instead of the new water tax, lawmakers crafted a compromise that includes \$100 million from cap-and-trade revenue and \$33.4 million from the general fund. A trailer bill also seeks to use 5% of the cap-and-trade proceeds, up to \$130 million annually, for clean water projects until 2030.

Danny Cullenward, an energy economist and a member of the cap-and-trade oversight committee, said the new plan marks a "real shift," and not for the good.

"We are moving towards something that very clearly is not about climate," he said. "It's about water quality and it's about water access. It's not really about reducing greenhouse gas emissions."

The Newsom administration originally argued the expenditure on the water plan is in compliance with the cap-and-trade directive because trucks will no longer have to deliver bottled water to people whose tap water is undrinkable, and so will reduce emissions.

Cullenward, who in addition to being on the cap-and-trade oversight committee is the policy director for the climate group Near Zero, said that's a stretch.

"This is getting much closer to the line, if it's not over the line," he said.

But Gordon, who also advises Newsom on climate issues, said the water plan would also replace the existing water delivery system with one that's more energy efficient.

“A massive amount of our energy goes into moving water, and making that more efficient would have a huge impact,” she said. “If you’re not resilient, then your systems fall apart. We have a climate impact that’s creating this situation and we need to solve this situation in a way that reduces emissions.”

The water expenditure is just the latest appropriation to rile critics of the way cap-and-trade money is spent. Former Gov. Jerry Brown drew criticism when he spent more than \$1 billion from the fund on the state’s beleaguered high-speed rail project. More questionable was Brown’s 2013 diversion of \$500 million cap-and-trade dollars to help balance the state’s budget, although the money was eventually repaid. Last week the Los Angeles Times published an editorial saying that lawmakers are turning cap-and-trade revenue into a “slush fund.”

### **Enviro Groups Split**

The debate over using cap-and-trade funds on clean drinking water has split the environmental community.

Some of the state’s largest environmental groups, such as the Sierra Club, argue that the program should primarily be used to stave off the worst impacts of climate change by curbing emissions. Kathryn Phillips, director of the Sierra Club California, told CALmatters that the money for the water project should have been taken out of the general fund instead of cap-and-trade.

But environmental justice groups have fought cap and trade for years, arguing that it allows industry to pay to pollute in communities already burdened with pollution. These groups have also advocated that any funds from the program be used to meet the needs of communities most impacted by dirty air.

“That includes places like Fresno and the Central Valley, where they are struggling not only with toxic drinking water, but also some of the worst air quality in the state,” said Marie Choi, spokesperson for Asian Pacific Environmental Network. “For us, solutions aren’t about carbon counting, it’s about making our neighborhoods and people healthy and whole again.”

For the last three years, Leadership Counsel for Justice and Accountability, an advocacy group for lower-income communities, pushed state lawmakers to approve a water tax, with the money going to pay for clean water programs in the San Joaquin and Coachella valleys, among other areas.

These places are most impacted by the hot, dry conditions exacerbated by climate change, the group argues, and in light of the tax plan’s failure, the group wants to see the current proposal to use cap-and-trade money enacted.

“Drought in particular has impacted drinking water quantity and quality,” said Phoebe Seaton, the group’s co-director. “We have seen since the Greenhouse Gas Reduction Fund’s inception the link between drinking water and climate, from an adaptation side and from a climate mitigation side,”

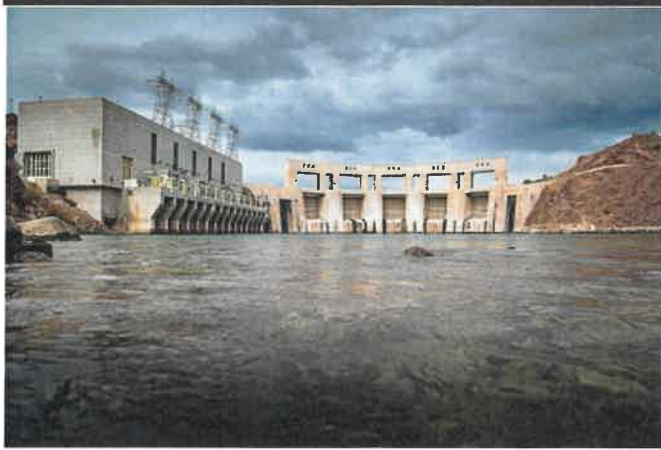
When Newsom presented his May budget revision, he defended his proposed tax on water bills, saying it would be a “proud day, when the Legislature and the governor can align on providing a basic fundamental right. That’s clean and drinkable water at an affordable price for the most vulnerable Californians.”

But even then, he signaled an openness to alternatives. “I’m not consumed by process, but by outcome,” he said in answer to a reporter’s question. “But we will get to a solution.”

# A Clean Sweep for Invasive Mussel Biofouling

07/01/2019 | Sonal Patel

Power



*The rapid proliferation of dreissena rostriformis bugensis—the quagga mussel—has major implications for power plant reliability. The U.S. Bureau of Reclamation installed a groundbreaking solution at Parker Dam in Arizona that virtually eliminated the invasive species from hydropower cooling systems. Parker Dam is the winner of POWER’s 2019 Water Award.*

While the creamy-hued, thumbnail-sized quagga mussel may look innocuous, its menace cannot be overstated. A mature female mussel can produce more than one million eggs per year, and in warmer waters of the Western U.S., they can spawn year-round. Eggs develop into microscopic larvae known as “veligers,” which float in the water column and can be easily transported. The damage, however, is by juvenile and adult mussels, which secrete byssal threads—small, thin fibers—and attach themselves to hard surfaces, where they form clusters, in some cases, of huge colonies up to 400 feet deep.

## POWER POINTS

### Winning Attributes

- ✓ Demonstrating at full scale a technology that eliminated the pervasive and potentially debilitating problem of mussel biofouling in hydropower cooling water systems.
- ✓ The solution could have implications for all power plants that draw water from bodies infested by quagga mussels, as well as other invasive species and bacteria that pose significant biofouling issues.
- ✓ Drastically reducing maintenance on its cooler systems and slashing associated costs.

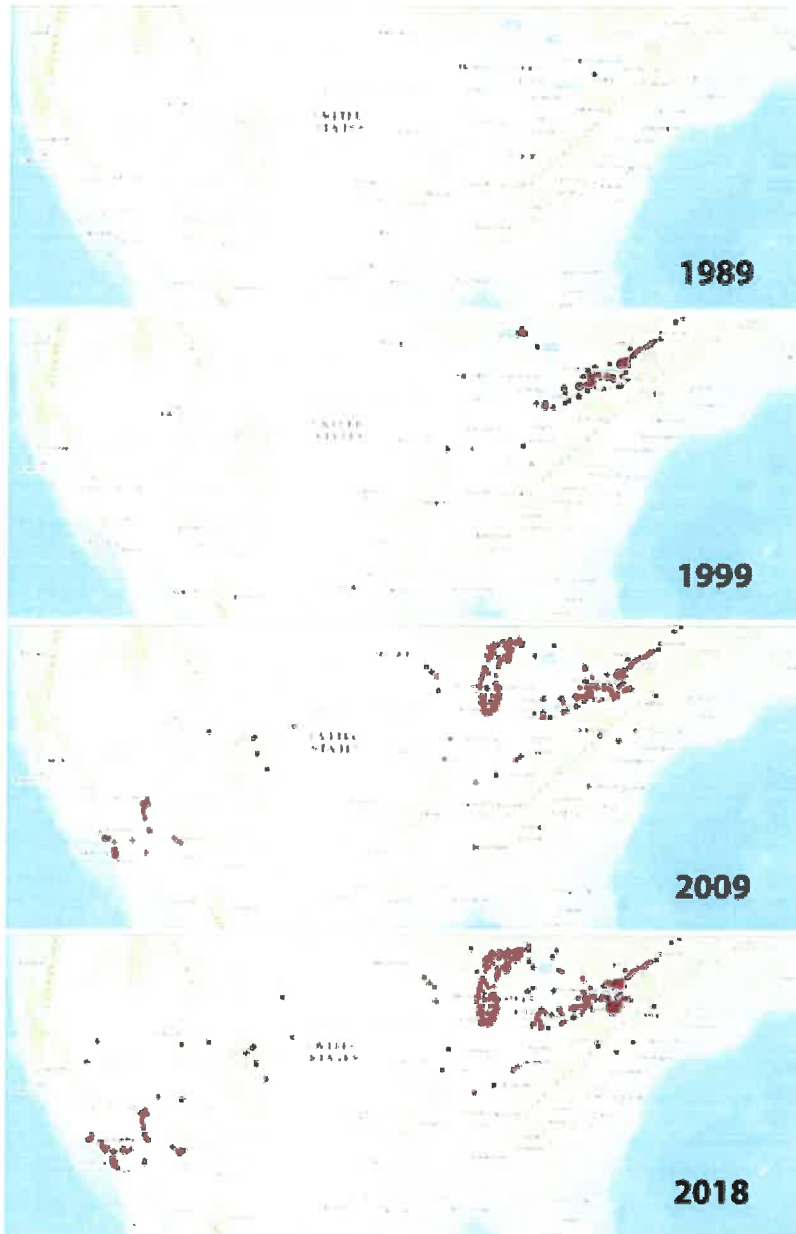
In large numbers, they pose myriad ecological risks—they can devastate aquatic biodiversity and water quality. And because they can attach to and quickly clog up water intake and delivery pipes, and foul dam intake and pipes, and the decay of dead mussels can corrode steel and cast-iron pipelines, they pose substantial economic headaches.

The trouble is that they are spreading uncontrollably, as the Department of the Interior’s (DOI’s) Bureau of Reclamation and other water body governing federal agencies have repeatedly warned over the years. Indigenous to the Ukraine, the small freshwater bivalve mollusks were first observed in New York in 1989, likely introduced by ballast waters from European ships. By 1992, the species that is highly polymorphic—it can rapidly adapt to extreme environmental conditions—had spread to the Great Lakes. And by the late 1990s, they

were in major waterways in Wisconsin, Missouri, and Iowa. In 2007, despite desperate,



coordinated initiatives by states and the DOI to prevent their spread west of the 100th Meridian, they began rapidly colonizing the Colorado River Basin, infesting Lake Mead, and then Lake Powell, Lake Havasu, Lake Mohave, and other substantial waterbodies that provide integral water and power supplies across Arizona, Nevada, Utah, and California.



*Quagga mussels have spread widely and rapidly across Europe and North America from their native ranges in the Ponto-Caspian region. The red dots in these images, which are captures from a USGS animated map, show how quickly the invasive species has spread across the U.S. Invasions have had catastrophic impacts in the ecosystems in which they have established, and they pose economic headaches when they clog water intake structures, which greatly increases maintenance costs for water treatment and power plants. Source: USGS. *Dreissena rostriformis bugensis*. animated map (1989-2018).*

Between 1993 and 1999, mussel infestations (both of quagga and zebra) cost the power sector in the Great Lakes region a stunning \$3.1 billion. Cause for alarm in the West is more pronounced because warmer waters dramatically ramp up reproduction rates, as Leonard Willett, a water

treatment specialist at aquatic invasive species control firm RNT Consulting, told *POWER* in May. “In the Great Lakes, it took mussels two to three years to start plugging up power plants and cooling water systems, while in the Lower Colorado River, by the end of 2007—less than 12 months after they showed up—our systems were plugged,” he said.

## Invading a Power Plant

At Parker Dam on Arizona’s Lake Havasu—a warm and nutrient-rich water body that has the largest mussel population in the region—the infestation has quickly morphed beyond a nuisance. The concrete arch structure—the “deepest dam in the world”—is outfitted with a 120-MW plant to power a crucial water pumping plant owned by the Metropolitan Water District of Southern California, as well as other users in California, Nevada, and Arizona.



1. A Parker Dam heat exchanger that was pulled for maintenance before the Hydro-Optic ultraviolet (HOD UV) treatment implementation (left), and the same unit, exposed for the same time and similar conditions, after treatment with HOD UV (right). Courtesy: Parker Dam staff/Bureau of Reclamation

Parker’s power plant includes a penstock gate structure, four penstock tunnels, and a building that houses four 30-MW units, each which discharge up to 22,000 cubic feet/second, as Parker Dam’s Operation and Maintenance Supervisor Marcus Dickerson told *POWER* in May. “Each generator has a separate cooling system that draws off its own penstock, and when the unit is started up to run, a motor-operated valve—an air-operated valve in this case—opens up and draws off water from the penstock,” he explained. “When we were performing our annual maintenance and our routine maintenance, [the quagga mussels] were showing up in strainers in greater and greater numbers, and when we performed cooling maintenance, they were showing up in the air-coolers.”

The self-cleaning strainer at the head of the cooling system, which the five-man maintenance crew of hydroelectric mechanics typically cleaned annually, began requiring monthly cleanings, he said. “Also, our raw water strainer and other strainers going into cooling systems throughout the plant—for our service water—were having to be flushed weekly, and the strainer baskets dumped weekly.”

And more alarmingly, the crew began to see a more-urgent need to shut down units to remove and manually scrub unit heat exchangers because they had been rendered increasingly inefficient by mussel fouling. “Removing coolers, removing the end caps, cleaning them all out, resealing them, putting them back together, and reinstalling them is not easy,” Dickerson noted. Efforts soon grew costly. Reclamation estimates annual maintenance costs to control the mussels at the 16 coolers alone soared by \$80,000.

### **Searching Desperately for an Environmentally Safe Solution**

Wary of the mussels’ potentially devastating impacts and fearing a vast infestation, the moment quaggas were detected at Lake Mead in 2007, Reclamation sprung into concerted action to control them. Among its first actions were to commission a task force to ensure the species did not affect power generation at the Lower Colorado Region’s Hoover, Davis, and Parker dams. Leading that task force was Willett in his former role as an environmental compliance manager at Hoover Dam. Solutions scrutinized over the task force’s eight-year study period included more than 100 coatings and materials to address biofouling on submerged substrates—including intake screens, trash racks, internal surfaces of large-diameter piping, and associated hydraulic equipment, he said.

In the end, Reclamation settled on ultraviolet (UV) treatment as the most viable and cost-effective solution, and in 2013, it selected the Hydro-Optic (HOD) UV system supplied by Atlantium Technologies Inc. as the preferred treatment option to supplement operational and mechanical activities already in place at the Hoover, Davis, and Parker dams. As Willett explained, UV irradiation is thought to physically prevent settlement of veligers, and it doesn’t need discharge permitting and has no detrimental environmental effects. “We chose [the technology] having done research on traditional UV,” he said. “The biggest difference was Atlantium’s HOD offered, with its proprietary properties, a much lower ability dose-wise to control the mussel larvae from settlement,” he said. “If you can lower the dose, then you have lower energy, lower maintenance, lower intensity—everything is at a lot lower cost.”

### **A Simple Solution**

Reclamation moved quickly, first testing a full-sized medium-pressure HOD UV system in four low doses—100, 50, 40, and 20 millijoules per square centimeter ( $\text{mJ}/\text{cm}^2$ )—on a cooling water line at Davis Dam Unit 3. That unit, which is still operational, contains six medium-pressure UV lamps with a maximum power of 4.2 kW each. In the two-year-long study, all doses showed, albeit to varying degrees, they can prevent veligers before they grow to adulthood and cause blockages. In December 2015, Reclamation initiated a full-scale two-year-long study at Parker Dam, installing and commissioning HOD UV systems on each of the four main turbine cooling

water lines downstream of the self-cleaning strainer. An additional system provided biofouling protection for the raw water supply of the on-site water treatment facility.

The four Parker Dam units on the cooling water lines deliver about 100 mJ/cm<sup>2</sup>, though doses vary based on water flow rate, UV transmittance (UVT)—which is a factor of water clarity—and lamp intensity. “Installation was fairly simple,” Willett noted. “The HOD UV units were horizontally installed into the existing 14-inch piping.” The system includes an electrical cabinet and a control panel outfitted with sensors. “Each UV system accommodates a flow rate of 454 cubic meters per hour (1,600 gallons per minute) for water quality conditions with UVT as low as 85%,” he said. “The HOD UV system uses a total internal reflection-based design that—when coupled with the comprehensive monitoring of such critical parameters as flow rate, UV lamp intensity, and UVT percentage—allows the system to achieve and maintain the specified UV dose.”

As part of the cooling water improvement, however, Parker Dam also chose to replace existing raw water piping, owing to excessive corrosion. The four HOD UV systems on their own cost Parker Dam about \$462,500 to install. According to Willett, with proper maintenance and operation the system is expected to last a minimum of 20 years. Atlantium performs all routine, semi-annual, and annual maintenance under a turnkey contract. Maintenance mostly involves changing out bulbs, which last roughly four to six months, and cleaning internal reflectors.

## **A Notable Achievement**

For Dickerson, the payoff has been huge. Despite needing an initial optimization phase, within the first year, biofouling-related maintenance of the coolers was reduced by 75%, and it was virtually eliminated in the second and third years. And more significantly, “We have not experienced any outages or degeneration due to quagga mussels since the installation,” he said.

Meanwhile, as a notable bonus, the HOD UV system at Parker Dam demonstrated it can also reduce settlement of native freshwater sponge, colonial hydroids, and bacteria-based micro-fouling, which have all been pervasive concerns. Dickerson also hailed the technology’s virtual elimination of most biofilm, including of a black sludge that consists primarily of cocci and rod bacterial cells.

Willett, meanwhile, lauded HOD UV technology’s vast potential across the power landscape, including at thermal and hydropower facilities that draw waters from bodies where quagga mussel infestations persist. In 2018, Hoover Dam initiated a similar full-scale installation for mussel settlement mitigation, he noted. Other utilities are also installing or considering full-scale treatments in Ontario, Arizona, and North Carolina, and several others have commissioned validations of the HOD UV technology, he said.

# **CORRESPONDENCE**



## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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

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### GENERAL MANAGER

JOHN FRIEDENBACH

June 13, 2019

Board of Supervisors  
Humboldt County  
825 5<sup>th</sup> Street, Room 111  
Eureka, CA 95501

RE: Humboldt County General Plan Update, Zoning Text Amendments – AE and TPZ

Dear Board of Supervisors,

We previously submitted a comment letter dated June 6, 2019 regarding the proposed zoning text amendments for Streamside Management Areas and Wetlands, AE – Agriculture Exclusive Zones, and TPZ – Timberland Production Zones (attached) that was included in your June 11, 2019 Board Packet. Since only the text amendments for the Streamside Management Areas and Wetlands were considered at your June 11<sup>th</sup> meeting, and the text amendments for the AE and TPZ will be considered at your June 18<sup>th</sup> meeting, we would like to have this June 6, 2019 letter included in the public comment for your June 18<sup>th</sup> meeting.

In general, the Humboldt Bay Municipal Water District (the District) is concerned about the cumulative effects of increased industrial activities within the Mad River watershed and the potential impacts to our water quality that the District provides to approximately 88,000 residents of Humboldt County. Zoning text amendments that expand and broaden the principally permitted industrial uses should be weighed against the environmental and health threats inherent in those activities and whether it is in the public's interest and welfare to expand those activities in environmentally sensitive areas. Further, some of the proposed amendments are inconsistent with the General Plan and their impacts may not have been studied in the EIR. Table 4-G shows that surface mining is an incompatible use under AE or TPZ. It is unclear whether the impacts of allowing oil and gas drilling and processing, mineral mining, and surface mining in TPZ were studied in the EIR.

The District believes that protecting water quality, which is one of the stated primary purpose of establishing standards within the County's General Plan, should receive a higher priority during your deliberations regarding the proposed zoning text amendments.

Respectfully,

  
John Friedenbach  
General Manager

Cc: John Ford, Director Planning and Building  
Anne L. Baptiste, Thomas Law Group



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MICHELLE FULLER, DIRECTOR

### GENERAL MANAGER

JOHN FRIEDENBACH

June 6, 2019

Board of Supervisors  
Humboldt County  
825 5<sup>th</sup> Street, Room 111  
Eureka, CA 95501

### RE: Humboldt County General Plan Update, Zoning Text Amendments

Dear Board of Supervisors,

This letter addresses the Humboldt Bay Municipal Water District's (District's) ongoing concerns with the General Plan Update, Zoning Text Amendments to be discussed at your June 11 and June 18, 2019 Board of Supervisors' Meetings. The District has raised concerns regarding the zoning text amendments in multiple prior correspondence with the Planning Department and/or Planning Commission, including comments submitted by email on March 21, 2019 and a comment letter on April 3, 2019. Nether correspondence was included in any of the three Planning Commission agendas for the zoning text amendments. Our April 3, 2019 letter is attached for reference as **Attachment A**.

The District operates four intake wells along the Mad River where it collects groundwater to provide drinking water to over 88,000 customers in Humboldt County. Immediately adjacent to the wells is APN 504-161-010-000, also known as the Mercer Fraser property, wherein mining, and other unpermitted activities such as processing and storage occur. These activities pose a continuing threat to our community's health and water security, and the District continues to be concerned that the zoning ordinance will be revised to summarily permit previously unpermitted activities or prior potentially illegal activities rather than be used as a forward-looking tool to adequately protect the health, safety, and welfare of your constituents.

The District understands that the Board will only be considering zoning text amendments at this point. However, to the extent that the zoning text amendments will affect the Mercer Fraser property and other properties along the Mad River watershed, the District continues to object to the proposed revisions for Sections 314-61.1 "Streamside Management Areas and Wetlands," 314-7.1 "AE – Agriculture Exclusive Zone," and 314.7.4 "TPZ – Timberland Production Zones," as discussed in further detail below.

**1. The District Opposes Amendments to Section 314-61.1 “Streamside Management Areas and Wetlands,” Scheduled to be Reviewed at the June 11, 2019 Board of Supervisors’ Meeting**

On April 4, 2019, the Planning Commission recommended that the Board of Supervisors adopt the zoning text amendments for Group 2. These include the proposed revisions to Section 314-61.1 “Streamside Management Areas and Wetlands.” For the reasons discussed below, the District continues to oppose the revisions to section 314-61.1.

As stated in the second bullet point under Section 314-61.2, the Purpose of establishing the standards are to:

- Implement portions of the County’s General Plan policies and standards pertaining to open space, conservation, housing, **water resources**, biological resources and public facilities. (Emphasis added)

Per the revisions, development and use limitations applicable to streamside management areas in 314-61.1 do not apply to mining operations. Added Section 61.1.9.2.5 provides “Development within Streamside Management Areas shall be limited to the following: ... Normal, usual and historical agricultural and surface mining practices and uses which are principally permitted within the SMA *shall not be considered development for the purposes of this standard.*” (Emphasis added.) There is no reason not to apply the streamside management protections to mining operations where, as a preliminary matter, the zone is established to abate erosion, runoff, and debris and encourage vegetation. These goals are at odds with this carte blanche permission to allow mining operations in the zone. Further, the term “historical” is vague; a plain reading shows that it would allow mining operations that operated at any time in the past on the site, whether permitted or not. Finally, there is no limitation on the size of such an operation, so any current or historic use could be expanded without any review. If mining operations are to be permitted in the zone at all, such use should be appropriately analyzed and permitted by the County via individual application. The District therefore opposes this change as currently drafted.

**2. The District Opposes Amendments to Sections 314-7.1 “AE – Agriculture Exclusive Zone” and 314.7.4 “TPZ – Timberland Production Zones,” Scheduled to be Reviewed at the June 18, 2019 Board of Supervisors’ Meeting**

Based on the District’s review of the Planning Commission’s recommendations during the March 21, April 4, and April 18, 2019 meetings, it appears no recommendation was made with respect to the proposed amendments to Sections 314-7.1 “AE – Agriculture Exclusive Zone” and 314.7.4 “TPZ – Timberland Production Zones.” The District requests that Planning Staff clarify what was actually considered and approved by the Planning Commission and, therefore, is under consideration for approval by the Board of Supervisors in the agendas for the June 11 and June 18, 2019 Board of Supervisors’ Meetings. The District continues to oppose the proposed revisions to Sections 314-7.1 “AE – Agriculture Exclusive Zone” and 314.7.4 “TPZ – Timberland Production Zones,” as discussed below, to the extent that the amendments are still being considered by either the Planning Commission or the Board of Supervisors.

Section 314-7.1 “AE – Agriculture Exclusive Zone” adds surface mining as a use permitted with a use permit in the AE zone. This is inconsistent with the Humboldt County General Plan Table 4-G. In approving the General Plan, the County determined that surface mining is not a use compatible with the



County's vision or interests and, thus, made the decision not to permit surface mining in AE. To approve the proposed zoning text amendment would be directly contrary to the County's General Plan. The District therefore opposes this change.

Section 314-7.4 "TPZ – Timberland Production Zones" adds oil and gas drilling and processing, mineral mining, and surface mining as uses permitted with a use permit in TPZ-Timberland Production Zones. It is unclear whether the impacts of allowing these uses were studied in the EIR. The District is concerned that the potential environmental impacts of oil and gas drilling in the Mad River watershed could negatively impact water quality and that those potential impacts have not been adequately analyzed or mitigated. The District therefore opposes this change as currently drafted.

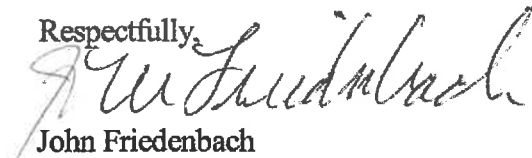
### **3. The Zoning Text Amendments are not in the Public Interest**

The zoning text amendments must be in the public interest to be adopted. (Humboldt County Code, § 312-50.3.1.) The finding that the proposed amendments are in the public interest is solely premised on the need to make the zoning ordinance consistent with the General Plan. However, to the extent the proposed revisions allow changes in uses that may detrimentally impact drinking water quality, they are not in the public interest. Accordingly, adopting revisions to the abovementioned sections would neither be in the public interest nor support a finding that the amendments are in the public interest.

\*\*\*

We look forward to working with you on addressing these concerns before the zoning text amendments as currently drafted are approved. Thank you for considering our comments and concerns.

Respectfully,



John Friedenbach  
General Manager

Cc: Anne L. Baptiste, Thomas Law Group  
John Ford, Director, Humboldt County Planning & Building

# Attachment A



## HUMBOLDT BAY MUNICIPAL WATER DISTRICT

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MICHELLE FULLER, DIRECTOR

### GENERAL MANAGER

JOHN FRIEDENBACH

April 3, 2019

Humboldt County Planning Department

John Ford Director

Via Email: [JFord@co.humboldt.ca.us](mailto:JFord@co.humboldt.ca.us)

### Re: Humboldt County Zoning Language Updates

Dear Mr. Ford,

This letter addresses the Humboldt Bay Municipal Water District's renewed concerns with the General Plan Update, Zoning Text Amendments to be discussed at your April 4, 2019 Planning Commission meeting. We operate four intake wells along the Mad River where we collect groundwater to provide drinking water to over 88,000 customers in Humboldt County. Immediately adjacent to the wells is APN 504-161-010-000, also known as the Mercer Fraser property, wherein mining, and other unpermitted activities such as processing and storage occur. This poses a continuing threat to our community's health and water security and the District continues to be concerned that the zoning ordinance will be used to summarily permit previously unpermitted activities or prior potentially illegal activities rather than being a forward-looking tool to adequately protect the health, safety, and welfare of your constituents.

We understand that you are only considering text amendments at this point. However, to the extent that the text amendments will affect the Mercer Fraser property and other properties along the Mad River watershed, we have the following objections and concerns.

1. Section 314-7.1 adds surface mining as a use permitted with a use permit in the AE zone. This is inconsistent with the Humboldt County General Plan Table 4-G. In approving the General Plan, the County determined that surface mining is not a use compatible with the County's vision or interests and, thus, made the decision not to permit surface mining in AE. To approve the proposed zoning text would be directly contrary to the County's General Plan. We oppose this change.
2. Section 314-7.4 adds oil and gas drilling and processing, mineral mining, and surface mining as uses permitted with a use permit in TPZ-Timberland Production Zones. It is unclear whether the impacts of allowing these uses were studied in the EIR. The District is concerned that the potential environmental impacts of oil and gas drilling in the Mad River watershed could negatively impact water quality. We oppose this change.
3. The limitations applicable to streamside management areas in 314-61.1 do not apply to mining operations. Section 61.1.9.2.5 provides "Development within Streamside Management Areas shall be limited to the following: ... Normal, usual and historical agricultural and surface mining practices and uses which are principally permitted within the SMA shall not be considered development for the purposes of this standard." There is no reason not to apply the streamside management protections to mining operations where, as a preliminary matter, the zone is established to abate erosion, runoff, and debris and encourage vegetation. These goals are at odds with the carte blanche permission to allow mining operations in the zone. Further, the term "historical" is vague; a plain reading shows that it would allow mining operations that operated at any time in the past on the site, whether permitted or not.

Finally, there is no limitation on the size of such an operation so any current or historic use could be expanded without any review. If mining operations are to be permitted in the zone at all, such use would be appropriately analyzed and permitted by the County via individual application. We oppose this change.

We have raised these concerns multiple times in previous correspondence with the Planning Department and/or Planning Commission. We specifically submitted written comments via email March 21, 2019, albeit the day of the meeting, comments that were excluded from the staff report prepared for your April 4<sup>th</sup> meeting on these issues.

We look forward to working with you on addressing these concerns before the text amendments are approved. Thank you for considering our comments and concerns.

Respectfully,

  
John Friedenbach  
General Manager

Cc: Leslie Walker, Thomas Law Group  
John Miller, Senior Planner, Humboldt County Planning & Building



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MICHELLE FULLER, DIRECTOR

### GENERAL MANAGER

JOHN FRIEDENBACH

June 28, 2019

Frank Blackett, Regional Engineer  
Federal Energy Regulatory Commission  
Division of Dam Safety and Inspections-S.F. Regional Office  
100 First Street, Suite 2300  
San Francisco, CA 94105-3804

### RE: R.W. Matthews Dam (Project No. 03430-CA) – Complete Five Year Reprint of the Emergency Action Plan

Dear Mr. Blackett,

Every five years, the FERC requires a complete reprint and issuance of the Emergency Action Plan (EAP). The five year reprint of the EAP for R.W. Matthews Dam was due on December 31, 2018. Our District requested and received an extension from FERC to submit our EAP by June 30, 2019 in order to incorporate changes needed to comply with new California regulations (*SB 92 Committee on Budget and Fiscal Review & Section 8589.5 of the California Government Code*). FEMA's *Federal Guidelines for Dam Safety: Emergency Action Planning for Dams* was used as a reference in updating the EAP.

3 copies of the reprinted EAP are included in this mailing. Some of the changes include:

- Updated cover pages for key dam location and contact information.
- Updated Distribution List to reflect four additional binders in circulation.
- Updated Notification Flowcharts, including a third flowchart for "High Flow/Non-Failure Emergencies."
- Updated HBMWD Response Plan.
  - New section of reference tables and forms.
  - Updated inundation maps with a Critical Appurtenant Structure (CAS) failure scenario.
- Updated versions of Trinity County's and Humboldt County's Emergency Operations Plans.
- Updated Appendices five, six, and eight.

Please use these new binder to replace your EAPs from February 2014. If you have any questions, please do not hesitate to call our office at (707) 443-5018.

Respectfully,

Samantha Ryan  
Program and Regulatory Analyst



SECTION G3 PAGE NO. 1  
**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

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**GENERAL MANAGER**

JOHN FRIEDENBACH

July 3, 2019

The Honorable Bob Wieckowski  
California State Assembly  
State Capitol  
Sacramento, CA 95814

**RE: Senate Bill 13 (Wieckowski) – Opposition Removed [As Amended July 1, 2019]**

Dear Senator Wieckowski:

The Humboldt Bay Municipal Water District wishes to notify you we have withdrawn our opposition to SB 13, relating to accessory dwelling units (ADU's).

Impact fees are an important tool for special districts to provide services, infrastructure, and quality of life for local communities. As amended on March 13, the bill would have prevented public agencies from assessing connection fees and capacity charges on newly constructed ADUs. The amendments in print on July 1 removed this prohibition. HBMWD has no further concerns with the bill and will remove our opposition.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "John Friedenbach".

John Friedenbach  
General Manager

cc:: Francisco Montes, Office of Senator Bob Wieckowski [[francisco.montes@sen.ca.gov](mailto:francisco.montes@sen.ca.gov)]

Asemblymember Jim Wood ([assemblymember.wood@assembly.ca.gov](mailto:assemblymember.wood@assembly.ca.gov))

Senator Mike McGuire ([thomas.witzel@sen.ca.gov](mailto:thomas.witzel@sen.ca.gov))

Rylan Gervase, Legislative Representative, California Special Districts Association [[advocacy@csda.net](mailto:advocacy@csda.net)]

Kris Anderson, ACWA Legislative Advocate ([krisa@acwa.com](mailto:krisa@acwa.com))



GAVIN NEWSOM  
GOVERNOR



JARED BLUMENFELD  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

**North Coast Regional Water Quality Control Board**

June 6, 2019

Carol Rische  
Humboldt Bay Municipal Water District  
P.O. Box 95  
Eureka, CA 95502

H.B.M.W.D. JUN 10 2019

Dear Ms. Rische:

**Subject: No Further Action**

**File: Humboldt Bay Municipal Water District Pump Station #3  
Case No. 1NHU562**

This letter confirms the completion of site investigation and remedial actions for the above referenced location. In the course of drilling a monitoring well on April 12, 2006, near surface, hydrocarbon impacted soil was visually observed in the boring by the on-site geologist. The impacted area was in the "corporation yard" near the Humboldt Bay Municipal Water District's water collection well at Pump Station #3.

Based on the information in the above referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the discharges documented in the file is required.

If you have any questions on this matter, please contact Keith Baldanza at (707) 576-6732 or [keith.baldanza@waterboards.ca.gov](mailto:keith.baldanza@waterboards.ca.gov).

Sincerely,

  
Digitally signed  
by Charles Reed  
Date: 2019.06.06  
13:55:10 -07'00'

Water Boards  
Matthias St. John  
Executive Officer

190606\_KJB\_mc\_Humboldt\_Pump\_Sta\_NFA

cc: Mr. Norm Crawford, [NCrawford@co.humboldt.ca.us](mailto:NCrawford@co.humboldt.ca.us)

# **CONTINUING BUSINESS**



**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

To: Board of Directors

From: John Friedenbach

Date: July 3, 2019

Subject: Water Resource Planning (WRP) – Status Report

.....

The purpose of this memo is to summarize recent activities and introduce next steps for discussion.

**1) Top-Tier Water Use Options**

**a) Local Sales**

Staff met again with Nordic Aquafarms and has been providing water quality data for their due diligence process. No update from Enviva. Internal analysis of industrial system rejuvenation has been completed and will be discussed under a separate agenda item. The City of Trinidad has initiated a study of their water supply which will include a search for an alternative sources of water supply. See newspaper article on Page F2, 4-5 in your packet.

**b) Transport**

No update.

**c) Instream Flow Dedication**

Progress continues with the tasks contained in our WCB instream flow grant. President Woo, John Friedenbach and David Aladjem will have met in Sacramento with the Water Board staff on July 10<sup>th</sup> to discuss our project. Others will participate via video conferencing. We will report out about the meeting.

# Nordic Aquafarms in Humboldt County

Nordic Aquafarms seeks to keep residents and stakeholders informed and engaged as we move through the process of establishing our state-of-the-art facility in Humboldt County

## June 2019 Nordic News



### What's Going on in Humboldt?

Nordic Aquafarms is currently conducting due diligence on its proposed Humboldt County facility. The due diligence is expected to be completed by September of this year. The company expects to start permitting the facility this fall, contingent on the results of the due diligence.

Due Diligence includes a comprehensive investigation and appraisal of the site, regional infrastructure and more to ensure Humboldt County is the best location for our project.

Areas of investigation during this phase include

- Availability and condition of needed infrastructure
- Water quality
- Contamination on the site
- Seismic and tsunami assessments
- Permitting requirements including timeline, stakeholders and scope
- Site layout and plan

## Food for Thought

### Erik Heim, CEO and founder of Nordic Aquafarms



A quarter pound of beef for a hamburger takes 460 gallons of water to produce. A pound of bread takes close to 200 gallons of water. A pound of eggs takes 20 gallons. A pound of potatoes takes 100. Clearly, the food we consume requires a lot of water.

The environmental cost of our consumption should always be a key consideration because climate change is a reality. Resource-efficient food production must be a part of our answer to reverse the effects of environmental destruction.

Nordic can be a part of the solution.

For example, one gallon of local freshwater is used per 4-ounce serving of fish. This is less than 1 percent of the water consumption a similar serving of beef requires.

Nordic's facility will produce 1.6 pounds of CO<sub>2</sub> per serving of fish, which is significantly lower than most consumer meats and 1/3 the level of most trans-ocean imports of fresh seafood. Average yield figures from US statistics show that per acre per year, about 13,000 pounds of corn can be produced, about 4,000 pounds of wheat or less than one cow, which produces about 430 pounds of beef, per acre. The statistics may vary based on location and source, but the figures are broadly representative.

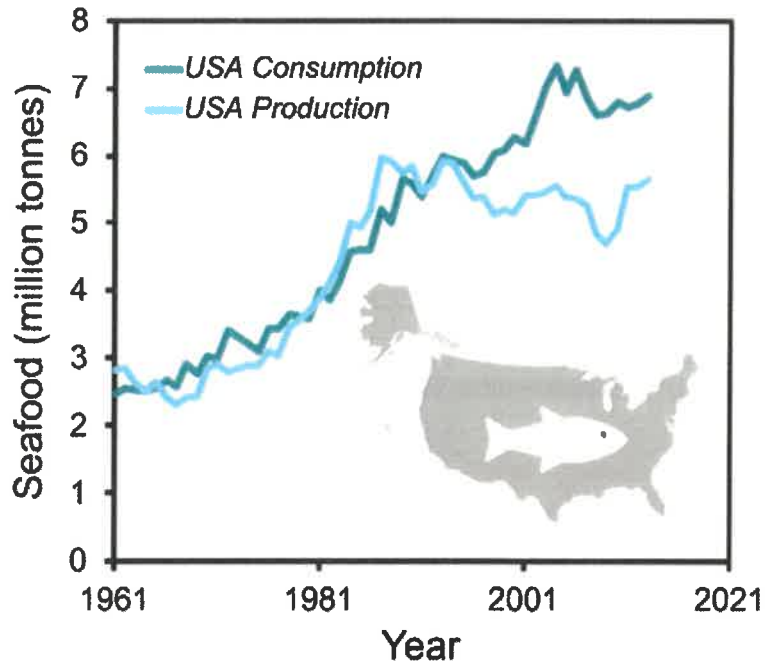
Alternatively, Nordic's planned Maine facility will produce 1.7 million pounds of gutted fish per acre per year. Innovative designs, depth of tanks, and continuous flow of fish through the system enable high yields, all while maintaining high fish welfare standards.

The demand for protein will continue to grow in the US – but Nordic can help meet this demand by adding new resource-efficient food production systems that will help counter the escalation of environmental challenges, while growing new jobs and opportunity for many. It will also enable displacement of imports, and strengthen domestic food security with fully traceable products. For those who are not ready to put insects on their menu or to go vegan, locally produced or caught seafood are green and healthy choices.

Erik A. Heim is president of Nordic Aquafarms, Inc.

## Getting Real About Food

Scientific American recently published a story focused on the growing need for aquaculture in the US. The story was written by Halley E. Froehlich, PhD, an incoming assistant professor of marine aquaculture and fishery sciences at the University of California, Santa Barbara. Froehlich also co-leads the Conservation Aquaculture Research Team at the National Center for Ecological Analysis and Synthesis.



In the story, Froehlich points out that the global demand for seafood is growing- and noted though the US is the largest seafood importer (over 50% of which is farmed), the country contributes less than 1 percent to the world's aquaculture production.

She notes that nationally we need to have more evidence-informed conversations and policies around the future of domestic aquaculture that address important philosophical questions—"namely, where do we want our food to come from and what, if any, role should we play in its production?"

She states that the narrative needs to move away from 'wild versus farmed' and toward 'wild *and* farmed.' "Let's have serious, informed conversations about the state of seafood and how the U.S. can both contribute to and benefit from sustainable Blue Growth," she said.

Read the full article [HERE](#)

Graphic: Data from FAOSTAT. Credit: Halley E. Froehlich

# Fish farms on land not best for aquaculture

By **LAWRENCE REICHARD** |

*Times-Standard*

PUBLISHED: June 27, 2019 at 12:00 am | UPDATED: June 27, 2019 at 4:28 pm

On Feb. 11, Nordic Aquafarms, a Norwegian company, announced plans to build a land-based fish farm in the former Samoa pulp mill on Humboldt Bay. Nordic Aquafarms said the operation would produce 23,000 metric tons of salmon or steelhead trout per year. With salmon currently fetching at least \$5 per kilo on commodity markets, a salmon operation would produce annual revenues of at least \$115 million, thus marking a significant increase in California's annual aquaculture production of \$200 million.

And more may be on the way.

Whole Oceans, a Maine-based company, has announced plans to build another land-based fish farm somewhere on the west coast, but no specific location has been released. Both Nordic Aquafarms and Whole Oceans are pursuing big land-based fish farms in Maine, but Nordic has run into stiff opposition in the coastal town Belfast, Maine, and its project there might not pass muster with state regulators.

U.S. seafood consumption is increasing, and much of the world's wild fish stocks are under stress from overfishing, but with the environment in general under considerable stress and the effects of climate change becoming increasingly stark, are large land-based fish farms the best way forward for aquaculture?

Evidence suggests it is not.

Both Nordic Aquafarms and Whole Oceans tout the environmental sustainability of land-based fish production, and while they may be more environmental than sea-based, open-pen aquaculture, land-based facilities do pollute and, like sea-based operations, they pose dangers to wild fish populations. Nordic's Belfast project would discharge 7.7 million gallons of relatively warm effluent and 1,600 pounds of nitrogen into picturesque Belfast Bay every day, raising the specter of algae blooms that can choke off the oxygen on which marine life depends. Nordic's Belfast operation might use as much as 1,200 gallons of fresh water per minute, potentially straining or even endangering the local aquifer and watershed.

Land-based aquaculture also poses threats to wild-fish populations. Fish can and do escape, and escaped fish can compete for prime spawning grounds, and can destroy wild-fish eggs and spawning grounds. They can also spread diseases unknown to wild fish and can breed with wild fish, creating offspring that are ill-equipped for the rigors of open-water.

Conventional aquaculture also strain stocks of forage fish, small fish that comprise part of farm-fish food. Peru, a major forage-fish producer, has had to repeatedly close

its vast anchoveta harvest because of overfishing for foreign fish farms. And when forage fish decline, populations of larger fish are imperiled.

Despite this, some Maine environmental groups have backed the project, but Sierra Club Maine, the Maine Lobstermen's Union and two newly-formed Belfast groups oppose it.

But there is an alternative, one that doesn't use any fresh water and doesn't pollute. In fact, this alternative form of Aquaculture actually renews and rejuvenates marine waters.

This alternative aquaculture, which is becoming known as the Green Wave model, named after a Connecticut nonprofit, is based on the production of kelp. But it is much more than that.

The system starts with lines of rope strung horizontally and supported by buoys on the surface of open marine water. From this run vertical lines of seeded kelp and cages that produce oysters, scallops, mussels and clams.

Kelp is a natural cleanser of marine waters, but the Green Wave model has other benefits as well. Connecticut-based Green Wave trains new "kelp farmers" and estimates kelp farm start-up costs at \$20,000. Compare that to Nordic Aquafarms' Humboldt County projection of 80 jobs for a \$400 million investment, and per dollar, Green Wave produces 250 times as many jobs. And with a base model of local, independent ownership, the Green Wave system keeps revenues and profits largely in farmers' communities.

With climate change bearing down on us all, we must redirect food production toward greener, more sustainable models. With the Green Wave aquaculture model, the technology and know-how are there to seize, and California would be well advised to do just that.

*Lawrence Reichard is a freelance writer in Belfast, Maine.*

*From Redheaded Blackbelt*

## **CDFW ASSISTED BY NATIONAL GUARD AND OTHER AGENCIES NAB NEARLY 3000 PLANTS AND DETAIN 8 SUSPECTS DURING RAIDS YESTERDAY IN HAYFORK AND RUTH AREA**

July 3, 2019 Kym Kemp 19 comments



***Truck and trailer heaped with marijuana at the Hayfork Trinity County Sheriff Substation yesterday afternoon. [Photo provided by a reader]***

### **Information from the California Department of Fish and Wildlife:**

On July 2, the California Department of Fish and Wildlife (CDFW), assisted by the Trinity County Sheriff's Office, the U.S. Forest Service, the National Guard and the State Water Board, served three warrants in Trinity County. Two parcels were located in the Hale Creek watershed near Ruth Dam and one on the 2100 block of Barker Valley Road near Hayfork.

A records check... confirmed that none of the parcels were permitted by the county nor were they licensed by the state for commercial cannabis cultivation. Sites were selected based on their potential threat to the environment not plant count. The operations yielded an estimated 2,958 illegal marijuana plants and scientific staff documented 16 Fish and Game Code violations.

This is the third year in a row that warrants have been served by CDFW on the two sites in the Hale Creek watershed. Property owners have ignored attempts to remediate environmental damage through Notice of Violations. Further action may be taken.

Eight suspects were detained during the operations. Criminal charges will be filed with the Trinity County District Attorney's Office for consideration. No further information is available at this time as these are ongoing investigations.

**Humboldt Bay Municipal Water District**

To: Board of Directors

From: John Friedenbach

Date: July 3, 2019

Re: **Procurement of Engineering and Construction Services for 2019 Federal Disaster DR-4434-CA FEMA Recovery Funding**

**Background**

As a result of the 2019 February winter storms, the District incurred damages at two of our Ranney Collectors. They were: 1. Landslide at Collector 2 Cable Car House; and 2) Collector 4 river erosion exposing the water transmission line from the collector under the Mad River. The District's Procurement Policy for Federally-Funded Projects requires in part that engineering services be obtained through a request for qualifications process. The District has established a standard operating procedure for this process.

The emergency and time sensitive project of replacing the Collector 2 Cable Car House and stabilizing the river bank preventing further erosion around Collector 4 were completed during March. The Collector 4 emergency responses are covered activities in the District's HCP and LTSAA. CDFW and NMFS were consulted during our emergency response efforts and both conducted site visits. Because of the emergency operations needed for these activities, our procurement policy provides an exception from the qualifications based selection process for engineering services. This exception was utilized for the engineering services required for these construction activities. The less time sensitive projects of buttressing the Collector 4 transmission pipeline and compliance with any CDFW or NMFS bank restoration requirements allow for implementation of our normal engineering and construction procurement practices.

The Collector 4 river work must be completed prior to the onset of the next rainy season this fall. Consequently, time is of the essence to complete the service and construction procurement processes and complete the necessary construction work prior to the winter river levels. Delaying the procurement approval to the August Board meeting will unnecessarily delay the projects such that staff is concerned that the projects may not be completed prior to the beginning of the fall rainy season.

**Recommendation**

Staff requests that the Board authorize the General Manager to negotiate and enter into contracts with the engineering firm selected through our procurement policy qualification based process and construction company(ies) through the competitive low bidder process. Staff



anticipates that these services will exceed the General Manager's procurement threshold of \$30,000.

Alternatively, the Board could request a Special Meeting to approve/award engineering and/or construction contracts.

Recording Requested By:

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

After Recording Return To:

Humboldt Bay Municipal Water District  
 Attn: John Friedenbach  
 PO Box 95  
 Eureka, CA 95502-0095

APNs: 507-331-066

**FIRST AMENDMENT TO GRANT OF RIGHT OF WAY  
 AND NOTICE OF LOCATION**

This "First Amendment to Grant of Right of Way" (hereafter "First Amendment") is entered into this \_\_\_\_\_ day of July, 2019, by and between PHILLIP M. LAZZAR and DEBORAH J. LAZZAR, as Trustees of the Community Trust Created under the Phillip M. Lazzar and Deborah J. Lazzar Trust Agreement, dated January 15, 2002 (successor-in-interest to Bruna Bertolini, Mary Bertolini and Elio Bertolini), hereinafter referred to as "Grantor", and HUMBOLDT BAY MUNICIPAL WATER DISTRICT, a California municipal water district, hereinafter referred to as "Grantee".

A. WHEREAS, Grantor is the owner of certain real property located in the City of Arcata, County of Humboldt, State of California, Alliance Road, Arcata (APN 507-331-066), which is more particularly described in *Exhibit A* hereto and incorporated herein by this reference (collectively, "Grantor's Property").

B. WHEREAS, Grantor's predecessor-in-interest executed that certain written Grant of Right of Way (the "Easement") on or about March 16, 1961, and thereby vested Grantee with certain easement rights over and across Grantor's Property, as described in said instrument. The Easement was recorded after execution, on or about June 16, 1961, in Volume 610, Page 499 of Official Records of Humboldt County.

C. WHEREAS, the Easement allows the Grantee to specify the location of the right of way and easement by recording a "Notice of Location" and delivering said Notice of Location to Grantor.

D. WHEREAS, Grantor and Grantee desire to amend the Easement, as to Grantor's Property, in order to (i) set forth the specific location of the easement across Grantor's Property, and (ii) widen the easement to Forty-five (45) feet plus an additional buffer zone, as described below.

E. WHEREAS, this First Amendment constitutes the first amendment and modification to the Easement.

NOW, THEREFOR, for mutual consideration received, the adequacy of which is hereby acknowledged, Grantor and Grantee hereby amend, modify and supplement the Easement in the following limited respects:

**First Amendment to Easement**

**1. Amendment to Size of Easement**

The right of way and easement over Grantor’s Property shall be extended to forty-five (45) feet in width for all purposes. In addition, there shall be a buffer zone, which shall extend five (5) feet on either side of the Easement, parallel to the Easement and for the entire length of the Easement on Grantor’s Property upon which there shall be no fencing, structures, residential construction, nor planting of plants with invasive root systems.

**2. Location of Easement and Easement Description**

The easement location set forth in the Easement is hereby amended in its entirety, as to Grantor’s Property, and shall be replaced with the legal description of the easement area set forth in **Exhibit B** attached hereto (“Easement Area”).

**3. Continuation of Easement.**

Subject to the modifications recited in this First Amendment, the Easement shall continue in all respects, including the purposes and uses of the Easement. This Amendment shall apply only to Grantor’s Property and shall in no way affect the Easement as to any other parcel of land burdened by the Easement. The Easement, as modified by this First Amendment, shall bind and inure to the benefit of the respective heirs, personal representatives, successors and assigns of the parties hereto.

**GRANTOR:**

Dated: \_\_\_\_\_

By: \_\_\_\_\_  
Phillip M. Lazzar, as Trustee

Dated: \_\_\_\_\_

By: \_\_\_\_\_  
Deborah J. Lazzar, as Trustee

**GRANTEE:**

**Humboldt Bay Municipal Water District**

Dated: \_\_\_\_\_

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

Its: \_\_\_\_\_





**Legal Description of Grantor's Real Property**

**For APN Parcel IDs: 507-331-066**

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THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF ARCATA, COUNTY OF HUMBOLDT, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

That certain Parcel entitled "Remainder" on Parcel Map No. 3609, filed in the Office of the Humboldt County Recorder in Book 36 of Parcel Maps, Pages 41 and 42.

**EXHIBIT B**

**LEGAL DESCRIPTION for  
HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
45-FOOT WIDE WATERLINE EASEMENT**

A 45 foot wide strip, over, under, and across all that real property described as follows:

Commencing at a 3/4" iron pipe with plastic plug, LS 3150, as monument was set and marks the northwest corner of Parcel 3 on Parcel Map No. 1217, recorded in Book 10 of Parcel Maps, Page 132, Humboldt County Records, for Lilly Lucchesi;

Thence South 14 degrees 49 minutes 00 seconds West along the westerly line of said Parcel 3 82.20 feet to the True Point of Beginning of said 45 foot waterline easement;

Thence South 76 degrees 07 minutes 59 seconds East 129.25 feet to the east line of said Parcel 3;

Thence South 14 degrees 43 minutes 59 seconds West along the easterly line of said Parcel 3 9.88 feet to an angle point therein;

Thence continuing South 14 degrees 54 minutes 57 seconds West along said easterly line 35.33 feet;

Thence leaving said easterly line of Parcel 3 North 76 degrees 07 minutes 59 seconds West 279.03 feet to the west line of Parcel 4 of said Parcel Map;

Thence North 14 degrees 49 minutes 00 seconds East along the westerly line of said Parcel 4 45.00 feet;

Thence leaving said westerly line of said Parcel 4 South 76 degrees 07 minutes 59 seconds East 149.83 feet more or less to the Point of Beginning.

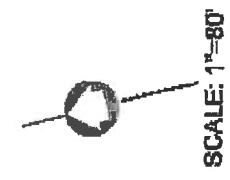
The basis of bearings for this description is the west line of Parcel 3 per Parcel Map No. 1217, recorded in Book 10 of Parcel Maps, Page 132, Humboldt County Records, for Lilly Lucchesi, said west line bearing South 14 degrees, 49 minutes, 00 seconds West.

A two page plat depicting this description is attached hereto and made a part hereof.

**END OF DESCRIPTION**



David A. Crivelli  
PLS 7015  
License Expires 6/30/2008  
Dated September 9, 2006



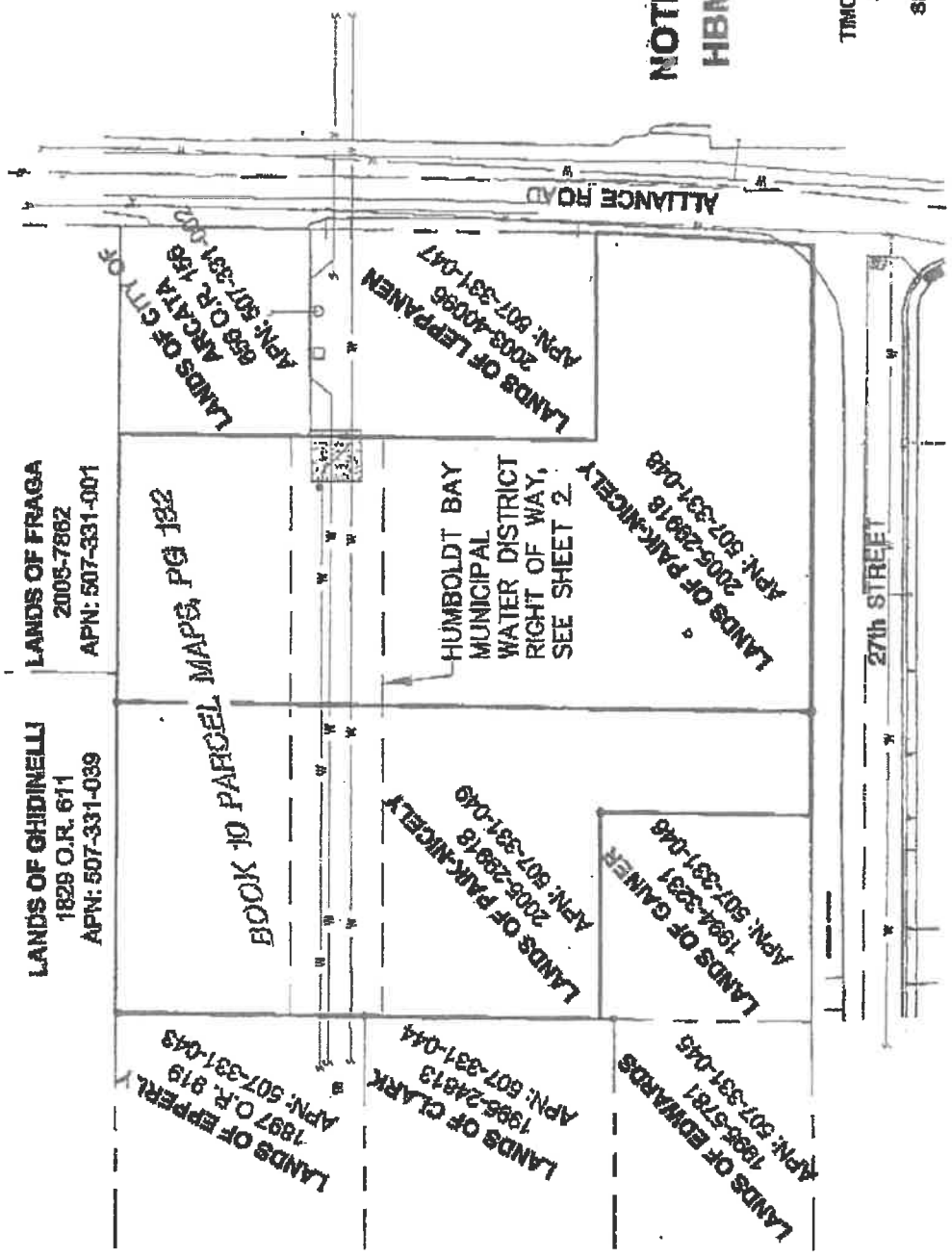
**NOTICE OF LOCATION  
HBMWD WATERLINE  
EASEMENT**

OVER THE LANDS OF  
TIMOTHY & MARYLYN PAIK-NICELY  
APN #s: 507-331-048 & 049  
SECTION 20 T8N R1E N6608

IN THE CITY OF ARCATA  
HUMBOLDT COUNTY, STATE OF CALIFORNIA  
SCALE: 1"=80' SEPTEMBER 2008 SHEET 1 OF 2

**Crivelli Surveying Co.**

1880 Whitlire Ave,  
McKintleyville, Ca. 95519  
(707) 840-9510



**LEGEND**

- WATER LINE
- EXTERIOR BOUNDARY
- - - ADJACENT BOUNDARY
- - - EASEMENT LINE





- Vault 1 @ Samoa Power Poles Beach - **Julio Valdez**, cartoon-like ocean themed mural - notes: this was selected because it's playful, fun for kids and families and detailed, and this is a site people can walk by to see it versus driving by.
- Vault 2 @ Samoa near former pulp mill - **James Rose**, abstract flowers - notes: this was selected because abstract art will work well at a location more distant from the road.
- Vault 3 @ Bay Street location - **Ben Goulart**, scuba diver - notes: this artist knows that he will not be able to add anything to the top of the vault. He plans to paint it like the giant scuba diver's face. This was selected for this location as a nod to the dive shop in the town of Finnetown at the end of Bay Street.
- Vault 4 @ New Navy Base Road, northern end - **Laci Dane Coelho**, egret - notes: this one is pretty self-explanatory, the group liked its boldness and appropriateness.
- Vault 5 @ New Navy Base Road, middle - **Sheala Dunlap**, colorful shark - notes: the artist will add a colorful ocean-like background so it is not "blank" looking and won't invite graffiti.
- Vault 6 @ New Navy Base Road, southern end - **Mir De Silva**, cormorant and pinniped - notes: this artist proposed a specific traffic-calming message well-suited to this location.
- Vault 7 @ Friends of the Dunes trail - **Patricia Sennott**, dune plant species - notes: the artist attached her sketch for this vault separately and it is attached here, it didn't make it into the initial application.

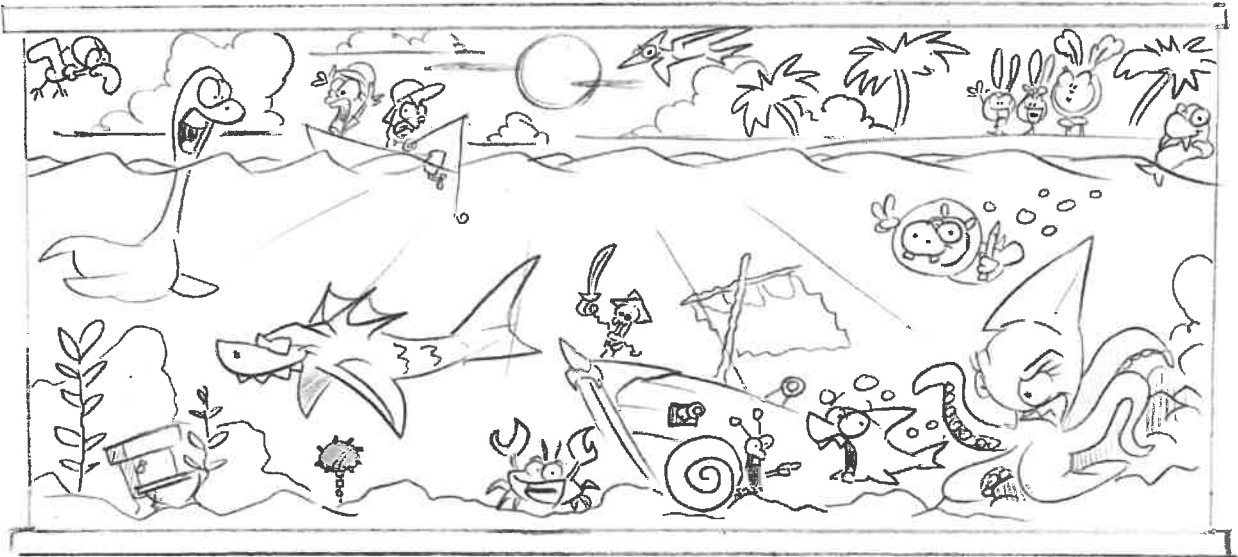
\* The following two are <sup>vaults.</sup> pending approval

- Vault 8 @ Samoa town south - **Lucas Thornton**, wave/ surfing design - notes: it isn't perfectly clear what the artist intended from the application unless you read it thoroughly. He proposed a surfing-related image similar to what is in the second to last picture. The group agreed that this was a fun nod to the surfing community, street art style, and a great choice for a well-traveled road for surfers. Lucas is a very experienced muralist and the team was confident that it will turn out great.

- Vault 9 @ Ma'lel Dunes - **Crystal Perez**, bird mural - notes: this artist contacted Friends of the Dunes to get information about the appropriate birds to include which the group appreciated. BLM has given enthusiastic support to this idea. Like the FOD trail design, this is a vault that is by a very popular trail in the dunes.

#1

- Proposed design – Please attach a drawing/ depiction of what you propose to paint on the concrete vault. By submitting, you agree that the design you have submitted is what you will paint, with no substantive changes. You further acknowledge and agree that the District reserves the right to remove the as-applied artwork in the event the as-applied art work materially deviates from the proposed design. The District shall make this determination in its sole discretion and its decision shall be final.



***Thank you very much for your interest!***

*James Rose*  
Cylinder Proposal

#2



#3

# SCUBA GIGANTIUM

CONCRETE VAULT MURAL @ SAMOA DUNES  
2019

(No)  
\* WILL ADD ON W/ PROSTETIC →



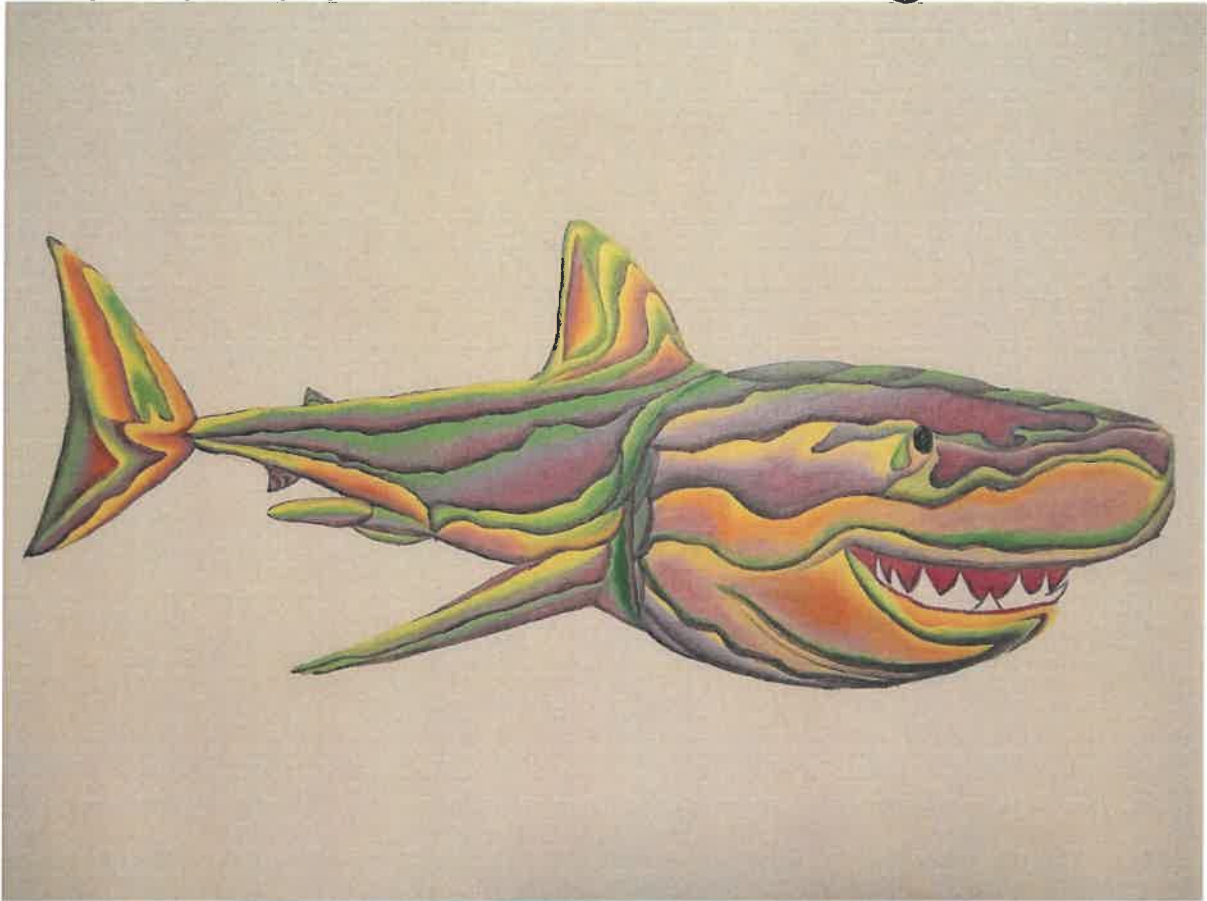
BENJAMIN GOJUART  
707-298-1770  
MURAL-MAN.COM

#4



Thank you very much for your interest!

#5



#6





#6

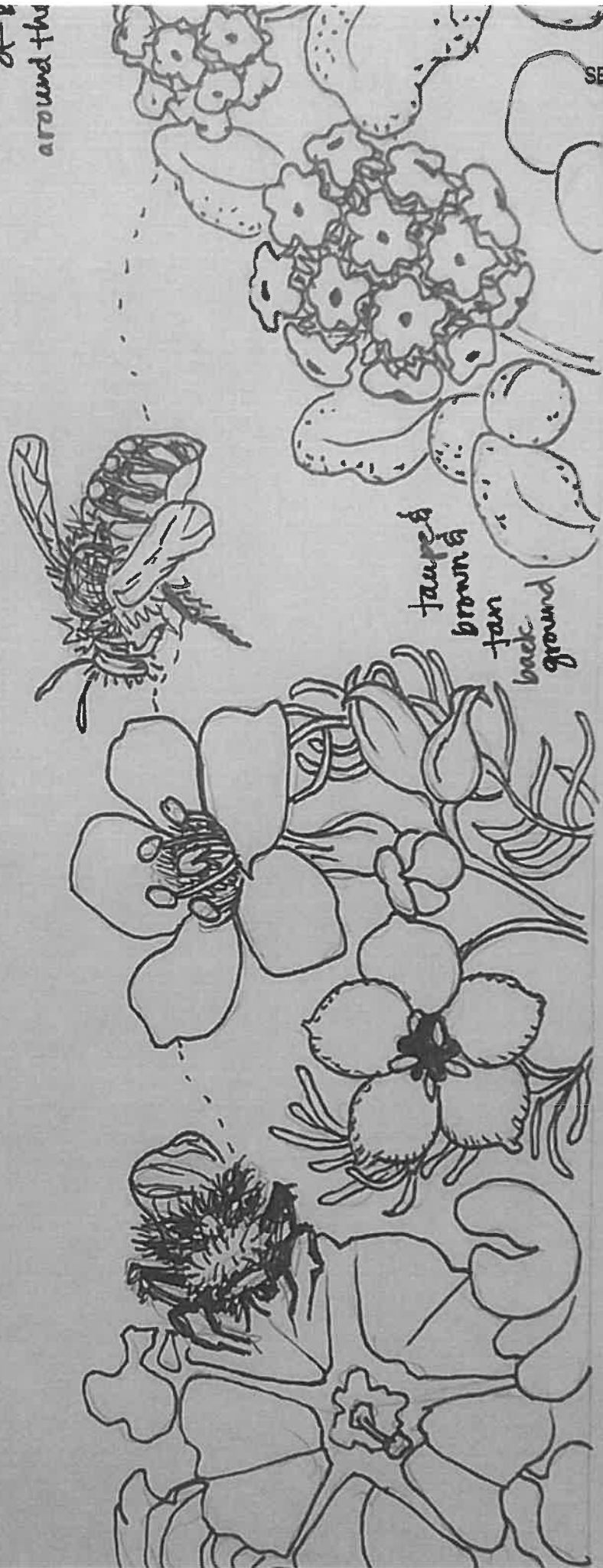


# 5' x 15.7' Vault Sketch

Patricia Sennott

# 7

Various sk  
of v  
around the



arding Background colors:  
proportion of "sky" colors to  
"sand" colors will depend  
on which vault & its placement

#8

I have more than one vision for the cement pipes. I'd like to paint a wave on one with a surfer getting tubed in the barrel. The first would connect with the surfers. I think motorists would get a good laugh out of it. I'd use paint brushes with mural grade acrylic paint followed by 3 coats of exterior water based varnish, and maybe some graffiti coat. 12. Artwork samples – Please



# 9



# New Business



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



**Agenda for Special Joint Meeting of HBMWD Board of  
Directors with the Ruth Lake Community Services District  
Board of Directors**  
200 Headquarters Road, Mad River, CA  
July 19, 2019

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**Convene at Eureka office to travel to Ruth Lake (6:00 am & depart by 6:15 am)**

**Visit Various Ruth Area Sites:**

- **Hydroplant (8:30 a.m. – 9:30 am)**
- **Boat Tour-lakeshore inspections (9:45 a.m.-12:00 p.m.)**

**Lunch at HBMWD District Headquarters with RLCSD and Guests (12:00 p.m.)**

**JOINT BOARD MEETING– 1:00 p.m.**

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

**1. Public Comment**

**2. Introductions**

**3. Updates from Guests:**

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

**4. Ruth Lake CSD Topics**

- a. Aquatic Invasive Species:
  - 1. 2018 Annual Report- discuss
  - 2. Dept. of Boating and Waterways Quagga Prevention Grants
    - a. 2017/18
    - b. 2018/19
  - 3. Any issues or areas of concern – discuss
- b. Lease Lots: area of concern- discuss



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

SECTION I | PAGE NO. 2



**Agenda for Special Joint Meeting of HBMWD Board of  
Directors with the Ruth Lake Community Services District  
Board of Directors**  
200 Headquarters Road, Mad River, CA  
July 19, 2019

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**5. HBMWD Topics**

- a. Law Enforcement on Ruth Lake
- b. Algae bloom - discuss
- c. Cannabis Cultivation in the Mad River Watershed
  - i. discussion re: current enforcement efforts
  - ii. input re: ideas or issues to address

**ADJOURNMENT**

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

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

Note – start times listed above are estimates and may vary due to traffic delays or length of site visits. Members of the public are invited to address the Board on any items listed on the agenda above, or on issues affecting the operation of the District which are within the jurisdiction of the Board. Public comment may be limited to 5 minutes per person.

(Posted and mailed July 17, 2019)

**Humboldt Bay Municipal Water District**

To: Board of Directors

From: John Friedenbach

Date: June 6, 2019

Re: Industrial Water System – Customer Charge Discussion

**Discussion**

During the May Special Board meeting, the Board requested a discussion in June regarding customer charges for industrial water provided on the Samoa Peninsula.

As you are aware, Ordinance 16, delineates the framework for industrial vs municipal charges for our regional water system. Attached is a copy for your reference.

The recurring operating and maintenance costs have been kept artificially low because the industrial water system has basically been idle since 2009 when the last pulp mill closed and only used periodically by the Harbor District since they acquired the former LP Pulp Mill site. To foster the Board's discussion on this issue, staff has listed a series of issues/questions:

1. What will be the make up of the negotiating team with the Harbor District for determining contract terms and pricing?
2. What will the process be for negotiations?
3. How will the base cost for system availability be calculated?
  - a. Should there be a minimum availability cost?
    - i. If so, for discussion, should that be: \$2,000 / mo.; \$5,000 / mo.; \$10,000 / mo.?
  - b. Should there be a "phase in" of a minimum availability cost monthly charge?
4. How will the "Base Water Facility Cost Proration" under Section 4 of Ordinance 16 be determined prior to having a consistent volume consumer of industrial water?
5. What should be the duration of the contract for providing industrial water to the Harbor District given the potential for larger scale industrial customers on the peninsula?
6. How should the ReMAT funds factor into the pricing for industrial water service, if at all?
7. Other items / issues to consider?



**Humboldt Bay Municipal Water District  
Ordinance 16  
as Amended June 2006  
as Amended January 2017**

**Establishing Rates, Charges and Conditions of Service  
For  
Water Sales To Municipal Water Customers**

**BE IT ORDAINED**, by the Board of Directors of the HUMBOLDT BAY MUNICIPAL WATER DISTRICT (hereinafter HBMWD), as follows:

- 1. Definitions** – as used in this Ordinance, the following terms shall have the following meanings unless the context clearly otherwise requires:
  - 1.1. A/B Bond Taxes** – taxes received by HBMWD pursuant to a levy allowed in accordance with the Series A and B general obligation bonds authorized by voters within HBMWD in 1956.
  - 1.2. Average Daily Water Use** – the average daily use, expressed in million gallons per day (MGD), in any given calendar year, as calculated from data recorded by HBMWD's meters and data collection system totalizers. The number for the most recent calendar year shall be calculated, by HBMWD, by January 30 of the subsequent calendar year. The number shall be obtained by dividing the total amount of water used by a given Customer in the calendar year by the total number of days in that same calendar year.
  - 1.3. Base Water Facilities (BWF)** -- all HBMWD wells, diversion facilities, dams, pumping facilities, storage tanks, or water transmission and distribution facilities; all electrical, radio, electronic, computer and control (SCADA) systems; and any related appurtenances existing as of June 30, 1999.
  - 1.4. Drinking Water Filtration Plant (DWFP)** – the water filtration facility as designed to meet the State's water quality mandate as it exists on the effective date of this Ordinance.
  - 1.5. Drinking Water Treatment Facilities (DWTF)** -- all facilities and appurtenances relating to the treatment of water for potable use. Specifically, this includes the new State required DWFP and the existing disinfecting system.
  - 1.6. General Reserves** – those moneys set aside by HBMWD's Board of Directors in any fund (e.g. general fund, general reserve, contingency reserve), regardless of the type or purpose of such fund, but exclusive of:

- accumulations for payment of principal and interest on any future bond issue or other future indebtedness incurred with the consent of HBMWD's affected customers;
- any reserve fund required to be established by law;
- any reserve fund created by public grant or loan program wherein said reserves are to be allocated to a defined future project expenditure;
- the proceeds of loans or grants;
- the proceeds of any residual A/B bond taxes;
- amounts collected by HBMWD under Price Factor 2 on account of encumbrances obligated but not yet paid;
- amounts collected by HBMWD for future capital projects as provided in Price Factor 2; or,
- the DWFP and SRF Reserves set forth in Sections 7.1.3 and 7.1.6
- amounts collected from IWC's to "mothball" or take industrial water facilities out of service.

**1.7. Industrial Water Customer (IWC)** – The industrial customers in the District's Improvement District U-1, or any other industrial customers which use more than 50% of the water delivered to them for manufacturing or production activities and which are supplied through any of HBMWD's industrial or raw water system.

**1.8. Municipal Water Customer (MWC)** – Cities, Community Services Districts, and other public entities which purchase water from HBMWD for use within HBMWD boundaries.

**1.9. Moving Five-Year Average** – a figure, calculated by HBMWD no later than January 30 each calendar year, that reflects the average of the previous five years Average Daily Water Use.

**1.10. Peak Rate Allocation:** The maximum number of gallons per calendar day of water to which a customer is entitled by contract.

**1.11. Peak Delivery Rate:** The rate of delivery of water by District to any customer which, if continued uniformly for a twenty-four (24) hour period starting at midnight, would produce an amount equal to the customer's Peak Rate Allocation.

**1.12. Proposition 13 Taxes** – HBMWD's share of the proceeds of taxes levied under the provisions of Article 13A of the California State Constitution.

**1.13. Safe Drinking Water State Revolving Fund (SRF)** – the Safe Drinking Water State Revolving Fund created pursuant to Section 116760.30 of the California Health and Safety Code.

**1.14. Special Facility** -- any facility (excluding the DWFP) constructed or purchased by HBMWD, after the effective date of this Ordinance, and pursuant to contract, for the direct benefit of one or more of HBMWD's customers (see Price Factor 5). Major repair or replacement of any portion of the BWF or DWTF does not constitute Special Facilities. A future expansion or addition to the DWFP may be considered a Special Facility if constructed at the request of MWC's and not pursuant to a mandate under Section 11.1.3 and Price Factor 6.

**2. Water Delivery Systems** -- HBMWD has two water delivery systems. These systems share common elements of the Base Water Facilities such as the dam, electrical system, maintenance shops, vehicles, computer and other electronic controls, etc.

**2.1. Industrial or raw water system** -- this system draws water directly from the surface of the Mad River and delivers it, via pipelines, to end users. Water from this system receives no treatment of any kind and is not fit for human consumption. The industrial system is not regulated nor permitted by the State or Federal governments.

**2.2. Municipal or domestic system** -- this system draws water from a series of Ranney Wells (also known as lateral arm wells) located in the bed of the Mad River. This water is naturally filtered through the sand and gravel of the riverbed which lie over the collector laterals of each well. This naturally filtered water is disinfected and then stored in a clearwell prior to delivery to Municipal Water Customers. A DWFP, which will remove unacceptable levels of turbidity from the well water, will be added to this system to comply with mandates received from the State Department of Health Services.

**2.3. DWFP Capacity** -- The capacity of the DWFP will be a function of the source water turbidity and other operating conditions that may exist from time to time. HBMWD will endeavor to operate the DWFP at its optimal capacity for any given water quality and operating conditions. Based on the engineering studies completed as of the effective date of this Ordinance, the DWFP is expected to have an operating capacity ranging from 9 MGD to 21 MGD depending on the filter loading rate (gallons per minute per square foot of filter) that can be achieved given the turbidity and other operating conditions. HBMWD shall have authority to require MWC's to reduce their demand from the DWFP in response to variations in DWFP capacity. Furthermore, HBMWD shall have no responsibility for delivering water volumes to MWC's beyond the capacity of the DWFP.

**3. Cost/Pricing Structure - General** -- HBMWD's cost structure is designed to:  
a) fairly and reasonably allocate costs between the two delivery systems described in Section 2, and; b) further prorate those allocated costs among the water users which are connected to each delivery system. This two-step cost allocation process will reflect costs associated with the operation,

maintenance, repair and replacement of Base Water Facilities and the Drinking Water Treatment Facilities - including the new DWFP.

- 3.1. The sections of this Ordinance 16 relating to Industrial Water Customers or Industrial Water Facilities are included only to define the initial proration of the BWF costs and Revenue Credits between the Industrial Water Customers and Municipal Water Customers. Once derived, the proration of the costs and Revenue Credits allocated to the Industrial Water Customers will be determined from time to time via contract with those Industrial Water Customers.
- 3.2. The Price Factors outlined in Section 7 and the Revenue Credits described in Section 8 will be applied to those costs and credits allocated to the Municipal Water Customers. The Price Factor amounts charged to any one Municipal Water Customer will contain a fair share portion of the costs of operation, maintenance, repair and replacement of the Base Water Facilities; and, a fair share portion of the costs of construction, operation, maintenance, repair and replacement of the Drinking Water Treatment Facilities. The Revenue Credits are also prorated to assure a fair distribution. Attachment 1 of this Ordinance presents a summary of how the Industrial/Municipal cost allocation, Price Factors and Revenue Credits work.
- 3.3. The costs of operating, maintaining, repairing and replacing HBMWD's retail water system are included in the overall Industrial/Municipal cost structure outlined herein. HBMWD's retail customers pay rates that assure recovery of all such costs. The revenues collected from retail customers are credited to the Municipal Water Customers in accordance with the provisions of Section 8 (Revenue Credits) herein. Industrial Water Customers are credited via contract using the same principles. This approach assures that Industrial Water Customers and Municipal Water Customers do not subsidize the retail system.

#### **4. Base Water Facility Cost Proration**

- 4.1. The costs of operating (excluding power for pumping), maintaining, repairing and replacing HBMWD's Base Water Facilities; and, maintaining reasonable reserves therefor, have been apportioned, by HBMWD, between the Industrial Water System and Municipal Water System (see Section 3) using a commodity/demand type of methodology. Costs were allocated on the basis of historical use or intent, peak demand or average use depending on the specific cost element being prorated. The resulting allocation at July 1, 1999 is established at 63% for the Industrial Water System and 37% for the Municipal Water System. HBMWD will review this proration prior to the beginning of every fifth fiscal year starting with the fiscal year which marks the fifth anniversary of the adoption of this Ordinance 16; and, in consultation with all Municipal Water Customers and Industrial Water Customers, HBMWD will adjust the percentage allocation to reflect then current conditions. The resulting allocation at

July 1, 2004, following the first review at the fifth fiscal year, is established at 45% for the Industrial Water System and 55% for the Municipal Water System. Due to the lack of industrial customers, the allocation at July 1, 2017 is established at 100% Municipal Water System.

4.2. The prorated share for the Municipal Water System, derived via this percentage allocation, will be further divided among all Municipal Water Customers using Price Factors 2 and 4, described in Section 7.

4.3. The prorated share for the Industrial Water System, derived via this percentage allocation, will be further divided among all Industrial Water Customers via contract.

**5. Drinking Water Treatment Facilities Cost Proration** -- The costs of constructing, operating, maintaining, repairing and replacing HBMWD's DWTF; and, maintaining reasonable reserves therefor, will be allocated only to Municipal Water Customers via the Price Factors 1, 2, and 4 outlined in Section 7.

**6. Pumping Power** -- The costs of power for pumping water will be apportioned, by HBMWD, between the Industrial Water System and the Municipal Water System based on metered electrical use at HBMWD's pumping facility. The Industrial Water Customers shall pay the portion of HBMWD's actual monthly electricity costs to pump water into the Industrial Water System. The Municipal Water Customers shall pay the portion of HBMWD's actual monthly electricity costs to pump water into the Municipal Water System. The resulting allocation of the MWC pumping power costs shall be distributed to individual MWC's via Price Factor 3 outlined in Section 7.

## **7. Price Factors**

### **7.1. Price Factor 1 (DWFP Debt Service)**

7.1.1. Each Municipal Water Customer shall pay HBMWD, each year, a proportionate share of the payments of principal and interest (if any) on the SRF loan used to construct the DWFP.

7.1.2. Such proportionate share shall be determined by multiplying the annual payment required by a fraction, the numerator of which is a specific MWC's Moving Five-Year Average water use, and the denominator of which is the sum of the Moving Five-Year Average water use of all MWC's. HBMWD will bill each MWC 1/12<sup>th</sup> of their Price Factor 1 charges each month.

7.1.3. SRF loans require the establishment and maintenance of a reserve equal to one year's debt service. HBMWD will fund this SRF Reserve in accordance with the provisions of Section 7.1.6 (DWFP Reserve). HBMWD will use any amount remaining in the SRF Reserve to pay

the final year's installments on the loan, in lieu of Price Factor 1 charges.

7.1.4. Regardless of the proportionate share calculation based upon its Moving Five-Year Average water use, no MWC's Moving Five-Year Average, for Price Factor 1 calculations, shall be adjusted below 75% of its first Moving Five-Year Average calculated in accordance with this Ordinance – except as specifically provided in Section 9 for the City of Blue Lake and the Manila Community Services District.

7.1.5. If HBMWD receives any State or Federal grants to help fund the construction of the DWFP, such grant funding will be placed in a separate reserve and will be used to reduce Price Factor 1 obligations of all MWC's on a prorata basis using the formula described in Section 7.1.2 above.

7.1.6. **DWFP Reserve**

7.1.6.1. HBMWD shall establish from General Reserves available on July 1, 1999, a DWFP Reserve in an amount not to exceed \$1,000,000. To the extent established, the DWFP Reserve shall be used in the following order of priority:

- a) To pay for the upfront costs of final engineering design and bid assistance. These costs will be reimbursed via the SRF Loan and HBMWD will return such reimbursement to the DWFP Reserve.
- b) To pay for construction and other project related costs for which payment is due, but which have not been reimbursed via the SRF Loan.
- c) To establish the State required SRF Loan Reserve. This reserve consists of one year's principal and interest payments. HBMWD will determine the timing and amount of funds to transfer from the DWFP Reserve in accordance with State SRF Loan rules and regulations. The SRF Loan contract and any other applicable regulations will govern use of the SRF Loan Reserve.

7.1.6.2. All interest earned in any given fiscal year, either by the DWFP Reserve or the SRF Reserve, will be used: first, to rebuild any drawdown of the SRF Reserve; and second, to reduce the annual obligation each MWC would otherwise bear under Price Factor 1.

7.1.6.3. In the event one or more of HBMWD's IWC's significantly reduces its contractual commitments from those adopted concurrent with this Ordinance, or terminates such contract, any amount of DWFP Reserve not committed to the SRF Loan Reserve may be used by HBMWD to fund any other budgeted need.

7.1.6.4. Any remaining principal and interest in the DWFP Reserve shall be used to proportionally reduce the obligations each MWC will otherwise bear under Price Factor 1. The timing of such reduction shall be determined by HBMWD.

## **7.2. Price Factor 2 (Operations/Maintenance/Capital Costs)**

7.2.1. Each Municipal Water Customer shall pay a proportionate share of the monthly net operating, maintenance and capital costs obligated or paid for the Base Water Facilities. The Municipal Water Customers' share of Base Water Facility costs shall be as determined in Section 4. Net costs for the Base Water Facility means the operating, maintenance and capital costs minus applicable Revenue Credits as outlined in Section 8. Additionally, each Municipal Water Customer shall pay a proportionate share of the monthly operating, maintenance, repair, replacement and capital costs obligated or paid for the Drinking Water Treatment Facilities.

7.2.2. Each Municipal Water Customer shall pay a proportionate share of the monthly net operating, maintenance and capital costs obligated or paid for the Base Water Facilities. The proportionate share of the BWF for each MWC, shall be determined by a fraction, the numerator of which is the customer's Peak Rate Allocation, and the denominator of which is the sum of the Peak Rate Allocation of all MWC's.

7.2.2.1. Effective July 1, 2006, each MWC's Peak Rate Allocation shall be established as reflected in Attachment 2.

7.2.2.2. The proportionate share of the BWF that each MWC pays may be adjusted periodically as set forth herein. The Peak Rate Allocation shall be reviewed, and may be adjusted by HBMWD, effective July 1, 2017, and subsequently every fifth anniversary thereafter (e.g. July 1, 2022). Such review shall be done in consultation with the MWCs. Any adjustment to a MWC's Peak Rate Allocation shall be determined by HBMWD based one of the following conditions: 1) a request by a MWC to increase its Peak Rate Allocation to accommodate increased peak water use due to a new customer and/or actual or planned growth, or 2) a request by a MWC to decrease its Peak Rate Allocation to accommodate reductions in peak water use due to the addition of a water storage reservoir or implementation of water conservation measures. HBMWD reserves the right to deny a request for an increase in a MWC's Peak Rate Allocation if HBMWD no longer has capacity to deliver the requested increase.

7.2.2.3. In addition, at the beginning of any fiscal year, HBMWD may increase the Peak Rate Allocation of a MWC if that MWC has understated its required Peak Rate Allocation, based on

recorded historical peak daily use. Such adjustment may only be done after consultation with the affected MWC.

7.2.3. Each Municipal Water Customer shall also pay a proportionate share of the monthly operating, maintenance, repair, replacement and capital costs obligated or paid for the Drinking Water Treatment Facilities. The proportionate shares of Drinking Water Treatment Facilities costs shall be determined by a fraction, the numerator of which is a specific MWC's Moving Five-Year Average water use, and the denominator of which is the sum of the Moving Five-Year Average water use of all MWC's.

7.2.4. In order to avoid monthly fluctuations in Price Factor 2 charges, HBMWD will bill/credit MWC's, each month, 1/12<sup>th</sup> of Price Factor 2 related costs/Revenue Credits as reflected in the budget adopted for any given fiscal year. Within 90 days of the end of the fiscal year, HBMWD will calculate the actual Price Factor 2 costs/Revenue Credits for that fiscal year. If actual Price Factor 2 charges are higher than the total of the flat monthly billings, the excess charges will be added, in even monthly installments, as a surcharge to the following fiscal year's Price Factor 2 charges. If actual Price Factor 2 charges are less than what was billed throughout the fiscal year, a refund credit, in even monthly installments, will be added to the following fiscal year's Revenue Credits.

7.2.5. HBMWD will update its Capital Improvement Plan every five years, beginning in 2017. HBMWD will provide a draft of the updated plan to the MWC's by January 15, for their review and comment. HBMWD will provide the final update of its Plan to MWC's no later than February 28, for their use in budget planning and analysis and updates of water rates.

7.2.6. Individual capital projects estimated to cost more than \$200,000 may be charged out in increments under this provision up to three years in advance of the project – even though no actual charges are obligated or paid. Before any such advance charges are levied, the projects must be included in HBMWD's capital improvement plan and have Board approval for implementation. Funds collected in this manner will be held and accounted for in a separate reserve, and any interest earned will be applied toward the specific project for which the funds were collected. In the event a project, for which money has been collected, is cancelled; those funds – including interest – will be refunded, on the same basis as they were charged, within 90 days of the end of the fiscal year in which the project was cancelled.

7.2.7. **Price Factor 2 Costs Defined** -- The operating, maintenance and capital costs included in Price Factor 2 shall be no greater than the actual costs obligated or paid by HBMWD in connection with the operation, maintenance, repair and replacement of its facilities. All



such costs shall be reasonable and in line with past practices. Specifically excluded from Price Factor 2 costs are those costs covered by any other Price Factor as defined in this Ordinance. Price Factor 2 costs include, but are not limited to:

- capital costs as described in Sections 7.2.5 and 7.2.6;
- payroll expenses, and consultant expenses;
- services, materials and supplies for general operation, repair, maintenance or replacement of facilities and equipment;
- overhead costs such as insurance, permit fees, travel/conference, dues/subscriptions, telephones, vehicles and office expenses;
- special costs such as legal settlements, court awards;
- energy costs, other than power for pumping or those related to Price Factor 5 or Price Factor 6 facilities;
- debt service on borrowings, except SRF debt service; and,
- year-end encumbrances such as purchase orders issued and contract obligations incurred but not yet paid.

### **7.3. Price Factor 3 ( Power for Pumping)**

7.3.1. Each Municipal Water Customer shall pay each month a share of HBMWD's costs for all electricity used to pump water, except as such electricity use may be a part of the Industrial Water System, operation of a Special Facility or a Mandated Facility.

7.3.2. The allocation of the HBMWD's electricity charges for pumping will be determined by calculating the cost of pumping one million gallons of municipal water. The calculation will use the actual amount of energy cost incurred to pump municipal water and the total actual municipal water use for the most recent month for which the HBMWD has been billed. The unit pumping cost will be multiplied by each Municipal Water Customer's actual water use during the same period which figure is the Price Factor 3 charge that month.

### **7.4. Price Factor 4 (Additions to General Reserves)**

7.4.1. HBMWD will not add funds to General Reserves as defined in Section 1.6 if the General Reserves at the end of any fiscal year are equal to or in excess of Two Million Dollars (\$2,000,000).

7.4.2. The total annual budgeted contribution to General Reserves for all IWC's and MWC's shall be no more than \$350,000, or the difference between \$2,000,000 and the actual General Reserves amount at the end of the fiscal year, whichever is less.

- 7.4.3. If the actual General Reserves exceed \$2,000,000, no Price Factor 4 charges will be levied. If the actual General Reserves are less than \$2,000,000, HBMWD will determine the amount of Price Factor 4 charges to be levied, not to exceed the limitations specified in Section 7.4.2.
- 7.4.4. Notwithstanding the foregoing, if deemed necessary by HBMWD, the \$2,000,000 threshold for calculating Additions to General Reserves may be adjusted by formal action of HBMWD's Board of Directors in the tenth year of this contract. Any such adjustment will be made in consultation with all MWC's and IWC's.
- 7.4.5. To assure that any Additions to General Reserves are fairly allocated between IWC's and MWC's, the total amount of Additions to General Reserves set aside in any fiscal year will first be prorated to the Base Water Facilities and the Drinking Water Treatment Facilities on the basis of the relative worth of the respective undepreciated property, plant and equipment value for each of the two facility classifications as shown in HBMWD's annual audit. The proration of charges for the Additions to Reserves will then proceed in accordance with the provisions of Section 4 and Price Factor 2.
- 7.4.6. Each Municipal Water Customer shall pay, in even monthly installments, its proportionate share of HBMWD's annual budgeted contribution to General Reserves.

**7.5. Price Factor 5 (Special Facilities)** -- Any Industrial or Municipal Water Customer who contracts with HBMWD for a Special Facility shall pay the following costs in the manner set forth below:

- 7.5.1. all administrative, engineering, design, construction costs or annual amortization and interest costs of HBMWD required to pay the capital costs of any such Special Facility; and,
- 7.5.2. the annual operating and maintenance costs (including but not limited to costs for electricity used to operate any such Special Facility) required for the Special Facility which are constructed for, and at the request of any customer.
- 7.5.3. In the event that more than one customer contracts with HBMWD for a given Special Facility, such costs shall be apportioned on the basis set forth in the contract. Terms and conditions for repayment of such costs to HBMWD, including allocation of benefits, shall be established by contract prior to construction of the facility.

**7.6. Price Factor 6 (Mandated Facilities)** -- In the event it becomes necessary to construct, operate and maintain Mandated Facilities as defined in Section 11.1.3 of this Ordinance, each MWC that receives the

benefit of such Mandated Facility shall pay its proportionate share, as determined below, of the following:

- 7.6.1. all costs, including annual amortization and interest, required to pay the capital cost of such Mandated Facility; and,
- 7.6.2. the reasonably determinable annual operating, maintenance and electrical costs of such Mandated Facility.
- 7.6.3. HBMWD shall determine by ordinance which customers benefit from the construction of a Mandated Facility. HBMWD shall allocate charges under this Price Factor 6, to the customers so designated, on the basis of relative benefit. Customers that HBMWD determines will not benefit from a Mandated Facility shall not be subject to any Price Factor 6 charges for that facility.
- 7.6.4. The provisions of this Section 7.6 shall not apply to the currently mandated DWFP, which shall be funded pursuant to Sections 5 and 7.1, 7.2, and 7.4 of this Ordinance.

**8. Revenue Credits** -- All revenue credited to MWC's under this Ordinance will be credited towards Price Factor 2 charges related to Base Water Facilities. Such charges will be reduced on a monthly prorata basis, as set forth below, by HBMWD's monthly cash receipts from Proposition 13 taxes, interest on investments, miscellaneous revenues (not including residual A/B Bond taxes, revenue from water supply contracts, grants or loans), and hydroelectric revenues.

**8.1. Proposition 13 tax revenue** will be credited to Industrial and Municipal Water Customers on a prorata basis using the assessed real property value (AV) within the HBMWD of each Water Customer as the numerator and the total AV of all Municipal and Industrial Water Customers as the denominator. AV figures will be reviewed annually.

**8.2. Retail water sales revenue** will be credited as outlined for "all other Revenue Credits" below; except that, the portion of revenues collected to pay for the costs of the Drinking Water Filtration Plant will be credited only to Municipal Water Customers. Crediting for such DWFP revenues to the MWC's will use the Moving Five-Year Average methodology used to allocate DWFP charges in Price Factors 1 and 2.

**8.3. All other Revenue Credits** will first be prorated to IWC's and MWC's in accordance with the provisions of Section 4. The MWC share will be further allocated to individual MWC's by multiplying such Revenue Credits by a fraction, the numerator of which is each Municipal Water Customer's Peak Rate Allocation and the denominator of which is the sum of the Peak Rate Allocation of all of HBMWD's Municipal Water Customers. The Peak Rate Allocation calculation will be as described in Section 7.2.2.

## **9. Blue Lake/ Manila Adjustment**

9.1.1. It is recognized that the City of Blue Lake and the Manila Community Services District each have a single large customer – Ultra Systems III for Blue Lake and Sierra Pacific Industries for Manila CSD – that accounts for a major amount of their water sales volumes; and, therefore, for their prorata payment obligations in accordance with the terms of this Ordinance.

9.1.2. In the event either one of these MWC's experience a reduction of 25% or more of their then current Average Daily Water Use caused by reduced flow to, or loss of, these specific customers, or their successors in interest, the Moving Five-Year Average and the Peak Rate Allocation will be adjusted in the fiscal year following such reduction.

9.1.3. The Moving Five-Year Average for subsequent fiscal years will be adjusted by deducting the amount of reduction for all years used in the calculation. The Peak Rate Allocation will be adjusted by deducting the amount of reduction.

9.1.4. The following conditions will apply to this Section 9:

- The MWC must notify HBMWD in writing of the need for the adjustment as soon as possible but not later than May 31<sup>st</sup> prior to the fiscal year in which the adjustment will occur.
- The MWC must provide evidence satisfactory to HBMWD of the reduction or loss.
- If equal or greater volume is regained by growth of customer base, the amount of reduction will be added back into both the Moving Five-Year Average and the Peak Rate Allocation in the subsequent fiscal year using the same methodology as was used for the reduction.

**10. Payment Guarantee** -- Each MWC shall pay the amounts due to the HBMWD on a monthly basis within 15 days of the date of HBMWD's billing. Such payments shall be due regardless of interruptions of services or inability to meet the water treatment requirements of Section 11.

## **11. Water Treatment**

**11.1. HBMWD Responsibilities** -- as of the date of this Ordinance, HBMWD provides water treatment only by the natural filtration provided via the sand and gravel through which water pumped from the Ranney Wells must pass; and, meeting "minimum chlorine disinfection", prior to HBMWD's points of delivery to the MWC, as specified by the State Department of Health Services (DHS) in Attachment 3 (dated 4/22/99) to this Ordinance. The DHS may reduce these requirements, by permit, once the DWFP is operating.

- 11.1.1. Upon completion of the DWFP, HBMWD will also provide water filtration to achieve the maximum turbidity level of 5 NTU year round at the points of delivery by HBMWD to the MWC's; and, to achieve the optimized treatment goal of 1 NTU in 90% of measurements taken at the DWFP as specified by the DHS in Attachment 4 (dated 10/21/98) to this Ordinance.
- 11.1.2. To the extent of its existing treatment capabilities, HBMWD will deliver, at HBMWD's points of delivery to MWC's, water that complies with other legally-mandated water quality standards (i.e. beyond chlorine disinfection and filtration as specified in Sections 11.1 and 11.1.1) that are applicable to HBMWD and its MWC's generally.
- 11.1.3. In the event that HBMWD or its MWC's generally, are required by law, regulation, order or other governmental mandate to construct any new facility or upgrade any existing facility, or to comply with any standard that cannot be met without constructing a new facility or upgrading an existing facility (hereafter "Mandated Facilities"), HBMWD will, in consultation with the MWC's, undertake to design, finance, construct, operate and maintain such additional facilities as may be necessary to meet the applicable legal requirements at HBMWD's points of delivery to MWC's. Each MWC that receives the benefit of such Mandated Facilities shall pay its proportionate share of the costs in accordance with Price Factor 6 of this Ordinance. In the absence of such additional facilities, HBMWD shall have no responsibility to the MWC's for compliance with such requirements.

**11.2. MWC Responsibilities** – Except for water treatment responsibilities expressly assumed by HBMWD under this Ordinance, each MWC shall be responsible for complying with all laws, regulations and permits applicable to it as a Public Water System under State law, including, but not limited to, sampling, monitoring, reporting and water quality requirements beyond HBMWD's point of delivery to the MWC.

**12. Excess Water Deliveries**: Delivery of water from HBMWD to the MWCs shall generally be made at a rate not to exceed the MWC's Peak Delivery Rate. It is understood, however, that MWCs may desire to take water from HBMWD at a rate greater than their Peak Delivery Rate to achieve cost savings in their utility power bills and/or HBMWD's Price Factor 3 charge. HBMWD will, at its sole discretion, deliver water to a MWC at a rate greater than its Peak Delivery Rate so long as HBMWD has the capacity to do so. HBMWD reserves the right to place a MWC on a delivery schedule at a specified delivery rate for a specified time period to allow HBMWD to supply Peak Rate Allocation to all MWCs.

**13. Limitations on HBMWD Responsibilities** – Delays in, or failure of, performance by HBMWD under this Ordinance or any contract executed

pursuant to this Ordinance shall not constitute a default or give rise to any claim for damages if caused by circumstances beyond the control of HBMWD, including but not limited to acts of legislation or government, decrees of the courts, acts of God, inability or failure of HBMWD's facilities to deliver a particular quantity or quality of water, strikes or other concerted action of labor, fires, floods, droughts, explosions, war, acts of the military, sabotage or any similar event or occurrence. HBMWD shall not be responsible under this Ordinance, or any contract executed pursuant to it, to deliver water to MWC's at particular pressures or rates of flow, or in particular volumes.

**14. Default** -- In the event that any MWC shall fail to make any payment at the time and in the manner herein provided, or shall fail to perform any duty on its part to be performed under the provisions of this Ordinance and any contract pursuant to it, and such default shall continue for a period of thirty (30) days after written notice thereof is given by HBMWD, HBMWD may at its option, in addition to and not in lieu of any other remedy provided by law:

- withhold deliveries of water to such MWC until such time as the MWC's obligations have been brought current;
- sue for damages; and/or
- sixty (60) days after written notice, cancel the MWC's water contract.

**14.1.** HBMWD's exercise of any of these options shall not be exclusive but shall instead be cumulative of each other and of any other remedies or rights to which the HBMWD may be entitled. Damages for default as set forth above shall include all payments to which the HBMWD is entitled under the Price Factors set forth in this Ordinance, and under any Special Facilities contract with the defaulting MWC, for the full term of the contracts and Ordinance.

## **15. Arbitration**

**15.1. Availability Of Remedy** The procedure described in Section 14.2 hereof shall be available to the HBMWD and to any Municipal Water Customer provided that any such MWC has entered into a contract with the HBMWD pursuant to this Ordinance. The procedure described below shall be fully binding on the HBMWD and on all such MWC's regardless of whether they become actual parties to the arbitration proceeding provided that the HBMWD furnishes written notice to all such MWC's upon the initiation by the HBMWD or any MWC of the proceeding described below and each MWC is given an opportunity to participate in the proceedings.

**15.2. Procedure For Resolution Of Disputes** In the event of a disagreement between the HBMWD and a MWC concerning the implementation of this Ordinance and the establishment of charges hereunder, the HBMWD and

the MWC shall meet and discuss the issues, in good faith, with a view to resolving the disagreement. If the parties are unable to agree, the dispute will be settled by mandatory and binding arbitration at the general offices of the HBMWD (currently located in Eureka, California) pursuant to the rules of the American Arbitration Association. Notwithstanding the foregoing, no issue will be submitted to arbitration that involves the exercise of subjective discretion or the legislative powers of the HBMWD as conferred by law. Only issues that can be determined by fact finding and reference to objective standards set forth in this Ordinance or the contract between the HBMWD and the MWC will be the subject of arbitration.

**15.3. Effective Date Of Resolution Of Dispute.** A demand for arbitration shall be effective as to any fiscal year only if demand is made no later than sixty (60) days after the end of that fiscal year. In the absence of such a timely demand, the decisions of the Board of Directors of the HBMWD shall be final and conclusive. Decisions of the arbitrator shall apply only to the fiscal year as to which demand is made as provided in the preceding sentence, and to subsequent fiscal years.

## **16. Effect of Ordinance**

- 16.1.** This Ordinance is intended to provide a fair and equitable allocation of costs and Revenue Credits between Industrial Water Customers and Municipal Water Customers; and, to provide a cost and Revenue Credit allocation structure among Municipal Water Customers for that share of costs and Revenue Credits allocated to Municipal Water Customers. This Ordinance shall apply to all water sold by the HBMWD by contract executed pursuant to this Ordinance, but not to HBMWD's retail sales or to water sold for fire suppression purposes.
- 16.2.** This Ordinance shall be effective to establish rates and conditions of service for a Municipal Water Customer only after such MWC enters into a written contract with HBMWD that is approved by an ordinance or resolution of HBMWD's Board of Directors.
- 16.3.** The HBMWD acknowledges that it is bound by its contracts for the full term thereof. Neither a contract entered into pursuant to this Ordinance nor this Ordinance may be amended, modified or supplemented in any way that impairs any contract executed pursuant to it (including by the enactment of new ordinances or resolutions) without the express written consent of the MWC who is the other party to the contract. Each contract entered into pursuant to the provisions of this Ordinance shall be deemed to supersede any and all prior contracts between the HBMWD and the MWC executing the new contract.
- 16.4.** Attachments 1, 2, 3 and 4 to this Ordinance 16 are incorporated herein by reference.

- 16.5.** Nothing contained in this Ordinance, or in any contract executed pursuant to this Ordinance, shall limit HBMWD's authority under Water Code section 350 et. seq. to adopt equitable regulations and restrictions to conserve water during a drought or other water shortage emergency.
- 17. Severability** -- If any section, sentence, clause or phrase of this Ordinance is for any reason held to be invalid by a court of competent jurisdiction, such decision shall not affect the validity of the remaining provisions of this Ordinance, provided however that the Board of Directors of HBMWD may amend this Ordinance to correct such invalidity if such action can be taken without materially impairing the rights of any parties to contracts executed pursuant to it, and provided further that said Board may rescind this Ordinance if, in the judgment of the Board, the court decision of partial invalidity renders it impossible or impractical to enforce any of the remaining material terms of this Ordinance.
- 18. Effective Date of Ordinance** – This revised Ordinance 16 shall become effective as of July 1, 2017 or after adoption by the HBMWD Board of Directors, whichever occurs later.





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



Minutes for Meeting of Board of Directors

January 12, 2017

letter, signed by 114 agencies that was sent to the State Water Resources Control Board. The SWRCB will conduct a hearing for final approval on February 7. Mr. Helliker also shared the District's letter to Governor Brown requesting he rescind the emergency proclamation on drought conditions.

Water Resource Planning

Transport

Mr. Helliker stated there is not much to report in regards to transport. He did send reports to the folks they met with at ACWA per their request.

Local Sales

Mr. Helliker met with Jack Crider of the Harbor District. They are pursuing a project to locate a data center at the former pulp mill site. The data center could require a significant amount of water for cooling purposes.

Instream Flow

Mr. Helliker stated staff is working on developing a schedule and workplan for revising the diversion rights at Essex to implement a dedication of an annual average of 20 million gallons per day of water to instream flow. The plan should be available next month for the Board's review.

Ordinance 16 and Contract Changes

Mr. Helliker highlighted the proposed changes to the ordinance. The changes include: 1) Adding a line to note amendments in 2017; 2) a sentence to note that the current cost allocation is 100% Municipal Customers; 3) revise the schedule for the quintennial revision of the Peak Rate Allocation to commence July 1, 2017 in order to address revenue changes in 2016 in the Manila CSD; 4) replace current limit on capital expenditures with a quintennial Capital Improvement Plan update process; and 5) revise the effective date of the ordinance to reflect new revision. Mr. Helliker attended the Municipal Customer's Board and Council meeting to address any questions or concerns. He stated the municipal customers, both staff and board, are aware of the proposed changes and have not expressed any concerns. On motion by Director Latt, seconded by Director Woo, the Board voted 5-0 to approve the changes to Ordinance 16.

New Board Member recruitment

The Board discussed the recruitment process for a new Board member. Only one applicant applied for the position. Director Hecathorn stated the applicant seemed good and is qualified, however she would like to see more than one applicant. She noted the vacancy announcement went out during the holiday season when people were focused elsewhere. Director Latt added that the Harbor District was also looking for a new commissioner during the time frame. The Board agreed it would be good for the community and District if the Board had a larger pool of applicants to select from. They requested additional advertising and extending the deadline until February 8<sup>th</sup>. The Board will have a Special Meeting on February 10 at 2pm to discuss appointing new Director.

I. NEW BUSINESS

Officer and Committee Assignments

**Humboldt Bay Municipal Water District  
Industrial Water System Rehab Budgetary Costs**

<u>Direct Diversion (PS6)</u>	<u>Budgetary Estimate</u>	<u>Assumptions</u>
<b>Superstructure &amp; Bridge crane</b>		
<b>Pumps</b>		
1- 200HP	\$ 700,000.00	Inflated from previous project in 2008 \$505,617.00
1- 700HP	\$ 70,380.00	30 SPH-1 or 28HQO-1 with coatings. Price includes tax and freight
	\$ 133,000.00	28EBL - 3 stage 316 SS impellers. Price includes tax and freight
<b>Bearings</b>	\$ 16,000.00	18 bearings - (9) for each pump - Rubber marine type bearings
<b>Gaskets &amp; Hardware</b>	\$ 4,000.00	
<b>Column Rehab</b>	\$ 5,000.00	This would rehab pump columns
<b>Motors</b>		
1- 200HP	\$ 41,270.00	200Hp US/NIDEC 885 RPM 3 Ph/ 60hz/ 2300 V inverter duty motor. Price includes tax and freight
1- 700HP	\$ 92,000.00	Price includes tax and freight
<b>Motor Shafting &amp; Couplings</b>	\$ 7,000.00	New motor shafting and coupling for 2 motors

**Humboldt Bay Municipal Water District  
Industrial Water System Rehab Budgetary Costs**

<u>Direct Diversion (PS6)</u>	<u>Budgetary Estimate</u>	<u>Assumptions</u>
<b>VFD Motor Starters</b>		
1- 200HP	\$ 107,000.00	Installed Price
1- 700HP	\$ 126,000.00	Installed Price
<b>12kV system and transformers</b>		
	\$ 200,000.00	Replace transformers IF needed.
<b>Lube Water System</b>		
Pump skids complete	\$ 22,000.00	Price for two new complete 10 Hp pump skids and installation
Flow meters	\$ 4,000.00	This would replace two flow meter assemblies acomplete with allarm functions for low flow
<b>Control system</b>		
Programable Logic Controller System	\$ 36,000.00	Controllogix 10slot, panel view, & power monitors. All Ethernet compatible
<b>Instrumentation</b>		
	\$ 12,000.00	Includes level transmitters, Turbidimeters, flow meter transmitter
<b>Screens</b>		
	\$ 400,000.00	Screen replacement or refurbishment for 1 side only.
<b>Bar screen trash rake system</b>		
	\$ 30,000.00	This covers sandblasting and painting of structure and for replacement of the hydraulic pump, cylinders, sheaves and cable.
<b>Fish return culvert</b>		
	\$ 6,500.00	175 feet of 24" culvert and materials for installation. ie, concrete and couplings.

**Humboldt Bay Municipal Water District  
Industrial Water System Rehab Budgetary Costs**

<u>Direct Diversion (PS6)</u>	<u>Budgetary Estimate</u>	<u>Assumptions</u>
<b>Cranes</b>		
Gate crane	\$ 33,000.00	This would replace one gate crane hoist assembly using our existing gantry. (Includes sandblasting and paint)
<b>Station control valves</b>		
Valves	\$ 12,000.00	Based on pricing for similar valves. Estimate for two 20" Valmatic butterfly valves.
Operators	\$ 20,000.00	This would replace two of the air operators with Beck electric operators
<b>Pipeline</b>		
Air reliefs	\$ 50,000.00	Estimated cost to replace existing A/R's with low pressure A/R's
Valves	\$ 200,000.00	Estimated cost to replace four 42" valves. Two at valve vault 1, one at valve vault 2 and the Harbor District meter building valve.
Repairs	\$ 150,000.00	Estimated cost to make 2-3 repairs as needed along the pipeline alignment.
	<b>\$ 2,477,150.00</b>	<b>Approximate. For discussion purposes only.</b>

Hi John,

We are pleased to submit the attached Draft Technical Memorandum (TM) for the Mad River Water Clarification Treatment Facility Conceptual Level Study. The TM describes the proposed water treatment process to treat the Mad River water for industrial use and to manage the sludge produced during the water treatment process. The TM includes a conceptual level site layout for the built-out (36 mgd capacity) facility and a conceptual level opinion of probable project cost (OPPC) for the initial phase (4.5 mgd capacity) of the Mad River Water Clarification Facility.

Our OPPC for the initial phase is estimated to be about \$24,200,000. Based on the Association for the Advancement of Cost Engineering's expected accuracy range for Class 5 (conceptual-level screening) estimates, the project cost range for this is a conceptual-level OPPC could be between \$16,000,000 and \$34,000,000.

About 7.5 acres of land would be required for the planned 35 million gallon per day capacity built-out facility. A significant portion of the 7.5 acres would be required for the sludge drying beds that are proposed for processing the solids produced from treating the Mad River water during the first two phases, particularly during high River flow events and resultant high turbidity in the River water. The required area for the water clarification facility could be reduced to about 3 acres by using mechanical dewatering instead of sand drying beds for solids handling, but a mechanical dewatering facility would cost more to construct, operate, and maintain. The OPPC in the Draft TM is based on using sludge drying beds to dewater the wet sludge and does not include the higher cost to install and use a mechanical system to dewater the wet sludge.

We look forward to reviewing the draft TM with you. Please let us know when you would like to schedule a call to review the Draft TM.

Sincerely,  
Craig

**Craig Thompson, P.E., BCEE**  
Principal Engineer  
WEST YOST ASSOCIATES  
direct 925.949.5826

## TECHNICAL MEMORANDUM

DATE: June 28, 2019 Project No.: 879-50-19-01  
SENT VIA: EMAIL

TO: John Friedenbach, General Manager  
Humboldt Bay Municipal Water District

CC: Dale Davidsen, Water Superintendent  
Humboldt Bay Municipal Water District

FROM: Aileen Kondo, PE, RCE #74367

REVIEWED BY: Craig Thompson, PE, RCE #44224, BCEE #10-20029,

SUBJECT: Mad River Clarification Treatment Facility – Conceptual Level Study

### BACKGROUND

The Humboldt Bay Municipal Water District (District) owns and formerly operated Pump Station No. 6, which includes a river diversion structure and six pumps. The pump station supplied Mad River water to two pulp mills located on the Samoa Peninsula. The two pulp mills ceased operating in the late 1990s or early 2000s, and the District's 50 to 60 million gallon per day (mgd) Mad River water (rights) supply has remained underused. The water supply is available for use by new customers.

The Humboldt Bay Harbor District is negotiating sale or lease of portions of the former Louisiana Pacific (LP) pulp mill site to Nordic Aquafarms (Nordic) for fish farming operations. Information provided by Nordic in its February 20<sup>th</sup>, 2019 memorandum (Attachment A) indicate that the water delivered to and used in its fish farms must satisfy several important water quality criteria. The District recognizes that its Mad River water supply will not satisfy some of Nordic's water quality requirements all of the time and will require treatment. The District is interested in knowing what treatment will be required, as well as the cost and land area requirements for a facility to treat Mad River water for supply to Nordic.

The District has contracted with West Yost Associates (West Yost) for engineering services to develop a conceptual level opinion of probable project cost (OPPC) and site layout for the required industrial water treatment facility (IWTF). This technical memorandum (TM) describes the proposed treatment process, including treatment of waste sludge solids generated by the water treatment process, to meet Nordic's water quality objectives. The TM summarizes the OPPC for the initial phase of the facility and includes a site layout for the anticipated built-out facility.

**WATER QUALITY AND DESIGN OBJECTIVES**

**Design Flow Rates**

The IWTF will need to provide a reliable water treatment capacity of 4 mgd in the initial phase (Phase 1) that is currently anticipated to be operational in September 2023. The IWTF will increase in capacity to 8 mgd in Phase 2 within 2 to 4 years after the Phase 1 facility is operational. The facility will expand to an ultimate treatment capacity of 35 mgd in Phase 3. Due to the critical nature of this water treatment facility, one redundant treatment train will be necessary in all phases.

Table 1 summarizes the proposed treatment facilities’ capacities for the IWTF initial, second, and ultimate expansion phases. The proposed design capacities are slightly higher than Nordic’s required capacities to allow for treatment trains with identical capacities, as they should be easier to design, construct, and operate. Each phase includes one redundant treatment train for reliability.

<b>Table 1. Proposed Treatment Facilities’ Capacities</b>			
Phase	Treatment Train	Total Capacity, mgd	Firm Capacity, mgd
1	Install two (2) x 4.5 mgd Trains	9	4.5
2	Add one (1) x 9 mgd Train	18	9
3	Add three (3) x 9 mgd Trains	45	36

**Water Quality Objectives**

Table 2 provides a comparison of the Mad River water quality and Nordic’s target water quality requirements for fish farming operations. The IWTF’s main treatment objective will be to reduce the turbidity (suspended and settleable solids) in the Mad River water supplied to Nordic to between 5 and 10 nephelometric turbidity units (NTU), especially during and after storm events. It is assumed that Nordic will provide additional treatment as-needed to satisfy its other water quality targets (e.g., pH, conductivity, temperature).

**Table 2. Mad River Water Quality Compared to Nordic Target Water Quality**

Parameter	Mad River Water Quality	Nordic Target Water Quality
Alkalinity, milligrams per liter (mg/L) CaCO <sub>3</sub>	61 <sup>(a)</sup>	>45
pH	7.3 to 8.3 <sup>(b)</sup>	6.8 to 7.4
Total Suspended Solids (TSS), mg/L	18 to 330 <sup>(c)</sup>	as low as possible
Turbidity, NTU	1 to 6,530 <sup>(d)</sup>	as low as possible
Conductivity, millisiemens per meter (mS/m)	15 <sup>(a)</sup>	4 to 5
Temperature, °C	15 to 21 <sup>(b)</sup>	<13

Notes:

(a) Based on lab analysis of one grab sample collected on May 8, 2019.

(b) Based on field analysis of five grab samples collected between May 24, 2019 and June 3, 2019.

(c) Based on lab analysis of six grab samples collected on May 22, 2019 and June 3, 2019, during and after a storm event. The analysis used Standard Method SM 2540D, 1997. Revs 2011, which only captured the non-filterable residue and did not include all solids in the sample.

(d) Based on daily recorded turbidity from January 1, 2000 through December 31, 2018. The average value of the daily turbidity data was 28 NTU, the 50<sup>th</sup> percentile turbidity value is 2 NTU, and the 90<sup>th</sup> percentile turbidity value is 62 NTU.

### Solids Production

Treatment of Mad River water to reduce turbidity will produce waste solids. Contributors to solids production include the solids in the Mad River water supply (measured as TSS) and solids from chemicals added (i.e., coagulant and coagulant-aid polymer) to condition the suspended solids in the Mad River for removal. The pounds of dry solids that would be produced were estimated using the District's available Mad River source water turbidity values and applying the following assumptions:

- The ratio of suspended solids (in mg/L) to turbidity (in NTU) is 1.5 mg/L per 1 NTU.
- Aluminum sulfate (alum) will be used for coagulation.
- The coagulant (alum) dose will vary between 10 and 100 mg/L, based on the source water turbidity; the coagulant dose will not exceed 100 mg/L regardless of the source water turbidity.
- Coagulant-aid polymer will be added at a ratio of 0.05 mg/L polymer to 1 mg/L coagulant.

The District collected grab samples from the Mad River following a storm event that increased turbidity levels in the river. Multiple samples were collected as the turbidity declined from over 350 NTU down to less than 30 NTU. The District measured the turbidity in the samples and sent the samples to a lab for TSS analysis. A correlation between the TSS and turbidity was developed from the data; generally, the ratio of TSS to turbidity was 0.9 mg/L per 1 NTU. The requested lab analysis was for a standard method that captures only the non-filterable residue and not all the solids in the sample. A more conservative TSS to turbidity ratio of 1.5 mg/L per 1 NTU was used in the solids production calculations.



The District performed jar tests to test a range of coagulant dosages for treating different levels of source water turbidities. The protocol used to perform the jar tests, as well as the jar test results, are included in Attachment B. Approximate optimal coagulant dosages were identified for the source water turbidity levels tested, and a correlation between coagulant dose and turbidity was developed. The correlation was used to estimate the coagulant dose based on the source water turbidity.

Annual amounts of dry solids production were computed at IWTF flow rates of 4.5 mgd, 9 mgd, and 36 mgd, using the historical daily turbidity data from January 2000 through December 2018. Table 3 lists the minimum, average, maximum, and 90<sup>th</sup> percentile annual dry solids production at these IWTF flow rates. The maximum values are within range of the 90<sup>th</sup> percentile values, which indicates that the maximum values are not outlying values. The maximum annual dry solids production values were used to size the solids handling facilities.

Plant Flow Rate, mgd	Annual Dry Solids Production, tons			
	Minimum	Average	Maximum	90 <sup>th</sup> Percentile
4.5	77	313	565	495
9	153	626	1,129	990
36	611	2,503	4,516	3,960

## WATER TREATMENT PROCESS

### Clarification

#### Coagulation/Flocculation/Sedimentation

A “conventional pretreatment” clarification treatment process of coagulation, flocculation, and sedimentation is proposed for reducing suspended solids and turbidity in the Mad River water. The Mad River is subject to high turbidity events, with turbidity spikes over 1,000 NTU. Direct (granular media or membrane) filtration is not suitable for treating high turbidity waters, due to its susceptibility to clogging. The conventional clarification process, which uses gravity settling, is better suited for treating high turbidity waters and can typically reduce turbidity levels down to Nordic’s desired 5 to 10 NTU water supply range.

The conventional clarification process involves adding chemicals (a coagulant and potentially a polymer) to facilitate particle agglomeration for settling. A metal-salt coagulant (likely aluminum sulfate or ferric chloride) would be added at the rapid mixer to coagulate (neutralize the charge of) particles in the water, so that the particles can agglomerate (more readily bind together) to form settleable floc particles. A coagulant-aid polymer may be added at the rapid mixer or in one of the flocculation chambers to enhance bridging the smaller flocs and facilitate formation of larger, more settleable flocs.

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The clarification treatment process would include the following components:

- Inline rapid mixers (one duty unit plus one standby unit).
- At least two treatment trains that provide the ability to deliver the required flow rate (4.5 mgd, 9 mgd, or 36 mgd) when one treatment train is off-line for routine or non-routine maintenance tasks. This will provide the required firm capacity and redundancy required. Each treatment train would include:
  - A flocculation train with three stages (chambers) and a vertical turbine flocculator in each stage with a variable speed motor to provide tapered mixing energy.
  - A sedimentation basin with launders to collect the clarified water and a sludge scraper mechanism to move the settled solids out of the basin.

Table 4 summarizes the clarification treatment process preliminary design criteria.

Table 4. Clarification Treatment Process Preliminary Design Criteria				
Parameter	Units	Initial Phase	Phase 2	Phase 3
Plant Design Flow Rate	mgd	4.5	9	36
Plant Total Capacity	mgd	9	18	45
Plant Firm Capacity	mgd	4.5	9	36
<b>Rapid Mixer</b>				
Process Units	no.	2 (1 + 1)	2 (1 + 1)	2 (1 + 1)
Type	--	Inline	Inline	Inline
Pipe Size	inches	24	24	48
Mixing Intensity	sec <sup>-1</sup>	800 to 1000	800 to 1000	800 to 1000
<b>Flocculation Basin</b>				
No. of Trains @ Capacity, per Train	no. @ mgd	2 @ 4.5	2 @ 4.5 & 1 @ 9	2 @ 4.5 & 4 @ 9
Overall Inside Dimensions, per Train (L x W x SWD)	ft x ft x ft	48 x 16 x 15	48 x 32 x 15	48 x 32 x 15
Floc Time	minutes	27.6	27.6	27.6
No. of Stages	no.	3	3	3
No. of Flocculators, per Train	no.	3	6	6
No. of Flocculators, Total	no.	6	12	30
Velocity Gradient, per Stage	sec <sup>-1</sup>	80, 40, 20	80, 40, 20	80, 40, 20
<b>Sedimentation Basin</b>				
No. of Basins @ Capacity, per Basin	no. @ mgd	2 at 4.5	2 at 4.5 & 1 at 9	2 at 4.5 & 4 at 9
Overall Inside Dimensions, per Train (L x W x SWD)	ft x ft x ft	107 x 16 x 16.25	107 x 33.5 x 16.25	107 x 33.5 x 16.25
Detention Time	hours	1.1	1.2	1.2
Surface Area with Tube Settlers, per Train	sq. ft	1,280	2,680	2,680
Surface Loading Rate	gpm/sf	2.4	2.3	2.3
No. of Launderers per Basin	no.	2	4	4
Launder Weir Overflow Rate	gpd/LF	14,063	14,063	14,063
<b>Abbreviations:</b> ft = feet gpd/LF = gallons per day per linear feet gpm/sf = gallons per minute per square feet L = length mgd = million gallons per day no. = number sec = seconds sq. ft = square feet SWD = side water depth W = width				

### Grit Removal

The Mad River water may contain a significant amount of settleable solids (in addition to suspended solids), especially during high flow rate events. These solids can settle readily and may settle out and accumulate in the flocculation chambers and in the sedimentation basins. The proposed sedimentation basins include sludge collection systems to permit removing most of the settled solids from the basin, but the settled solids may be abrasive and shorten the sludge collection equipment service life.

A grit removal system could be installed ahead of the coagulation/flocculation/sedimentation treatment trains to remove the larger settleable solids in the water, to reduce the frequency of basin cleaning events and reduce potential wear on the sedimentation basin sludge collection equipment. It is assumed that the IWTF will not include a grit removal system as part of the initial phase; but depending on District operating experience, a grit removal system could be installed as part of the Phase 2 expansion or Phase 3 expansion project. The grit removal system would not require redundancy, as it is not critical to the treatment process.

## Solids Handling

### Sand Drying Beds

Sand drying beds can serve as a simple sludge solids dewatering system. Sand drying beds typically include at least two basins with an underdrain water collection system in a gravel layer, above an impermeable membrane or soil layer, and a thicker sand layer above the gravel and underdrain system. The wet sludge solids from the sedimentation basin would be spread on top of the sand in the “active” basin, similar to the existing sludge handling system at the District’s Turbidity Reduction Facility (TRF). The wet sludge solids are dried by a combination of evaporation and gravity drainage through the sand. Decanted clarified water collected from above the top of the settled and thickened sludge solids layer and drainage water collected in the underdrain pipelines are returned to and mixed with the coagulated Mad River water ahead of the flocculation and clarification treatment process.

Our OPPC assumes that sand drying beds will be used for sludge solids handling and dewatering as part of both the initial phase and Phase 2 of the IWTF. Table 5 summarizes the preliminary design criteria for the solids drying beds. Due to large space requirements for sand drying beds, a mechanical dewatering system is recommended for Phase 3 (discussed below).

Parameter	Units	Initial Phase	Phase 2
Plant Design Flow Rate	mgd	4.5	9
Annual Solids Production	lbs	1,128,900	2,257,700
Solids Loading Rate (annual)	lbs/sf	20	20
Required Bed Area	sq. ft	56,445	112,885
No. of Drying Beds	no.	3	6
Dimensions, per Bed (L x W)	ft x ft	275 x 70	275 x 70
Total Bed Area	sq. ft	57,750	115,500

### Mechanical Dewatering

Mechanical dewatering units, such as centrifuges, belt presses, or screw presses, are recommended for the estimated amount of solids that would be handled after the Phase 3 expansion is in service. Mechanical dewatering units require significantly less space to process the large volume of solids that would be produced when clarifying 36 mgd of the Mad River water. The components of the mechanical dewatering system include the following:

- Gravity thickeners to thicken the sludge solids from the sedimentation basins.
- A thickened sludge holding tank and mixer to maintain a homogenous slurry that would be fed to the mechanical dewatering system.
- Mechanical dewatering equipment to de-water the wet sludge solids.
- Pumps to transfer the thickened sludge from the gravity thickeners to the sludge holding tank and a separate set of pumps to feed the homogenous sludge slurry to the centrifuge or other mechanical dewatering equipment.
- Mechanical sludge conveyors to transfer the dry sludge solids (20 to 25 percent dry solids) to a dumpster bin.
- Dumpster bins to contain the dewatered solids prior to hauling to a landfill.
- A sump and pumps to collect the concentrate from the mechanical dewatering equipment for return to the head of the clarification treatment process.
- A mechanical dewatering building to house the mechanical dewatering equipment, conveyors, dewatering system chemical storage and metering pumps, and dumpster bins.

The space requirement for a building to house the mechanical dewatering facilities is less than a single 275-foot by 70-foot sand drying bed. One of the sand drying beds could be decommissioned to provide space for the construction of the mechanical dewatering facilities, when expanding the IWTF capacity to beyond 9 mgd.

The District would need to review with Nordic the types of polymers used with mechanical dewatering system and the amount of polymer that can be present in the concentrate before converting from sand drying beds to mechanical dewatering equipment for solids handling. Additionally, installation of a grit removal system should be considered to reduce the potential for abrasive damage to the mechanical dewatering equipment.

### **CONCEPTUAL SITE LAYOUT**

In addition to the treatment process units described in Section 3 above, the IWTF would have a small operations building and chemical storage building. The operations building would include office space for a computer-based control station, lab space, an electrical room, toilet and shower facilities, and a mechanical/maintenance room (for the chemical metering pumps and general maintenance tasks use). The chemical storage area would be adjacent to the operations building and would include chemical spill containment walls and a canopy cover.

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Figure 1 and Figure 2, included at the end of this TM, show two optional site layouts. The layouts show the facilities that would be added at each phase. The total land area required for buildout of the Phase 3 facility with 36 mgd capacity is about 7.5 acres.

The required land area for the built-out facility could be reduced to 4.75 acres if mechanical dewatering were implemented in Phase 2 in lieu of constructing three additional sand drying beds. If mechanical dewatering were implemented in the initial phase and no sand drying beds were constructed, the required land area for the built-out facility would be about 3 acres.

### CONCEPTUAL OPINION OF PROBABLE PROJECT COST (OPPC)

An engineer's OPPC was developed for the initial phase (4.5 mgd) of the IWTF. The Association for the Advancement of Cost Engineering (AACE) International publishes guidelines for classes of cost estimates and their expected accuracy ranges. Based on these guidelines, the preliminary OPPC summarized below is a Class 5 Estimate. Class 5 estimates are based on limited information and are generally prepared for strategic planning purposes, assessment of initial viability, evaluation of alternate schemes, and project screening. Typical accuracy ranges for Class 5 estimates are (-)20 to (-)50 percent on the low side and (+)30 to (+)50 percent on the high side.

The total project cost is estimated to be \$24,200,000 and could range between \$15,770,000 and \$33,880,000. The OPPC was developed using budgetary quotes from vendors, cost data from similar projects, and R.S. Means Data Online. The cost estimate summarized in Table 6 below applies the following contingencies and markups:

- 8.5 percent sales taxes on materials (applicable in both Eureka and Arcata, California)
- 25 percent indirect project cost (general conditions, contractor overhead and profit, bonds, insurance, mobilization and demobilization)
- 40 percent for conceptual-level estimating contingency
- 2.5 percent inflation rate to midpoint of construction; assumes 42 months to midpoint of construction (January 2023)
- 25 percent for project costs (planning, permitting, design, construction management, engineering services during construction, and administrative and legal costs)

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<b>Table 6. Conceptual Level OPPC for the IWTF 4.5 mgd Initial Phase</b>	
<b>Element</b>	<b>Element Cost, dollars</b>
Site Work and Yard Piping	1,630,000
Clarification Treatment System	2,820,000
Sand Drying Beds	1,360,000
Operations Building and Chemical Storage	2,070,000
Electrical & Instrumentation	1,880,000
<b>Subtotal Project Cost</b>	<b>\$9,780,000</b>
Taxes on Materials (8.5%)	370,000
<b>Subtotal</b>	<b>\$10,150,000</b>
General Conditions, Overhead & Profit (25%)	2,540,000
<b>Subtotal</b>	<b>\$12,690,000</b>
Estimating Contingency (40%)	5,080,000
<b>Current Construction Cost</b>	<b>\$17,770,000</b>
Inflation to Construction Midpoint (2.5%)	1,590,000
<b>Opinion of Probable Construction Cost</b>	<b>\$19,360,000</b>
Planning, Design, Construction Management, Engineering Services during Construction, District Project Administration and Legal Costs (25%)	4,840,000
<b>Opinion of Probable Project Cost</b>	<b>\$24,200,000</b>
<b>Opinion of Probable Project Cost Range</b>	<b>\$15,730,000 – \$33,880,000</b>

It should be noted that the OPCC does not include the following items:

- Rehabilitation of the Mad River intake and Pump Station No. 6
- Raw water pipeline to the IWTF
- Additional pumping, if needed, to deliver raw water to the IWTF
- Grit removal
- Mechanical dewatering facility
- Land acquisition
- Water storage
- Pump station to deliver water from the IWTF to customers
- Expansion to 9 mgd and 36 mgd

## SUMMARY

The proposed Mad River water treatment facility to reduce the Mad River water turbidity during and following winter storm events down to between 5 and 10 NTU includes a “conventional pretreatment” clarification process with rapid mix-coagulation, tapered flocculation, and sedimentation. Sand drying beds are proposed for processing of the wet sludge solids produced from treating the Mad River water during high flow events when turbidity can be as high as (and exceed) 1,000 NTU. The IWTF would include an operations building and a chemical storage facility. The total project cost for the initial 4.5 mgd capacity IWTF is estimated to be \$24,200,000

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with a cost range between \$15,730,000 and \$33,880,000. The total area required for the IWTF with 36 mgd capacity is about 7.5 acres. The total land area required for the IWTF could be reduced to 3 acres if mechanical dewatering were implemented instead of the proposed sand drying beds for solids handling, but a mechanical dewatering facility costs more to construct and operate.

#### ATTACHMENTS

Figure 1. Conceptual Site Layout 1

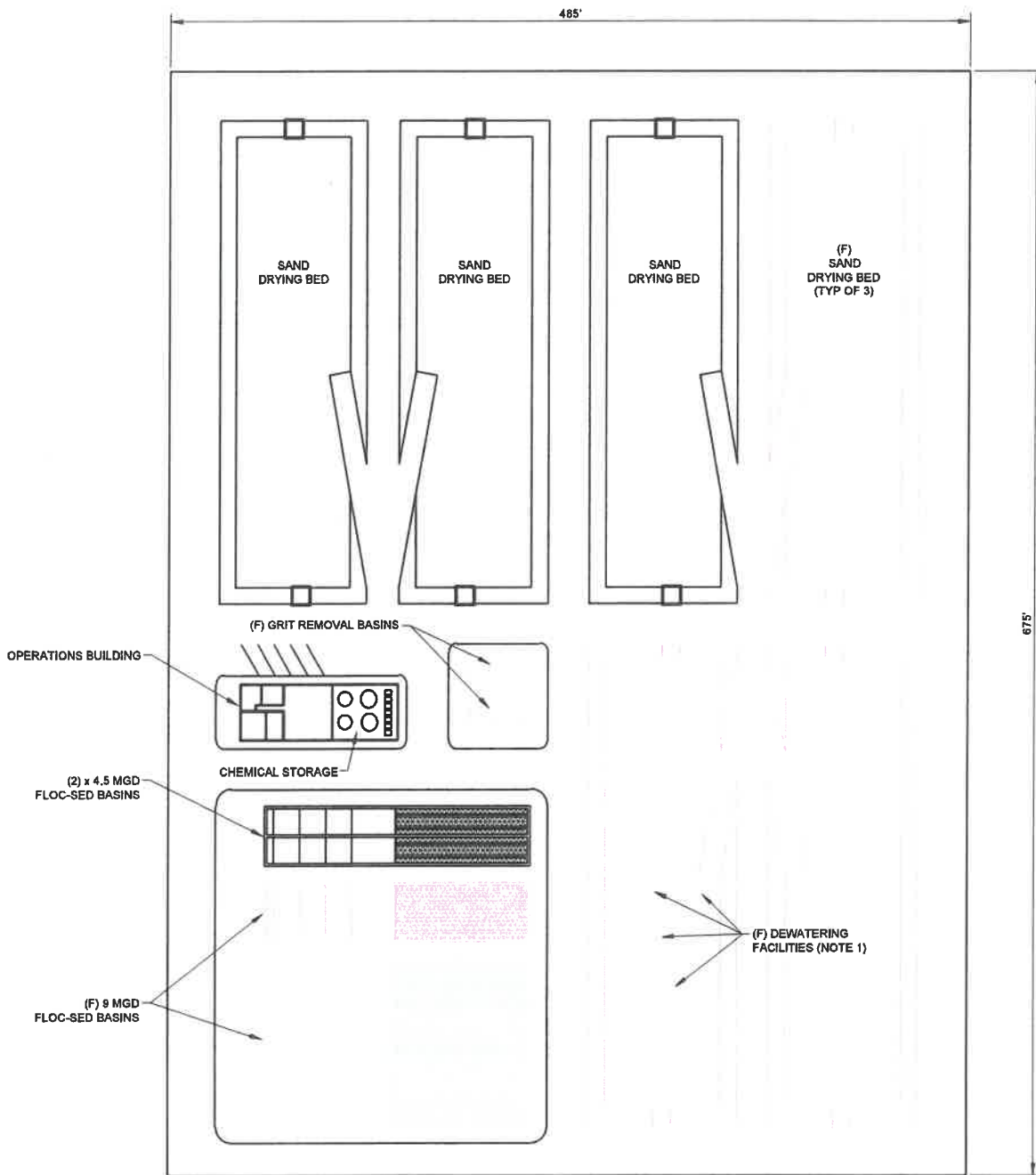
Figure 2. Conceptual Site Layout 2

Attachment A. Nordic Water Quality Requirements Memorandum

Attachment B. Jar Test Protocol to Evaluate Coagulation, Flocculation, and Sediment-clarification of Mad River Water and Jar Test Results



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**LEGEND**

- Initial Phase (4.5 mgd)
- Phase 2 (9 mgd)
- Phase 3 (36 mgd)

**Notes:**

1. When expanding to 36 mgd in Phase 3, mechanical dewatering will replace the sand drying beds for solids handling. The dewatering facilities will include gravity thickeners, solids feed tank, and a dewatering building housing the mechanical dewatering equipment (e.g. centrifuge), conveyors, and dumpster bins. One of the sand drying beds can be decommissioned for construction of the dewatering facilities in its place.

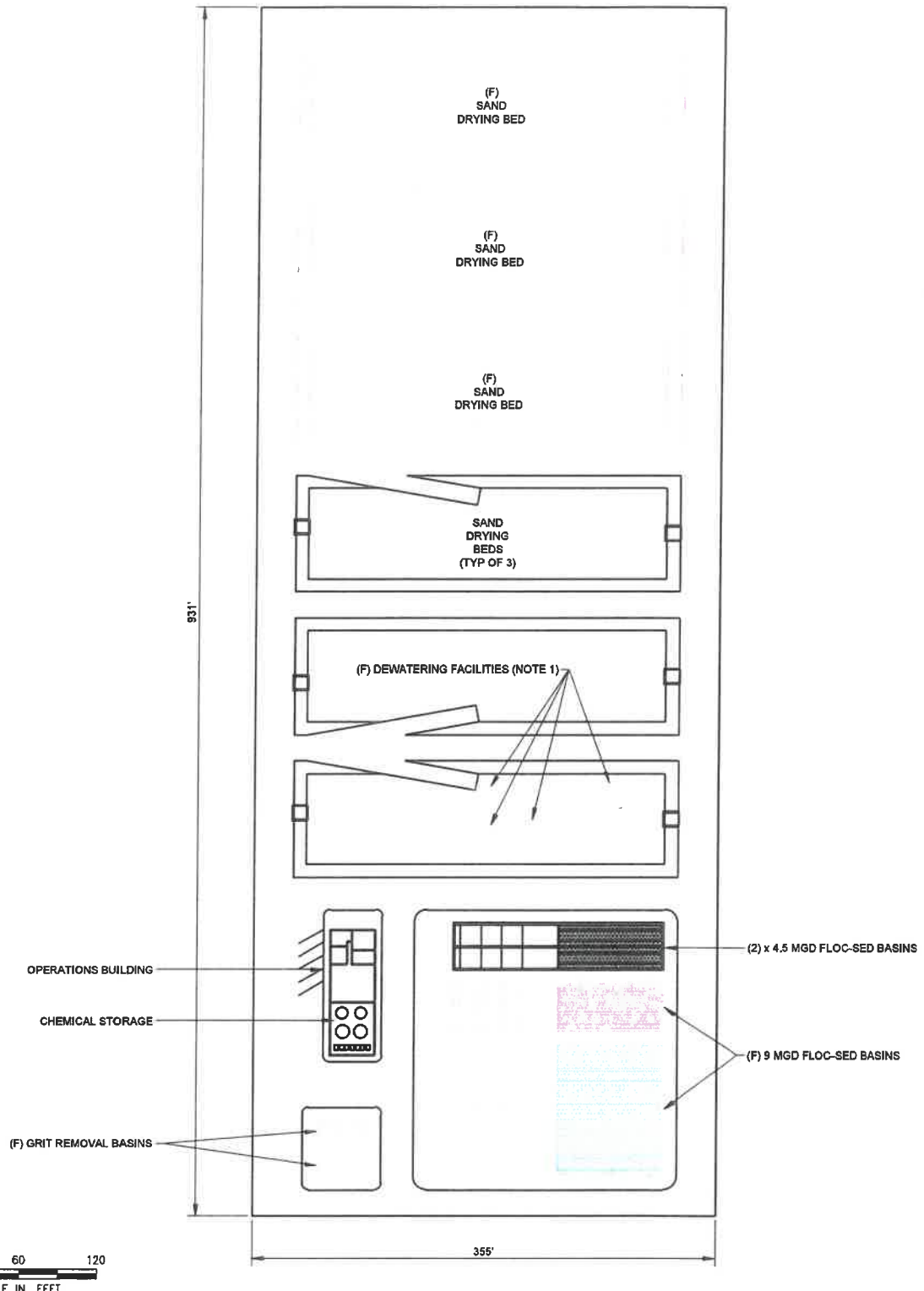


WEST YOST  
ASSOCIATES

**Figure 1  
Conceptual Site  
Layout 1**

Humboldt Bay Municipal  
Water District  
Mad River Clarification Treatment  
Facility Conceptual Level Study

\\WCS-FS1\Walmart\_Creek\Clients\1879\_Humboldt Bay\_MWD\DC-19-01\_Mad River Clarification Treatment Facility\CAD\Figures\1879-50-19-01-Figs 1 & 2.dwg 6/25/2019 4:54 PM akondo



**LEGEND**

—————	Initial Phase (4.5 mgd)
—————	Phase 2 (9 mgd)
—————	Phase 3 (36 mgd)

**Notes:**

1. When expanding to 36 mgd in Phase 3, mechanical dewatering will replace the sand drying beds for solids handling. The dewatering facilities will include gravity thickeners, solids feed tank, and a dewatering building housing the mechanical dewatering equipment (e.g. centrifuge), conveyors, and dumpster bins. One of the sand drying beds can be decommissioned for construction of the dewatering facilities in its place.



**Figure 2  
Conceptual Site  
Layout 2**

Humboldt Bay Municipal  
Water District  
Mad River Clarification Treatment  
Facility Conceptual Level Study

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## **ATTACHMENT A**

### **Nordic Water Quality Requirements Memorandum**

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February 20<sup>th</sup>, 2019

## Water Quality requirements

Producing fish requires clean water both from a fish welfare and a food security perspective.

Sometimes available water parameters may deviate from the ideal needs of the fish. In many such cases we are able to polish the water with various water treatment technologies to attain the quality we need. Our ability to do so depends on the severity of deviations in water quality and the cost of treatment. Some issues are easier to fix than others.

Non-starters with regards to water quality:

- Elevated levels of metals such as aluminum, iron, cobber, lead and a few others.
- The presence of toxins / pesticides / pollution in the water.
- High levels of chlorine or chloramine (typically in tap water).
- High levels of suspended solids containing clay.

Great fluctuations in water quality from the source may also cause complications in securing stable water quality for our fish. One such example can be extracting water from rivers that experience significant fluctuations in water quality from one day to another. Although such challenges may be overcome, they complicate operations and add additional risk and costs.

## Requirements for the Humboldt project

If there is a wish to develop an aquaculture hub on the peninsula, then a significant competitive advantage will be access to a stable and reasonably clean fresh water source.

Seawater will be withdrawn from a sea chest on site and is not a concern at this time.

For the Nordic Aquafarms project, we are seeking a minimum of 2000 g/m freshwater. This could easily be increased to 4000 g/m if the water is available. Cost of water will be a key consideration.

Volume use will be stable 24/7.

An assessment of water quality needs to take into account the levels of various parameters found in the water source, and how these potentially interact. As such there is no clear blue book answer to water quality – each individual source must be assessed across the board. Therefore, we will always need to obtain water quality data for a comprehensive assessment of potential challenges and remedies.

We will therefore need such water quality data from the Water District in Humboldt for further assessment. We will also need to perform our own testing on the water sources, also over time if variations in water quality is likely at the source. As a first step we can outline some general guidelines.

Water quality parameters to keep in mind:

Alkalinity (CaCO<sub>3</sub>) : higher than 45 mg/l

PH : 6.8-7.4

TSS (suspended solids): Generally, as low as possible

Turbidity : Generally, as low as possible

Conductivity : 4 - 5 ms/m

Ideal temp : lower than 13 C (higher temps require cooling)

If there are unusually high levels of nitrates, ammonia, etc., or very low oxygen levels, then this would have to be assessed. This is, however, not common in most quality water sources

And again, elevated levels of toxins, metals or pollution may be show-stoppers.

Issues with river water:

Surface water in rivers are in many cases subject to extreme variations in water quality and may require extensive treatment systems to achieve appropriate water quality. There is also an increased risk of disease transmission from native fish species with use of surface water from rivers. These challenges may be mitigated, but this requires a more extensive effort.

Among the largest challenges in river water are very high turbidity levels, high TSS, visibility/color and potentially elevated nutrient levels. If clay particles are present, this creates additional challenges, while clay in some cases also contains traces of aluminum that can be harmful to fish.

Recommendation:

While our summary here can provide some initial guidelines, we recommend obtaining any water quality data that might be available. We can review these and have a dialogue about potential ways forward.

There is no doubt that gaining access to water that holds better quality than surface water from a river is a significant advantage for aquaculture development on the peninsula.

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## **ATTACHMENT B**

Jar Test Protocol to Evaluate Coagulation, Flocculation, and  
Sediment-clarification of Mad River Water and Jar Test Results

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## Jar Test Protocol to Evaluate Coagulation, Flocculation, and Sediment-clarification of Mad River Water

*Note: The protocol previously provided to simulate the conditions in a contact clarifier will not be suitable for simulating the coagulation, flocculation, and sedimentation-clarification that we anticipate will be needed to reduce the Mad River water turbidity from 50 NTU and higher to less than 5 to 10 NTU.*

### Coagulant Dosage

We suggest starting with coagulant dosages in equal increments:

1. Jar number 1 (on the far left) should receive no coagulant and serves as the reference jar.
2. We suggest starting the first jar (Jar No. 2) at a dosage that is 0.2 mg/L of alum per 1 NTU (this would be 10 mg/L of alum for Jar testing water that has turbidity at 50 NTU).
3. Jar Nos. 3, 4, 5, and 6 should receive proportionally higher dosages (20 mg/L, 30 mg/L, 40 mg/L, and 50 mg/L).

Based on your information that there was a significant improvement in the floc and water clarity between coagulant dosages at 20 mg/l and 25 mg/L treating a water sample that was 50 NTU in the River. If a water sample has 100 NTU turbidity, the dosages for Jar Nos. 2, 3, 4, 5, and 6 should be proportionally higher (20 mg/L, 40 mg/L, 60 mg/L, 80 mg/L, and 100 mg/L). If your jar test experience indicates that the optimal dosage range required to coagulate the water is between 20 mg/L and 30 mg/L (or some similar range), the dosages should be in 5 mg/L increments starting with a dosage 5 mg/L lower than the lower range dosage (15 mg/L in Jar No. 2) and increasing in 5 mg/L dosage increments to a high dosage that is 5 mg/L above the upper dosage range (35 mg/L in Jar No. 6).

### Paddle Speed Settings

#### Coagulation Paddle Speed and Duration

The coagulation step simulation will remain the same at: 300 rpm for 5 seconds

#### Flocculation Simulation:

The likely flocculation system will include three tapered flocculation stages that provide an initial high mixing energy for 10 minutes, followed by a lower mixing energy (typically about one-half the first stage's mixing energy, G), and finally followed by the lowest mixing energy (about one-half of the second stage's mixing energy). The mixing energy is high (initially) to maximize the collision of coagulated particles needed to optimize contact among the smaller particles needed for optimal particle agglomeration. If the mixing energy remains high, some of the flocculated particles will tear apart ("shear"), so the second stage uses a lower mixing energy. Similarly, as the particles collide and form increasingly larger particles the energy needed for the larger particles to come into contact decreases.

As indicated on the attached Jar Test Unit mixing energy versus agitator paddle speed graph at a 16°C water temperature (about 61°F) and an initial series of mixing energies at 80 sec<sup>-1</sup>, 40 sec<sup>-1</sup>, and 20 sec<sup>-1</sup>, the jar test unit's speed should be about 85 rpm, 50 rpm, and 28 rpm. Similarly, if the water temperature is lower (10 C, or 50°F) and the same series of mixing energies is desired at 80 sec<sup>-1</sup>, 40 sec<sup>-1</sup>, and 20 sec<sup>-1</sup>, the jar test unit's speed should be about 90 rpm, 52 rpm, and 30 rpm (which isn't much different than for the 16°C water temperature). The three flocculation stages' duration should be 10 minutes (each).



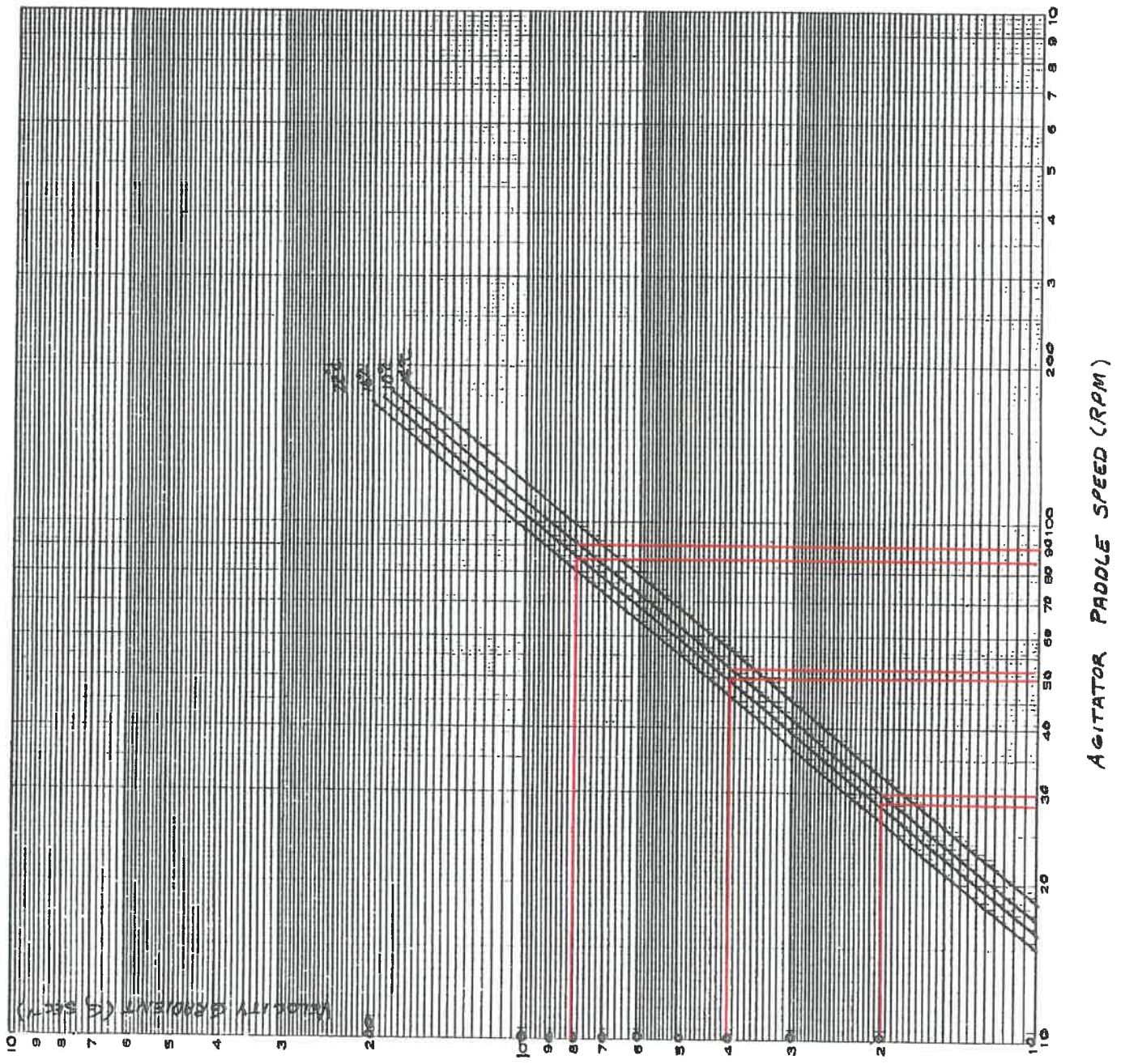
#### Flocculation Speeds and Durations:

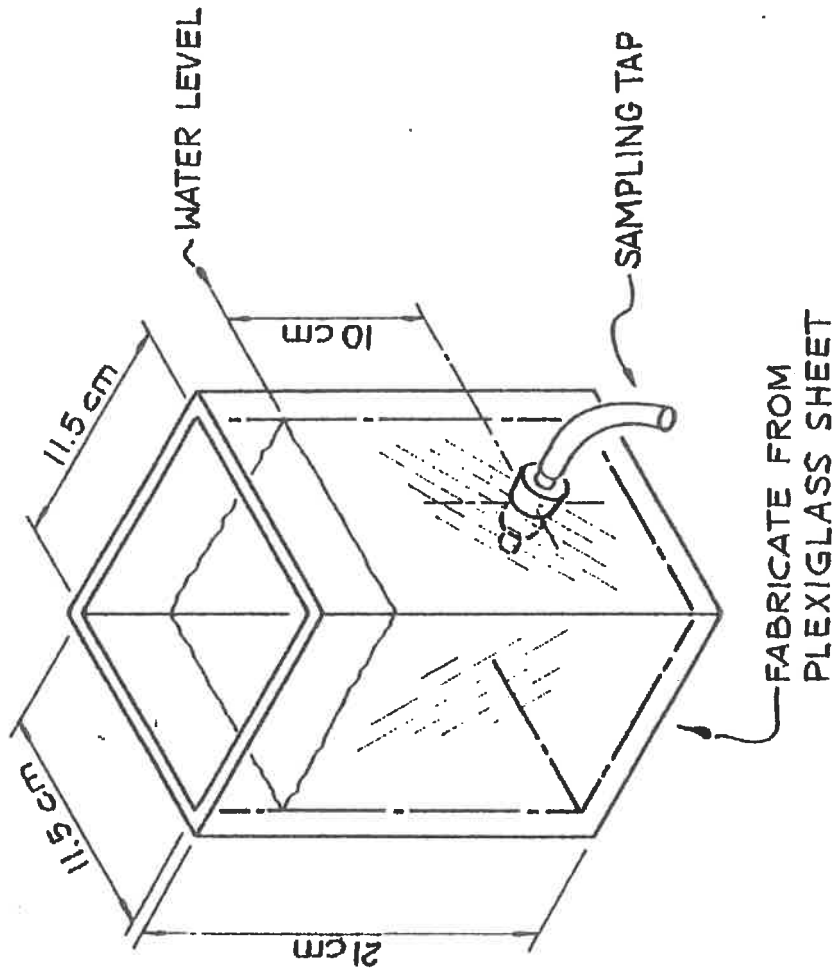
1. Stage 1: 85 to 90 rpm for 10 minutes
2. Stage 2: 50 to 52 rpm for 10 minutes
3. Stage 3: 28 to 30 rpm for 10 minutes

#### Sampling and Testing

After the third flocculation stage simulation ends, the settleable particles begin to drop to the bottom of the jars. In order to collect a sample that represents the clarification zone's rise rate (and the particles' settling rate that removes particles from the clarified water) the samples collected from the sample tap located 4-inches below the water surface should to be collected and the turbidity recorded within 2 to 2.5 minutes after the paddles stop. To the degree possible, each jar's sample/analysis time(s) after the paddles stopped should be recorded. If there are sufficient staff, two sets of samples should be collected and tested with the first as close to 2 minutes after the jar's paddles stop turning and the second sample should be collected and tested as close to 2.5 minutes after the paddles stop.

Since we are focused on clarification, the clarified water samples do not need to be filtered. If you elect to filter clarified water samples, it would be prudent to record each sample's filtered water turbidity.





## Jar Test Results

Test	Date	Time	Operator	Turbidity NTU	PH	Temperature	Sample Volume	Rapid Mix Rate RPM	Coagulation Rate RPM	Coagulation Mix Time	Coagulation Time Min	Filter
1	5/24/2019	1100	WW	49.7	7.6	69.9	2	300	25	20	20	Yes
2	5/27/2019	1230	WW	14	7.7	59	2	300	85, 50, 28	10, 10, 10	2, 2.5	No
3	5/28/2019	1500	WW	42.4	7.71	60.3	2	300	85, 50, 28	10, 10, 10	2, 2.5	No
4	5/29/2019	1500	WW	15	7.28	60.3	2	300	85, 50, 28	10, 10, 10	2, 2.5	No
5	6/3/2019	1400	WW	104	8.32	60	2	300	85, 50, 28	10, 10, 10	2, 2.5	No

Test 1	Jar 1	Jar 2	Jar 3	Jar 4	Jar 5	Jar 6	Test 1 was completed before we received your jar test parameters
Start Turbidity NTU	47.8	65.5	55.5	60.3	50.4	46.1	
Dose mg/l	5	10	15	20	25	30	
Filtered Turbidity NTU @ 15 min	24	25.9	27.3	20.5	1.43	0.78	
Removal NTU	23.8	39.6	28.2	39.8	48.97	45.32	

Test 2	Jar 1	Jar 2	Jar 3	Jar 4	Jar 5	Jar 6
Start Turbidity NTU	14	14	14	14	14	14
Dose mg/l	0	10	20	30	40	50
Turbidity NTU @ 2 min	14.8	14.8	16.2	18.6	18.3	17.6
Turbidity NTU @ 2.5 min	15.7	14.3	16.2	17.9	17.6	16.9
Removal NTU	-0.9	0.5	0	0.7	0.7	0.7

Test 3	Jar 1	Jar 2	Jar 3	Jar 4	Jar 5	Jar 6
Start Turbidity NTU	33.9	31.6	33.8	31.2	31.5	29.6
Dose mg/l	0	20	25	30	35	40
Turbidity NTU @ 2 min	32.3	25.7	22.9	31.9	34.8	33.4
Turbidity NTU @ 2.5 min	21	23.5	19.5	27.8	27	31.2
Removal NTU	11.3	2.2	3.4	4.1	7.8	2.2

Test 4	Jar 1	Jar 2	Jar 3	Jar 4	Jar 5	Jar 6
Start Turbidity NTU	17.5	15.7	15.6	15.9	15.8	16.3
Dose mg/l	0	20	25	30	35	40
Turbidity NTU @ 2 min	15.3	16.4	18.8	20	21.2	19.5
Turbidity NTU @ 2.5 min	14.7	15.1	17	19.4	19.8	18.6
Removal NTU	0.6	1.3	1.8	0.6	1.4	0.9

Test 5	Jar 1	Jar 2	Jar 3
Start Turbidity NTU	110	119	105
Dose mg/l	30	40	50
Turbidity NTU @ 2 min	104	95	97.8
Turbidity NTU @ 2.5 min	106	79.7	90.5
Removal NTU	-2	15.3	7.3

**Humboldt Bay Municipal Water District**

To: Board of Directors

From: John Friedenbach

Date: July 2, 2019

Re: **Humboldt County General Plan – Critical Municipal Water Supply Areas**

**Discussion**

The Humboldt County General Plan contains Chapter 11 – Water Resources Element. The stated Purpose of that chapter is provided in Subsection 11.1:

“This Element addresses water planning issues including river and stream water quality, stormwater runoff, groundwater management, water needs of fish and wildlife, water consumption, conservation and re-use methods, and state and federal regulations.”

Subsection 11.2 Relationship to Other Elements states:

“These and other water-related topics can be found throughout the General Plan. Water availability for development is addressed in the Land Use Element. The Conservation and Open Space elements address riparian corridors, wetlands, wildlife protection, fishery resources, other biotic resources, water-oriented recreation, and soil erosion. The Community Infrastructure and Services Element address public water and wastewater systems.”

The Subsection 11.4 Goals and Policies contains Policy WR-P4 which states:

“Critical Municipal Water Supply Areas. The Board of Supervisors shall designate all or portions of watersheds as “Critical Water Supply Areas” if cumulative impacts from land uses within the area have the potential to significantly impact the quality or quantity of municipal water supplies. Water resources within Critical Water Supply Areas shall be protected by the application of specific standards for such areas.”

During my discussions with Building and Planning Director John Ford, I inquired if the Mad River Watershed had received the Critical Municipal Water Supply Area designation. He stated that it had not. I then inquired if there were any such designations within the county. He stated that there were two: 1) Francis Creek (water supply for Del Oro Water Company which supplies the City of Ferndale); and 2) Luffenholtz Creek (City of Trinidad water supply). These two areas were designated as critical watersheds on the 1984 Framework General Plan Biological Resources Map and carried through in the General Plan Land Use Map. The General Plan text does not specifically identify these as critical watersheds. I then inquired how could the Mad River Watershed be designated as a Critical Municipal Water Supply Area. He replied that one would have to make a request to the Board of Supervisors.

**Recommendation**

Given this information, staff is recommending that our Board authorize staff to investigate this concept/designation further to determine what benefits, if any, could be achieved to protect the water quality of the Mad River Watershed, which is a major component of our District's Mission.

# Engineering

**CHANGE ORDER**

PROJECT: HBMWD Surge Tower Demolition Project

Change Order No.: 3Date: 06/26/19Page No.: 1 of 1**DESCRIPTION OF CHANGE:**

The areas to the south/east of the surge tower consist of rutted, deep, soft sand. It is very difficult to access the surge tower area and the existing Valve Vault #1 to the north via this pathway, which is the only path for access. Four truckloads of fractured rock are required to allow District staff to access the surge tower area and Valve Box #1 in the future.

The total cost for the work associated with this change order is four loads of rock at \$600/load = \$2,400.

CONTRACTOR: Figas Construction Inc.

Adjustment of contract sum	
Original Contract Sum	\$56,000.00
Prior Adjustments	\$7,250
Contract Sum Prior to this Change	\$63,250
Adjustment for this Change	\$2,400
Revised Contract Sum	\$65,650

Adjustment of contract completion dates	
Original Contract Completion Date	Oct. 13, 2019
Prior Adjustments in Calendar Days	0
Adjustment in Calendar Days for this Change Order	0
Revised Contract Completion Date	Oct. 13, 2019

**NOTE: CONTRACTOR WAIVES ANY CLAIM FOR FURTHER ADJUSTMENTS FOR THE CONTRACT SUM RELATED TO THE ABOVE-DESCRIBED CHANGE IN THE WORK.**

RECOMMENDED BY:

*Nathan Stevens*

Engineer – Nathan Stevens

DATE: 06/26/2019

APPROVED BY:

*John Friedenbach*

Owner – John Friedenbach, General Manager

DATE: 6/26/19

ACCEPTED BY:

*Adam Figas*

Contractor – Adam Figas, Figas Construction

DATE: 6/26/19



**FINANCIAL**

**Humboldt Bay Municipal Water District**

Memo to: Board of Directors

From: Chris Harris, Business Manager  
Becky Moyle, Accounting & Human Resources Specialist

Date: July 2, 2019

Subject: Financial Report for June 2019

The Financial Report for June 2019 was not completed by the BlueBook publish date. I expect to have the Financial Report completed next week and will email it to you as soon as it is completed. Please let me know if you would like a paper copy delivered to you.

The Monthly Expenses by Vendor Detail report is in the BlueBook.

Humboldt Bay Municipal Water District

--Monthly Overtime Report--  
Pay period dates: 6/1/2019 - 6/30/2019Page: 1  
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Position Title	2-01 Overtime Emp Hrs	2-01 Overtime Emp Amt	2-02 Doubletime Emp Hrs	2-02 Doubletime Emp Amt
Customer Srvc	1.50	\$45	.00	\$0
Actg/HR Spec	4.25	\$286	.00	\$0
Total ADMIN:	5.75	\$331	.00	\$0
Operations Spec	8.00	\$496	.00	\$0
Elec & Ins Tech	2.50	\$131	.00	\$0
Oper & Mnt Tech	6.00	\$292	.00	\$0
Maint Worker	5.00	\$135	.00	\$0
Oper & Mnt Tech	6.00	\$306	.00	\$0
Total ESSEX:	27.50	\$1,360	.00	\$0
Grand Totals:	33.25	\$1,691	.00	\$0

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 6/1/2019-6/30/2019Page: 1  
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Vendor Name	Date Paid	Description	Amount Paid
<b>101NETLINK</b>			
101NETLINK	06/06/2019	<i>Ruth Data Link/Internet</i>	160.00
Total 101NETLINK:			160.00
<b>ACWA/JPIA</b>			
ACWA/JPIA	06/20/2019	<i>RETIREE MEDICAL</i>	11,353.02
ACWA/JPIA	06/20/2019	<i>COBRA Dental</i>	96.68-
ACWA/JPIA	06/20/2019	<i>COBRA Vision</i>	18.56-
ACWA/JPIA	06/20/2019	<i>Health Insurance</i>	2,493.55
ACWA/JPIA	06/20/2019	<i>Dental Insurance</i>	106.12
ACWA/JPIA	06/20/2019	<i>Vision Insurance</i>	18.56
ACWA/JPIA	06/20/2019	<i>EAP</i>	2.35
Total ACWA/JPIA:			13,858.36
<b>Almquist Lumber</b>			
Almquist Lumber	06/28/2019	<i>paint and painting supplies</i>	97.76
Almquist Lumber	06/28/2019	<i>Storm Damage - Collector 2 Cable Car Shed</i>	41.58
Almquist Lumber	06/28/2019	<i>painting supplies</i>	135.41
Total Almquist Lumber:			274.75
<b>Alves, Inc</b>			
Alves, Inc	06/28/2019	<i>Essex Control Building Flooring Replacement</i>	5,971.84
Total Alves, Inc:			5,971.84
<b>AT &amp; T</b>			
AT & T	06/20/2019	<i>Eureka/Essex Land Line</i>	35.05
AT & T	06/20/2019	<i>Arcata/Essex Land Line</i>	35.05
AT & T	06/20/2019	<i>Samoa/Essex Land Line</i>	235.01
AT & T	06/20/2019	<i>Blue Lake Meter Signal Line</i>	60.52
AT & T	06/20/2019	<i>Eureka Office</i>	195.73
AT & T	06/20/2019	<i>Eureka Office Alarm Line</i>	109.93
AT & T	06/20/2019	<i>Samoa Booster Pump Station</i>	110.86
AT & T	06/20/2019	<i>Valve Building Samoa</i>	195.73
AT & T	06/20/2019	<i>Eureka Office</i>	448.61
AT & T	06/20/2019	<i>Essex office</i>	1,179.41
AT & T	06/20/2019	<i>TRF</i>	191.24
AT & T	06/20/2019	<i>Ruth Hydro/Dataline</i>	189.96
Total AT & T:			2,987.10
<b>AT&amp;T Advertising Solutions</b>			
AT&T Advertising Solutions	06/28/2019	<i>white page listing</i>	21.00
Total AT&T Advertising Solutions:			21.00
<b>AT&amp;T Long Distance</b>			
AT&T Long Distance	06/11/2019	<i>Ruth HQ</i>	11.81
AT&T Long Distance	06/11/2019	<i>Pumping &amp; Control</i>	105.82
AT&T Long Distance	06/11/2019	<i>TRF</i>	6.83
AT&T Long Distance	06/11/2019	<i>Essex Office</i>	335.36
AT&T Long Distance	06/11/2019	<i>Eureka Office Long Distance</i>	6.63
AT&T Long Distance	06/11/2019	<i>Ruth Hydro/Dataline Long Distance</i>	139.40
AT&T Long Distance	06/11/2019	<i>Eureka Office Long Distance</i>	57.38

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 6/1/2019-6/30/2019Page: 2  
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Vendor Name	Date Paid	Description	Amount Paid
Total AT&T Long Distance:			663.23
<b>B&amp;B Portable Toilets</b>			
B&B Portable Toilets	06/11/2019	Annual Ruth Maintenance - clean District portable toilet	80.00
Total B&B Portable Toilets:			80.00
<b>Brady Instruments</b>			
Brady Instruments	06/27/2019	Ruth Hydro Battery Hydrometer	82.59
Total Brady Instruments:			82.59
<b>Buckles-Smith</b>			
Buckles-Smith	06/11/2019	Collector 1 Electrical Upgrade	34,682.73
Buckles-Smith	06/28/2019	Fieldbrook-Glendale Reservoir Level Repair	422.70
Total Buckles-Smith:			35,105.43
<b>Campton Electric Supply</b>			
Campton Electric Supply	06/28/2019	electrical supplies	14.25
Total Campton Electric Supply:			14.25
<b>Citi Cards</b>			
Citi Cards	06/27/2019	Special Board Meeting - BBQ	179.79
Citi Cards	06/27/2019	ACWA/JPLA Training 6-19-2019	83.47
Citi Cards	06/27/2019	Annual Renewal	120.00
Citi Cards	06/27/2019	Auto maintenance	68.14
Total Citi Cards:			451.40
<b>City of Eureka</b>			
City of Eureka	06/06/2019	Eureka office water/sewer	83.00
Total City of Eureka:			83.00
<b>Coastal Business Systems Inc.</b>			
Coastal Business Systems Inc.	06/12/2019	Eureka office copy and fax machine	940.53
Total Coastal Business Systems Inc.:			940.53
<b>Cummins Pacific LLC</b>			
Cummins Pacific LLC	06/28/2019	Service Manual for TRF Generator	58.16
Total Cummins Pacific LLC:			58.16
<b>Davidson Brothers Lock &amp; Safe</b>			
Davidson Brothers Lock & Safe	06/06/2019	Ruth Bunkhouse keys	24.68
Davidson Brothers Lock & Safe	06/28/2019	Ruth Hydro PG&E meter building keys	21.05
Total Davidson Brothers Lock & Safe:			45.73
<b>Denco Controls, Inc</b>			
Denco Controls, Inc	06/11/2019	Collectors Pumps Oilers	4,840.52

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
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Vendor Name	Date Paid	Description	Amount Paid
Total Denco Controls, Inc:			4,840.52
<b>Downey Brand Attorneys LLP</b>			
Downey Brand Attorneys LLP	06/27/2019	<i>Streambed Flow Enhancement Grant</i>	714.00
Total Downey Brand Attorneys LLP:			714.00
<b>Endress Hauser, Inc</b>			
Endress Hauser, Inc	06/28/2019	<i>TRF Instrumentation Emergency Replacement</i>	1,239.42
Endress Hauser, Inc	06/28/2019	<i>TRF Instrumentation Emergency Replacement</i>	3,971.21
Endress Hauser, Inc	06/28/2019	<i>TRF Instrumentation Emergency Replacement</i>	3,428.55
Total Endress Hauser, Inc:			8,639.18
<b>Eureka Oxygen</b>			
Eureka Oxygen	06/20/2019	<i>cylinder rental</i>	111.64
Total Eureka Oxygen:			111.64
<b>Eureka Readymix</b>			
Eureka Readymix	06/28/2019	<i>Mainline Valve Replacement Collector 4</i>	248.57
Total Eureka Readymix:			248.57
<b>Eureka Rubber Stamp</b>			
Eureka Rubber Stamp	06/27/2019	<i>Eureka office name plates</i>	47.63
Total Eureka Rubber Stamp:			47.63
<b>Eureka-Humboldt Fire Ext.,Co, Inc</b>			
Eureka-Humboldt Fire Ext.,Co, Inc	06/28/2019	<i>Eureka office fire extinguisher maintenance</i>	49.00
Total Eureka-Humboldt Fire Ext.,Co, Inc:			49.00
<b>Fastenal Company</b>			
Fastenal Company	06/06/2019	<i>safety supplies</i>	122.46
Fastenal Company	06/06/2019	<i>maintenance supplies</i>	21.63
Fastenal Company	06/28/2019	<i>Domestic Reservoir Valve Replacement</i>	1,124.17
Fastenal Company	06/28/2019	<i>safety supplies</i>	44.40
Total Fastenal Company:			1,312.66
<b>Financial Credit Network</b>			
Financial Credit Network	06/27/2019	<i>Bad Debt Fee Collection Agency</i>	96.56
Total Financial Credit Network:			96.56
<b>FleetPride</b>			
FleetPride	06/28/2019	<i>Fieldbrook-Glendale CSD Reservoir Level Repair</i>	15.04
Total FleetPride:			15.04
<b>Frontier Communications</b>			
Frontier Communications	06/27/2019	<i>Ruth HQ</i>	53.90
Frontier Communications	06/27/2019	<i>Ruth Hydro/Ruth Dataline</i>	166.94

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
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Vendor Name	Date Paid	Description	Amount Paid
<b>Total Frontier Communications:</b>			220.84
<b>GEI Consultants, Inc</b>			
GEI Consultants, Inc	06/27/2019	FERC Dam Safety Engineer	275.00
<b>Total GEI Consultants, Inc:</b>			275.00
<b>GHD</b>			
GHD	06/28/2019	Stream Flow Enhancement - Wildlife Conservation Grant	8,750.25
GHD	06/28/2019	Surge Tower Replacement	6,663.00
GHD	06/28/2019	Ruth Dam Inundation Mapping	603.00
GHD	06/28/2019	Stream Flow Enhancement - Wildlife Conservation Grant	14,042.25
GHD	06/28/2019	12KV Switchgear Replacement - Grant	18,646.75
GHD	06/28/2019	Storm Damage - Collector 2 Cable Car	1,288.00
GHD	06/28/2019	Cathodic Protection System Survey/Evaluation	11,327.29
GHD	06/28/2019	TRF Generator Grant Applicaiton	6,548.75
GHD	06/28/2019	Surge Tower Replacement	8,228.50
GHD	06/28/2019	Nordic Aquafarms-Analysis	319.25
GHD	06/28/2019	FERC EAP Table Top Exercise	211.00
GHD	06/28/2019	General Engineering - Essex	1,371.50
GHD	06/28/2019	General Engineering - Water Quality	623.25
GHD	06/28/2019	General Engineering - Ruth Dam	1,765.50
GHD	06/28/2019	General Engineering - Storm Damage Collector 4	422.00
GHD	06/28/2019	General Engineering - Eureka	719.00
GHD	06/28/2019	General Engineering - Collector 1 Electrical Upgrade	588.50
GHD	06/28/2019	General Engineering - Fieldbrook-Glendale CSD	447.50
GHD	06/28/2019	Stream Flow Enhancement - Wildlife Conservation Grant	1,727.50
GHD	06/28/2019	12KV Switchgear Replacement - Grant	9,689.50
GHD	06/28/2019	Ruth Dam Inundation Mapping	348.00
GHD	06/28/2019	Cathodic Protection System Survey/Evaluation	470.99
GHD	06/28/2019	Credit Memo - General Engineering	382.50
<b>Total GHD:</b>			94,418.78
<b>GR Sundberg, Inc</b>			
GR Sundberg, Inc	06/06/2019	Emergency Repair Collector 2 Cable Car	102,813.09
GR Sundberg, Inc	06/06/2019	Emergency Collector 2 pipeline repair	52,262.37
GR Sundberg, Inc	06/06/2019	Emergency Collector 2 Slide Removal and Cable Car Building D	7,826.49
<b>Total GR Sundberg, Inc:</b>			162,901.95
<b>H.T. Harvey &amp; Associates</b>			
H.T. Harvey & Associates	06/06/2019	Assistance with Streambed Flow Enhancement - Grant	16,584.75
<b>Total H.T. Harvey &amp; Associates:</b>			16,584.75
<b>Health Equity Inc</b>			
Health Equity Inc	06/20/2019	District HSA Contribution	1,986.92
Health Equity Inc	06/11/2019	HSA Admin Fee - 2 employees	5.90
Health Equity Inc	06/11/2019	HSA Admin Fee 9 employees	26.55
<b>Total Health Equity Inc:</b>			2,019.37
<b>Hensel Hardware</b>			
Hensel Hardware	06/11/2019	maintenance supplies	22.19
Hensel Hardware	06/11/2019	Ruth Bunkhouse Furnishings	39.04

Humboldt Bay Municipal Water District

--Monthly Expenses by Vendor Detail Report--  
Report dates: 6/1/2019-6/30/2019Page: 5  
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Vendor Name	Date Paid	Description	Amount Paid
Hensel Hardware	06/28/2019	<i>Painting supplies</i>	42.26
Hensel Hardware	06/28/2019	<i>Surge Tower Air Relief Valve Cover</i>	53.28
Hensel Hardware	06/28/2019	<i>Bug Spray</i>	43.35
Hensel Hardware	06/28/2019	<i>Unit 3 supplies</i>	28.83
Hensel Hardware	06/28/2019	<i>Essex Hot water heater installation</i>	71.52
Total Hensel Hardware:			300.47
<b>Hensell Materials</b>			
Hensell Materials		<i>Emergency Generator for Communications Equipment</i>	.00
Hensell Materials	06/29/2019	<i>Emergency Generator for Communications Equipment</i>	21.00-
Hensell Materials	06/11/2019	<i>Emergency Repair - Collector 2 pipeline repair</i>	126.13
Hensell Materials	06/11/2019	<i>Emergency Repair - Collector 2 pipeline repair</i>	126.13
Hensell Materials	06/29/2019	<i>Ruth Bunkhouse rebuild</i>	19.96
Hensell Materials	06/29/2019	<i>Emergency Generator for Communications Equipment</i>	68.75
Hensell Materials	06/29/2019	<i>Emergency Generator for Communications Equipment</i>	371.83
Total Hensell Materials:			691.80
<b>Henwood Associates, Inc</b>			
Henwood Associates, Inc	06/06/2019	<i>Consultant Services Agreement</i>	2,625.57
Total Henwood Associates, Inc:			2,625.57
<b>Hopkins Technical Products, Inc</b>			
Hopkins Technical Products, Inc	06/28/2019	<i>Credit TRF chemical pump</i>	102.49-
Hopkins Technical Products, Inc	06/28/2019	<i>TRF N-Poly Pump Skid Replacement</i>	11,186.23
Total Hopkins Technical Products, Inc:			11,083.74
<b>Humboldt County Treasurer</b>			
Humboldt County Treasurer	06/06/2019	<i>Fund No 2712 Account 800870</i>	40,407.28
Humboldt County Treasurer	06/29/2019	<i>Fund No 3876 Account 800870</i>	45,611.43
Total Humboldt County Treasurer:			86,018.71
<b>Humboldt Redwood Company, LLC</b>			
Humboldt Redwood Company, LLC	06/20/2019	<i>Mt Pierce Lease site</i>	274.28
Total Humboldt Redwood Company, LLC:			274.28
<b>Humboldt Waste Management Authority</b>			
Humboldt Waste Management Authority	06/28/2019	<i>Waste materials disposal</i>	48.30
Total Humboldt Waste Management Authority:			48.30
<b>Industrial Electric</b>			
Industrial Electric	06/28/2019	<i>TRF Receptacle Repair</i>	6.79
Industrial Electric	06/28/2019	<i>Fieldbrook-Glendale Pump PLC</i>	7.66
Industrial Electric	06/28/2019	<i>Essex Hot water heater replacement</i>	35.00
Total Industrial Electric:			49.45
<b>Journey's End</b>			
Journey's End	06/28/2019	<i>meals for Annual Ruth Maintenance work crew</i>	2,015.14



Humboldt Bay Municipal Water District

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Vendor Name	Date Paid	Description	Amount Paid
Total Journey's End:			2,015.14
<b>JTN Energy, LLC</b>			
JTN Energy, LLC	06/06/2019	Consultant Services Agreement	2,625.57
Total JTN Energy, LLC:			2,625.57
<b>Larry Raschein</b>			
Larry Raschein	06/11/2019	Travel Advance - Ruth Hydro coverage	192.50
Total Larry Raschein:			192.50
<b>Lisa Newell</b>			
Lisa Newell	06/06/2019	auto mileage reimbursement-Annual Ruth Maintenance	118.32
Total Lisa Newell:			118.32
<b>Lubrication Engineers</b>			
Lubrication Engineers	06/11/2019	Collectors motor oil	165.90
Total Lubrication Engineers:			165.90
<b>Mario Palmero</b>			
Mario Palmero	06/20/2019	Travel Advance - Ruth area coverage	123.75
Mario Palmero	06/20/2019	Travel Advance - Ruth Hydro coverage	123.75
Total Mario Palmero:			247.50
<b>McMaster-Carr Supply</b>			
McMaster-Carr Supply	06/28/2019	Replace tools	434.82
Total McMaster-Carr Supply:			434.82
<b>Miller Farms Nursery</b>			
Miller Farms Nursery	06/28/2019	equipment maintenance	83.85
Miller Farms Nursery	06/28/2019	repair Park 1 Fence	114.18
Miller Farms Nursery	06/28/2019	Park 1 Fence Repair	11.84
Miller Farms Nursery	06/28/2019	Park 1 Fence Repair	38.40
Miller Farms Nursery	06/28/2019	equipment maintenance	46.75
Total Miller Farms Nursery:			271.34
<b>Mission Linen</b>			
Mission Linen	06/11/2019	Uniform Rental	110.31
Mission Linen	06/11/2019	maintenance supplies	97.26
Mission Linen	06/11/2019	maintenance supplies	70.06
Mission Linen	06/11/2019	Anti Fatigue Mats for Essex Control and Maint Shop Office	423.15
Mission Linen	06/11/2019	Uniform Rental	129.98
Mission Linen	06/11/2019	Uniform Rental	121.83
Total Mission Linen:			952.59
<b>Mitchell, Brisso, Delaney &amp; Vrieze</b>			
Mitchell, Brisso, Delaney & Vrieze	06/06/2019	Legal Services- May 2019	108.50

Humboldt Bay Municipal Water District

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Vendor Name	Date Paid	Description	Amount Paid
Total Mitchell, Brisso, Delaney & Vrieze:			108.50
<b>Munnell &amp; Sherrill, Inc.</b>			
Munnell & Sherrill, Inc.	06/28/2019	safety gear	418.84
Total Munnell & Sherrill, Inc.:			418.84
<b>Napa Auto Parts</b>			
Napa Auto Parts	06/28/2019	Floor Mats and Seat covers for new Unit 1	500.93
Napa Auto Parts	06/28/2019	equipment maintenance	180.92
Napa Auto Parts	06/28/2019	maintenance shop tool	40.62
Napa Auto Parts	06/28/2019	vehicle maintenance	23.15
Total Napa Auto Parts:			745.62
<b>Network Management Services</b>			
Network Management Services	06/27/2019	Eureka office computer assistance	603.84
Network Management Services	06/27/2019	Essential Care Computer Service for Eureka office	1,086.19
Total Network Management Services:			1,690.03
<b>North Coast Laboratories</b>			
North Coast Laboratories	06/11/2019	lab tests	70.00
North Coast Laboratories	06/11/2019	lab tests	70.00
North Coast Laboratories	06/11/2019	lab tests	70.00
North Coast Laboratories	06/11/2019	lab tests	70.00
North Coast Laboratories	06/11/2019	lab tests	200.00
North Coast Laboratories	06/11/2019	Nordic Farms - lab tests	55.00
North Coast Laboratories	06/11/2019	lab tests	70.00
North Coast Laboratories	06/11/2019	lab tests	70.00
North Coast Laboratories	06/11/2019	Nordic Farms - lab tests	630.00
North Coast Laboratories	06/11/2019	lab tests	70.00
North Coast Laboratories	06/11/2019	lab tests	70.00
North Coast Laboratories	06/11/2019	lab tests	35.00
North Coast Laboratories	06/11/2019	Nordic Farms - lab tests	60.00
North Coast Laboratories		lab tests	.00
North Coast Laboratories	06/11/2019	Nordic Farms - lab tests	41.25
North Coast Laboratories	06/11/2019	Nordic Farms - lab tests	55.00
North Coast Laboratories	06/11/2019	Nordic Farms - lab tests	55.00
North Coast Laboratories	06/11/2019	Nordic Farms - lab tests	55.00
North Coast Laboratories	06/28/2019	lab tests	70.00
North Coast Laboratories	06/28/2019	lab tests	70.00
North Coast Laboratories	06/28/2019	lab tests	200.00
North Coast Laboratories	06/28/2019	lab tests	70.00
North Coast Laboratories	06/28/2019	lab tests	35.00
North Coast Laboratories	06/28/2019	lab tests	35.00
Total North Coast Laboratories:			2,226.25
<b>Northern California Safety Consortium</b>			
Northern California Safety Consortium	06/06/2019	monthly membership fee	75.00
Total Northern California Safety Consortium:			75.00
<b>Pacific Gas &amp; Electric Co.</b>			
Pacific Gas & Electric Co.	06/20/2019	Ruth Bunkhouse	53.44

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Vendor Name	Date Paid	Description	Amount Paid
Pacific Gas & Electric Co.	06/20/2019	<i>Eureka Office</i>	378.30
Pacific Gas & Electric Co.	06/20/2019	<i>Jackson Ranch Rectifier</i>	10.34
Pacific Gas & Electric Co.	06/20/2019	<i>299 Rectifier</i>	17.18
Pacific Gas & Electric Co.	06/20/2019	<i>West End Road Rectifier</i>	19.07
Pacific Gas & Electric Co.	06/20/2019	<i>TRF</i>	8,692.04
Pacific Gas & Electric Co.	06/20/2019	<i>Ruth Hydro Valve Control</i>	26.30
Pacific Gas & Electric Co.	06/20/2019	<i>Ruth Hydro</i>	159.74
Pacific Gas & Electric Co.	06/20/2019	<i>Samoa Booster Pump Station</i>	876.53
Pacific Gas & Electric Co.	06/20/2019	<i>Samoa Dial Station</i>	33.03
Pacific Gas & Electric Co.	06/20/2019	<i>Essex Pumping</i>	54,827.71
Total Pacific Gas & Electric Co.:			65,093.68
<b>Pacific Lift and Equipment Co, Inc</b>			
Pacific Lift and Equipment Co, Inc	06/28/2019	<i>Inspect and certify vehicle lift</i>	464.99
Total Pacific Lift and Equipment Co, Inc:			464.99
<b>Pacific Paper Co.</b>			
Pacific Paper Co.	06/28/2019	<i>Eureka office supplies</i>	222.35
Total Pacific Paper Co.:			222.35
<b>Pape Material Handling</b>			
Pape Material Handling	06/28/2019	<i>equipment maintenance</i>	293.61
Pape Material Handling	06/28/2019	<i>equipment maintenance</i>	110.80
Total Pape Material Handling:			404.41
<b>Pierson Building Center</b>			
Pierson Building Center	06/06/2019	<i>Ruth Bunkhouse Furnishings</i>	8.27
Pierson Building Center	06/29/2019	<i>Essex tankless hot water heater</i>	281.02
Total Pierson Building Center:			289.29
<b>Pitney Bowes</b>			
Pitney Bowes	06/20/2019	<i>refill postage meter</i>	500.00
Pitney Bowes	06/20/2019	<i>postage meter supplies</i>	63.90
Pitney Bowes	06/27/2019	<i>postage meter supplies - FERC EAP Binders</i>	35.03
Pitney Bowes	06/29/2019	<i>postage meter lease</i>	256.34
Total Pitney Bowes:			855.27
<b>Platt Electric Supply</b>			
Platt Electric Supply	06/29/2019	<i>Collector 1 Electrical Upgrade</i>	23,405.73
Total Platt Electric Supply:			23,405.73
<b>Rebecca J. Moyle</b>			
Rebecca J. Moyle	06/06/2019	<i>Expense Reimbursement - Project Meeting &amp; BBQ Supplies</i>	119.26
Rebecca J. Moyle	06/06/2019	<i>Eureka office petty cash</i>	7.15
Rebecca J. Moyle	06/06/2019	<i>Eureka office petty cash -Office Supplies</i>	10.43
Rebecca J. Moyle	06/06/2019	<i>Eureka office petty cash -Office Supplies</i>	45.14
Rebecca J. Moyle	06/06/2019	<i>Eureka office petty cash- Fieldbrook-Glendale CSD Final Dema</i>	13.70
Rebecca J. Moyle	06/06/2019	<i>Eureka Office Petty Cash- Project Meeting &amp; BBQ Supplies</i>	25.24
Rebecca J. Moyle	06/27/2019	<i>Eureka office petty cash -Office Supplies</i>	8.60
Rebecca J. Moyle	06/27/2019	<i>Eureka office petty cash - Mail Ruth Leaseholder letter</i>	6.85

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Vendor Name	Date Paid	Description	Amount Paid
Rebecca J. Moyle	06/27/2019	Eureka office petty cash-ACWA/JPIA training	26.08
Rebecca J. Moyle	06/27/2019	Eureka office petty cash - Special Board Meeting	60.00
Total Rebecca J. Moyle:			322.45
<b>Recology Arcata</b>			
Recology Arcata	06/20/2019	Essex Garbage Service	516.31
Total Recology Arcata:			516.31
<b>Recology Humboldt County</b>			
Recology Humboldt County	06/11/2019	Eureka office garbage/recycling service	90.72
Total Recology Humboldt County:			90.72
<b>Redwood Electrical Services</b>			
Redwood Electrical Services	06/29/2019	Annual Electrical and maintenance inspection Ruth Hydro Plant	1,500.00
Total Redwood Electrical Services:			1,500.00
<b>Renner Petroleum</b>			
Renner Petroleum	06/29/2019	Sorbent pads and booms	70.53
Renner Petroleum	06/29/2019	Sorbent pads and booms	142.18
Renner Petroleum	06/11/2019	cardlock fuel - pumping & control	398.16
Renner Petroleum	06/11/2019	cardlock fuel - water quality	398.16
Renner Petroleum	06/11/2019	cardlock fuel - maintenance	398.16
Renner Petroleum	06/11/2019	cardlock fuel - customer service (Humboldt Bay Retail)	103.52
Renner Petroleum	06/11/2019	cardlock fuel - customer service (Fieldbrook-Glendale CSD)	294.63
Total Renner Petroleum:			1,805.34
<b>Rogers Machinery Company, Inc</b>			
Rogers Machinery Company, Inc	06/29/2019	CT tank sampling rebuild kit	48.83
Total Rogers Machinery Company, Inc:			48.83
<b>Ruth Lake C.S.D.</b>			
Ruth Lake C.S.D.	06/06/2019	Law Enforcement Assistance	5,000.00
Total Ruth Lake C.S.D.:			5,000.00
<b>Sequoia Gas</b>			
Sequoia Gas	06/12/2019	Ruth HQ Propane Tank Rental	74.25
Total Sequoia Gas:			74.25
<b>Sherrie Sobol</b>			
Sherrie Sobol	06/06/2019	Refund Ruth Bunkhouse	80.00
Total Sherrie Sobol:			80.00
<b>Sitestar Nationwide Internet</b>			
Sitestar Nationwide Internet	06/06/2019	Essex Internet	52.90
Total Sitestar Nationwide Internet:			52.90

Humboldt Bay Municipal Water District

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Vendor Name	Date Paid	Description	Amount Paid
Solo Sports			
Solo Sports	06/06/2019	<i>Safety Apparel</i>	90.51
Total Solo Sports:			90.51
<b>Staples</b>			
Staples	06/29/2019	<i>Essex office supplies</i>	130.77
Total Staples:			130.77
<b>Stillwater Sciences</b>			
Stillwater Sciences	06/29/2019	<i>professional assistance -Streambed Flow Enhancement Project</i>	2,054.00
Total Stillwater Sciences:			2,054.00
<b>Sudden Link</b>			
Sudden Link	06/06/2019	<i>Essex internet</i>	127.45
Sudden Link	06/11/2019	<i>TRF Internet</i>	22.56
Sudden Link	06/11/2019	<i>TRF Internet - Blue Lake SCADA Monitoring</i>	45.14
Sudden Link	06/11/2019	<i>TRF Internet - Fieldbrook-Glendale CSD</i>	45.14
Sudden Link	06/11/2019	<i>Eureka office Internet</i>	207.45
Sudden Link	06/29/2019	<i>Fieldbrook-Glendale CSD Internet</i>	293.52
Total Sudden Link:			741.26
<b>SWRCB-DWOCP</b>			
SWRCB-DWOCP	06/27/2019	<i>T3 Treatment Certification - Tim P Farrell</i>	90.00
Total SWRCB-DWOCP:			90.00
<b>Telstar Instruments, Inc</b>			
Telstar Instruments, Inc	06/29/2019	<i>TRF lab supplies</i>	547.07
Total Telstar Instruments, Inc:			547.07
<b>The Mill Yard</b>			
The Mill Yard	06/11/2019	<i>Essex shop tools storage</i>	89.30
The Mill Yard	06/11/2019	<i>Collector Pump Oilers</i>	64.02
The Mill Yard	06/11/2019	<i>Collector Pump Oilers</i>	26.80
The Mill Yard	06/11/2019	<i>Collector Pump Oilers</i>	47.32-
The Mill Yard	06/28/2019	<i>Ruth Bunkhouse Replacement</i>	339.34
The Mill Yard	06/28/2019	<i>Ruth Bunkhouse Replacement</i>	81.49
The Mill Yard	06/28/2019	<i>Painting Supplies</i>	48.65
The Mill Yard	06/28/2019	<i>Ruth Bunkhouse Replacement</i>	36.53
The Mill Yard	06/28/2019	<i>Ruth Bunkhouse Replacement</i>	37.27
The Mill Yard	06/28/2019	<i>Storm Damage - Collector 2 Cable Car</i>	28.20
The Mill Yard	06/28/2019	<i>Ruth Bunkhouse Replacement</i>	33.95-
Total The Mill Yard:			670.33
<b>Thomas Law Group</b>			
Thomas Law Group	06/11/2019	<i>Legal Fees - May</i>	468.75
Thomas Law Group	06/11/2019	<i>Legal Fees -May</i>	7,856.75
Total Thomas Law Group:			8,325.50

Humboldt Bay Municipal Water District

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Vendor Name	Date Paid	Description	Amount Paid
Thrifty Supply			
Thrifty Supply	06/29/2019	Surge Tower Replacement - Grant	2,887.88
Thrifty Supply	06/29/2019	Lead Free Brass Inventory	1,736.73
Thrifty Supply	06/29/2019	Surge Tower Replacement - Grant	3,265.85
Thrifty Supply	06/29/2019	Mainline Valve Replacement - Collector 4	38,604.30
Thrifty Supply	06/29/2019	Mainline Valve Replacement - Collector 4	1,357.28
Total Thrifty Supply:			47,852.04
<b>Times Printing</b>			
Times Printing	06/29/2019	Blue Book Dividers	490.53
Total Times Printing:			490.53
<b>Trinity County General Services</b>			
Trinity County General Services	06/27/2019	Pickett Peak site lease	250.00
Total Trinity County General Services:			250.00
<b>Trinity County Solid Waste</b>			
Trinity County Solid Waste	06/11/2019	Ruth HQ dump fees	33.27
Trinity County Solid Waste	06/11/2019	Ruth Hydro dump fees	33.28
Total Trinity County Solid Waste:			66.55
<b>U.S. Bank Corporate Payment System</b>			
U.S. Bank Corporate Payment System	06/11/2019	Administrative Professional Day- Lunch	238.14
U.S. Bank Corporate Payment System	06/11/2019	North Coast Resource Partnership Meeting-Yreka	75.59
U.S. Bank Corporate Payment System	06/11/2019	North Coat Resource Partnership meeting - Yreka	14.84
U.S. Bank Corporate Payment System	06/11/2019	CSDA GM Summitt	417.82
U.S. Bank Corporate Payment System	06/11/2019	ACWA Conference	1,144.36
U.S. Bank Corporate Payment System	06/11/2019	New Employee Jacket	57.45
U.S. Bank Corporate Payment System	06/11/2019	Deposit Slips	54.24
U.S. Bank Corporate Payment System	06/11/2019	Annual Ruth Maintenance	11.92
U.S. Bank Corporate Payment System	06/11/2019	ARC GIS Support	100.00
U.S. Bank Corporate Payment System	06/11/2019	Essex office supplies	249.59
U.S. Bank Corporate Payment System	06/11/2019	Operations Supervisor - Ergonomic Desk	79.34
U.S. Bank Corporate Payment System	06/11/2019	Essex office supplies	73.74
U.S. Bank Corporate Payment System	06/11/2019	Office supplies	11.20
U.S. Bank Corporate Payment System	06/11/2019	Office Wise Purchase Order Software	39.95
U.S. Bank Corporate Payment System	06/11/2019	scanner for Maintenance Shop	455.69
U.S. Bank Corporate Payment System	06/11/2019	Fieldbrook-Glendale CSD Bill Card Stock	119.09
U.S. Bank Corporate Payment System	06/11/2019	FERC Piezometer Webinar	130.00
U.S. Bank Corporate Payment System	06/11/2019	Travel to Oroville for FERC EAP Tabletop training	12.50
U.S. Bank Corporate Payment System	06/11/2019	Ruth Bunkhouse Furnishings	100.00
U.S. Bank Corporate Payment System	06/11/2019	Superintendent Office Remodel	54.65
U.S. Bank Corporate Payment System	06/11/2019	Ruth Bunkhouse Furnishings	296.79
U.S. Bank Corporate Payment System	06/11/2019	Emergency - Collector 2 Pipeline Leak Repair	196.83
U.S. Bank Corporate Payment System	06/11/2019	Ruth Bunkhouse Furnishings	51.50
U.S. Bank Corporate Payment System	06/11/2019	Hazwoper Training	313.50
U.S. Bank Corporate Payment System	06/11/2019	Roof Drain Scuppers - Eureka Office	126.21
U.S. Bank Corporate Payment System	06/11/2019	Heat Illness Protection	102.60
U.S. Bank Corporate Payment System		CSDA General Manager Summit	.00
U.S. Bank Corporate Payment System		ACWA Conference	.00
U.S. Bank Corporate Payment System	06/11/2019	CSDA General Manager Summit	417.82-
U.S. Bank Corporate Payment System	06/11/2019	ACWA Conference	1,144.36-
U.S. Bank Corporate Payment System	06/11/2019	ACWA Conference	1,562.18

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Vendor Name	Date Paid	Description	Amount Paid
U.S. Bank Corporate Payment System	06/11/2019	Annual Ruth Maintenance	55.29
U.S. Bank Corporate Payment System	06/11/2019	maintenance supplies	31.72
U.S. Bank Corporate Payment System	06/29/2019	Eureka office replace keyboard	35.79
U.S. Bank Corporate Payment System	06/29/2019	Office Wise Purchase Order Software	39.95
U.S. Bank Corporate Payment System	06/29/2019	FERC EAP Binders	522.52
U.S. Bank Corporate Payment System	06/29/2019	ACWA/JPIA Training 6/11/2019	322.00
U.S. Bank Corporate Payment System	06/29/2019	Eureka office projector maintenance	100.98
U.S. Bank Corporate Payment System	06/29/2019	Conference Call - Clarifier Industrial Water System	11.98
U.S. Bank Corporate Payment System	06/29/2019	Essex office supplies	173.28
U.S. Bank Corporate Payment System	06/29/2019	Project Budget Meeting/BBQ	29.39
U.S. Bank Corporate Payment System	06/29/2019	lab supplies	17.95
U.S. Bank Corporate Payment System	06/29/2019	UCMR Lab Tests	1,030.00
U.S. Bank Corporate Payment System	06/29/2019	SCADA/Control Software Training	159.00
U.S. Bank Corporate Payment System	06/29/2019	Collector 3 Security	399.99
U.S. Bank Corporate Payment System	06/29/2019	Internet cable	143.62
U.S. Bank Corporate Payment System	06/29/2019	Septic tank maintenance	51.99
U.S. Bank Corporate Payment System	06/29/2019	Superintende Office Remodel	147.03
U.S. Bank Corporate Payment System	06/29/2019	Heat Illness Prevention	24.85
Total U.S. Bank Corporate Payment System:			7,824.87
<b>United Rentals, Inc</b>			
United Rentals, Inc	06/29/2019	Shoring Pump Rebuild Kit	107.75
Total United Rentals, Inc:			107.75
<b>Verizon Wireless</b>			
Verizon Wireless	06/11/2019	General Manager	42.19
Verizon Wireless	06/11/2019	Customer Service - Humboldt Bay	12.55
Verizon Wireless	06/11/2019	Customer Service - Fieldbrook-Glendale CSD	35.73
Verizon Wireless	06/11/2019	Operations 2	.18
Verizon Wireless	06/11/2019	Customer Service Ipad-Humboldt Bay	9.88
Verizon Wireless	06/11/2019	Customer Service Ipad - Fieldbrook-Glendale CSD	28.13
Verizon Wireless	06/11/2019	Unit 6 - Ruth Area	42.67
Verizon Wireless	06/11/2019	Unit 6 - Ruth Hydro	42.67
Total Verizon Wireless:			214.00
<b>Waterline Envirotech LTD</b>			
Waterline Envirotech LTD	06/27/2019	replace Piezometer water depth meter	453.33
Total Waterline Envirotech LTD:			453.33
<b>Weck Laboratories, Inc</b>			
Weck Laboratories, Inc	06/11/2019	UCMR lab tests	1,030.00
Total Weck Laboratories, Inc:			1,030.00
<b>Wes Green Landscaping</b>			
Wes Green Landscaping	06/29/2019	Disposal of wood waste	44.00
Wes Green Landscaping	06/29/2019	Disposal of wood waste	55.00
Wes Green Landscaping	06/29/2019	Disposal of wood waste	55.00
Total Wes Green Landscaping:			154.00
<b>West Yost Associates, Inc</b>			
West Yost Associates, Inc	06/27/2019	Nordic Aquafarm - Water Clarification System	9,482.00

Humboldt Bay Municipal Water District

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Vendor Name	Date Paid	Description	Amount Paid
Total West Yost Associates, Inc:			<u>9,482.00</u>
<b>Worthington Products, Inc</b>			
Worthington Products, Inc	06/29/2019	<i>Ruth Log Boom Gate maintenance</i>	<u>759.10</u>
Total Worthington Products, Inc:			<u>759.10</u>
Grand Totals:			<u><u>648,233.23</u></u>



To: Board of Directors

Date: July 11, 2019

From: Chris Harris

RE: FY2018/19 Project Budget Reallocation - REVISION

**Review**

At the June 13th Board Meeting, the Board discussed and approved the FY18/19 Project Budget Reallocation. Upon finalization of the FY18/19 payables and the complete FY19/20 Budget, staff noted a revision to approved allocation was needed.

**Discussion**

The previous allocation and the necessary revision:

<b>Project</b>	<b>Funds</b>
Advanced Charges - 12kV Relocation Grant	\$500,000
Advanced Charges - Chlorine Scrubber Grant	\$350,000
Advanced Charges - Collector 2 Rehabilitation Grant	\$385,000
Advanced Charges - TRF Emergency Generator Grant	\$225,000
Advanced Charges - 3x Tank Seismic Retrofit Grant	\$60,000
18,000Lb Excavator	\$54,343
<b>Total Approved Reallocation</b>	<b>\$1,574,343</b>
<b>Revision Needed</b>	
<b>Project</b>	<b>Funds</b>
Advanced Charges - 12kV Relocation Grant	\$500,000
Advanced Charges - Chlorine Scrubber Grant	\$350,000
Advanced Charges - Collector 2 Rehabilitation Grant	\$385,000
Advanced Charges - TRF Emergency Generator Grant	\$225,000
Advanced Charges - 3x Tank Seismic Retrofit Grant	<b>\$30,000</b>
18,000Lb Excavator	\$54,343
<b>Total Revised Reallocation</b>	<b>\$1,544,343</b>
<b>Funds Returned to FY18/19 Project Budget</b>	
Maintenance & Emergency Repairs	<b>\$30,000</b>

As the Board is aware, this year the District has unfortunately been forced to deal with a multitude of "Maintenance and Repair Emergencies." Based on the timing of some of the related invoices, these additional funds are needed.

**Recommendation**

Staff recommends unallocating \$30,000 from the 3x Tank Seismic Retrofit and instead allocating it to the Emergency Maintenance Project Budget (total Maintenance & Repair Emergency Fund Budget \$80,000).

To: Board of Directors

Date: July 11, 2019

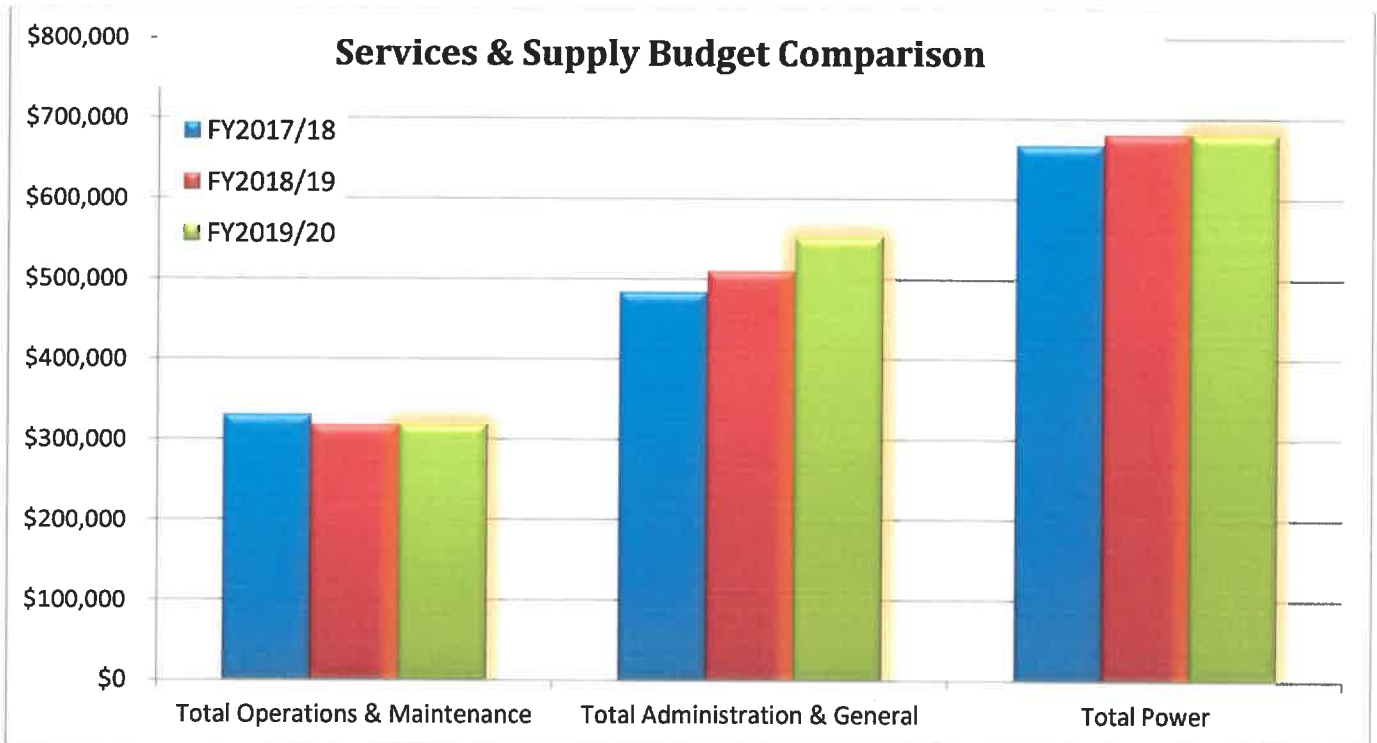
From: Chris Harris

RE: Final Budget for FY2019/20

**Review of Complete Proposed FY2019/20 Budget**

During the June 13<sup>th</sup> Board Meeting, staff presented the complete draft FY2019/20 budget for review and discussion. Based on feedback during that meeting, staff is presenting the proposed final version of the FY2019/20 budget with minimal changes.

- **Service & Supply Budget** – *No changes from June presentation.*
  - Total Service & Supply Budget including Power ≈ \$1,551,600
    - Increase of \$43,400 or 2.9% over FY2018/19 Budget
  - Four Accounts = Increased funding
    - USGS Station \$400
    - Telephone \$8,000
    - Travel/Conferences \$3,000
    - Dues/Subscriptions \$7,000
    - Regulatory Agency Fees \$25,000



• Salary & Wages Budget – No changes from June presentation

- Total Salary & Wages Budget: \$2,407,375
  - Includes staff recommended 2.7% COLA \$57,300
  - Includes misc. step & longevity increases \$33,300
  - Includes additional PART-TIME help \$21,840
  - Includes required minimum wage increase \$5,890

Consumer Price Index	2018 CPI	2019 CPI
U. S. City Average	2.1%	1.9%
West Region (Urban areas in one of four US Regions)	3.1%	2.7%
West Region Size Class B/C (Cities with population 50,000 – 1.5 Million)	2.8%	2.5%
San Francisco-Oakland-San Jose	3.6%	3.5%

COLA – What are Others Doing?		
Agency	COLA FY19	COLA FY20
<b>McKinleyville CSD</b>	2.75%	<b>3.45%</b>
<b>Humboldt CSD</b>	2.80%	<b>3.30%</b>
<b>City of Arcata</b>	2.50%	<b>Contract Neg.</b>
<b>City of Eureka</b>	1%	<b>1%</b>
<b>JPIA</b>	2.5%	<b>2.5%</b>

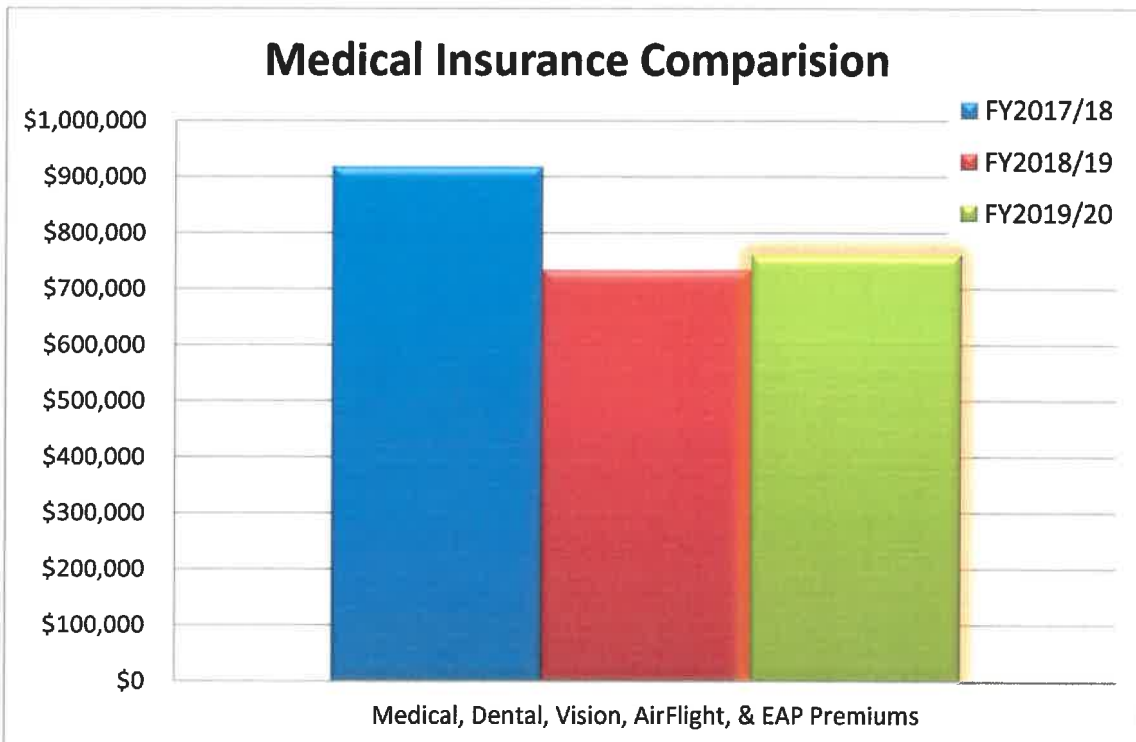
	<u>FY2017-18</u> 2.5% COLA	<u>FY2018/19</u> 3.0% COLA	<u>FY2019/20</u> 2.7% COLA
<b>Salaries &amp; Wages Budget</b>	\$2,174,641	\$2,211,835	\$2,350,015
<b>COLA</b>	\$59,121	\$60,780	\$57,360
<b>Total Salaries &amp; Wages Budget</b>	\$2,233,742	\$2,272,615	\$2,407,375
<b>\$ Change From Prior</b>	\$112,176	\$38,873	\$134,760*
<b>% Change From Prior</b>	5.31%	1.74%	5.93%

\*Change includes difference of GIS Part-Time Wages transferred from Project Budget

The finalized health insurance rates have been made available from JPIA and have been factored into the Employee Benefits Budget.

- **Total Employee Benefits Budget \$1,669,240**
  - *Medical Insurance Premiums* \$11,100
  - *Worker’s Compensation Insurance* \$5,000
  - *Payroll Tax Expense* \$10,200
  - *CalPERS* <\$5,000>

	FY17/18	FY18/19	FY19/20
<b>Employee Benefits Budget</b>	\$1,508,514	\$1,647,903	<b>\$1,669,240</b>
<b>\$ Change From Prior</b>	\$58,147	\$139,389	<b>\$21,337</b>
<b>% Change From Prior</b>	4.01%	9.24%	<b>1.30%</b>



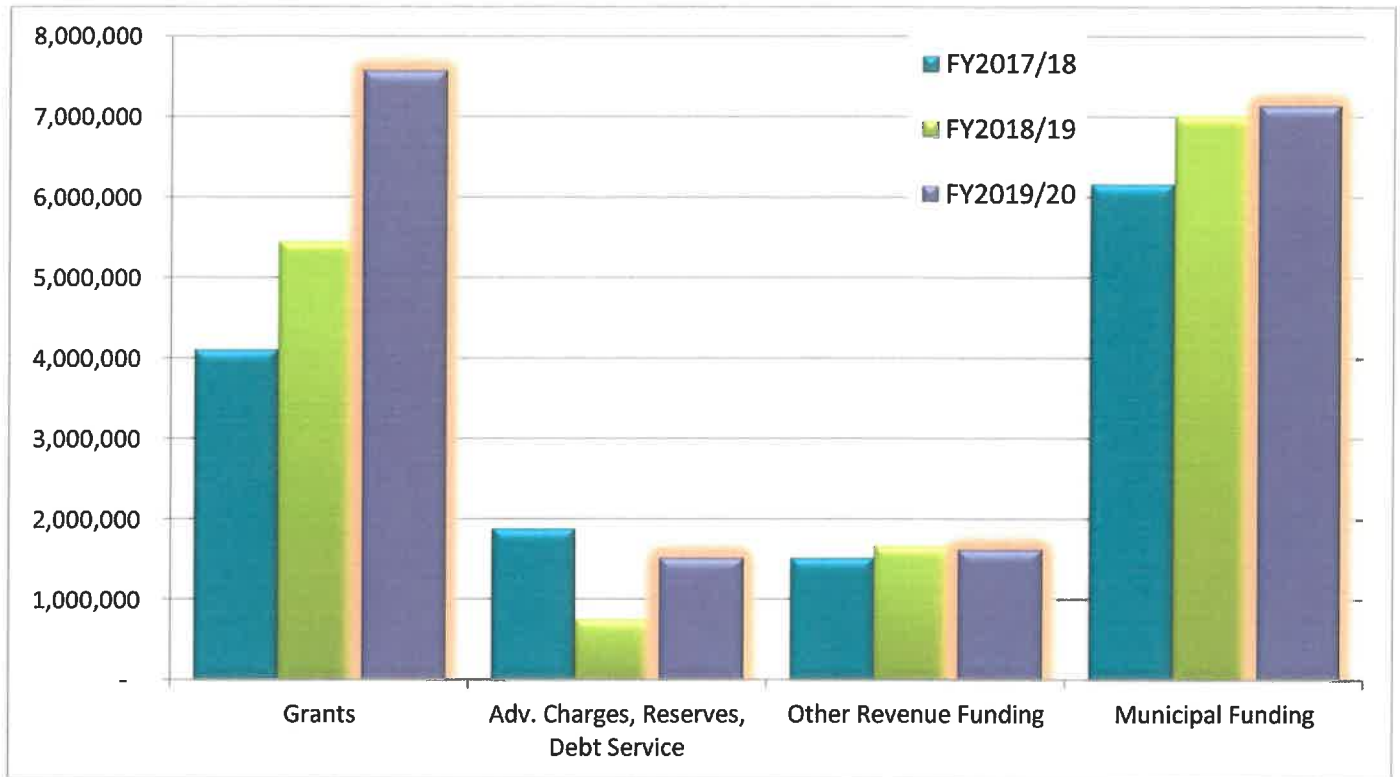
- **Project Budget** – \$30,000 allocation reversed from Prior Advance Charges for 3x Tank Seismic Retrofit (see prior Staff Report).

<b>FY 2019/20 PROJECT BUDGET TOTALS</b>					
<b>Budgeted Expenditures FY 2019/20</b>					
	Treatment	Base Facility	Total Projects	Debt Service	<b>Total Budgeted Expenditures</b>
<b>FY2019/20</b>	<b>\$3,429,339</b>	<b>\$7,917,664</b>	<b>\$11,347,003</b>	<b>\$162,200</b>	<b>\$11,509,203</b>
FY2018/19	\$116,750	\$8,440,943	\$8,557,693	\$162,200	\$8,719,893
Difference	\$3,312,589	<\$523,279>	\$2,789,310	\$0.00	\$2,789,310 (32.0%)
<b>Funding Sources for Project Budget FY 2019/20</b>					
	Advance Charges (Collected)	Grant Funding	Reserves	Customer Charges	<b>Total Funding Sources</b>
<b>FY2019/20</b>	<b>\$1,544,343</b>	<b>\$7,577,950</b>	<b>\$112,000</b>	<b>\$2,274,910</b>	<b>\$11,509,203</b>
FY2018/19	\$652,345	\$5,452,845	\$266,155	\$2,348,548	\$8,719,893
Difference	\$891,998	\$2,125,105	<\$154,155>	<\$73,638> <3.14%>	\$2,789,310 (32.0%)

- **Revenue & Funding Budget**

- Grant Funding
  - Increased by \$2,125,105 (38.9%) from FY2018/19
- Advance Charges, Reserves, and Debt Service
  - Increased by \$737,843 (80.3%) from FY2018/19
  - Largest factor = \$1,544,343 in Advance Charges carried forward in FY2017/18
- Other Revenue
  - Decreased by <\$41,400> <2.5%> from FY2018/19
  - Reduction in Power Sales Revenue and Interest Income based on analysis of prior year
  - Increase in Retail Water Sales based on analysis of prior year
  - Other Revenue also includes: Property Tax Revenue, FCSD Maintenance & Operations Services, and other misc. income
- Wholesale Contract Funding
  - Increase of \$137,238 (2.0%) from FY2018/19

## Funding Source Comparison



- Complete Budget Summary

COMPLETE FY2019/20 BUDGET SUMMARY & COMPARISON				
	FY 2018/19 Budget	FY 2019/20 Budget	Difference	
Budgeted Expenditures			\$	%
<b>Salaries &amp; Wages</b>	\$2,272,615	\$2,407,375	\$134,760	5.9%
<b>Employee Benefits</b>	\$1,647,903	\$1,669,240	\$21,337	1.3%
<b>Service &amp; Supply</b>	\$827,400	\$870,800	\$43,400	5.2%
<b>Power</b>	\$680,814	\$680,800	\$0.00	0.00%
<b>Projects*</b>	\$8,557,693	\$11,347,003	\$2,789,310	32.6%
<b>Debt Service</b>	\$547,337	\$547,337	\$0.00	0.0%
<b>Charges for Reserves</b>	\$350,000	\$350,000	\$0.00	0.0%
<b>Total Expenditures</b>	<b>\$14,883,763</b>	<b>\$17,872,555</b>	<b>\$2,988,807</b>	<b>20.1%</b>
<small>*Debt Service Listed Separately</small>				
Budgeted Revenues			\$	%
<b>Wholesale Contract Funding</b>	\$7,006,223	\$7,143,461	\$137,238	1.7%
<b>Grant Funding</b>	\$5,452,846	\$7,577,950	\$2,125,104	39.0%
<b>Other Revenue Funding</b>	\$1,668,394	\$1,627,000	<\$41,394>	<2.5%>
<b>Adv. Charges Collected, Reserves, Debt Service</b>	\$756,299	\$1,524,144	\$767,845	101.5%
<b>Total Funding Sources</b>	<b>\$14,883,763</b>	<b>\$17,872,555</b>	<b>\$2,988,793</b>	<b>20.1%</b>

<b>Total FY2019/20 Budget - \$17.9M</b>		
<b>Funding Source</b>	<b>\$ Funds</b>	<b>% Funds</b>
Grants	\$7.57M	42.4%
City of Eureka	\$3.20M	17.9%
Other Revenue	\$1.63M	9.1%
City of Arcata	\$1.36M	7.6%
HCSD	\$1.07M	6.0%
MCSO	\$1.08M	6.0%
Advance Charges, Reserves & Debt Service	\$1.52M	8.5%
City of Blue Lake	\$190k	1.1%
FBGD-CSD	\$173k	1.0%
Manila CSD	\$73k	0.4%
<b>Totals</b>	<b>\$17.9M</b>	<b>100%</b>

<b>Total Funding Summary FY2019/20 Budget - \$17.9M</b>		
<b>Funding Source</b>	<b>\$ Funds</b>	<b>% Funds</b>
Municipal Customer Funding	\$7.1M	39.7%
All Other Funding Sources	\$10.8M	60.3%
	<b>\$17.9M</b>	<b>100%</b>

**Staff Recommendation**

Staff recommends Board approval of the FY2019/20 budget as presented and described above.



# COUNTY OF HUMBOLDT

JOHN BARTHOLOMEW  
TREASURER-TAX COLLECTOR

825 FIFTH STREET ROOM 125  
EUREKA, CALIFORNIA 95501

PHONE: 707-476-2450  
FAX: 707-445-7608  
TOLL FREE: 877-448-6829  
EMAIL: [taxinfo@co.humboldt.ca.us](mailto:taxinfo@co.humboldt.ca.us)

Subject: Interest Apportionment Rate and Other Considerations

June 18, 2019

Honorable Board Members,

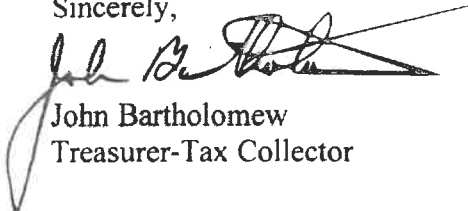
Your fund balances in the County Treasury from January through March 2019 (Fiscal 18/19 3<sup>rd</sup> Quarter) earned an annualized interest rate of 1.85%. For comparison purposes, the LAIF (Local Agency Investment Fund) rate was 2.55%.

Since the Federal Reserve's March meeting yields have continued to trend downward even though there were small interest rate fluctuations both up and down across the January to March quarter. During the month of March yields on longer maturities dropped more than yields on shorter maturities and for a brief period 3-month versus 10-year treasury rates on the yield curve inverted and prompted more speculation about a possible recession looming. Economic data continues to weaken, although the labor market is still robust, and the unemployment rate is near record lows. As a result, expectations have shifted from rate hikes to possible rate reductions sometime in the 2019 calendar year.

We captured quality yields over the past 6 months as we reinvested funds from matured securities purchased back in 2014 when interest rates were much lower; and there is sufficient liquidity to meet projected expenditures over the summer months. We will continue to ladder the portfolio with quality purchases once liquidity obligations for summer are in the rear-view mirror.

As always, our goals are Safety, Liquidity and Yield. Let us know how we may be of service.

Sincerely,



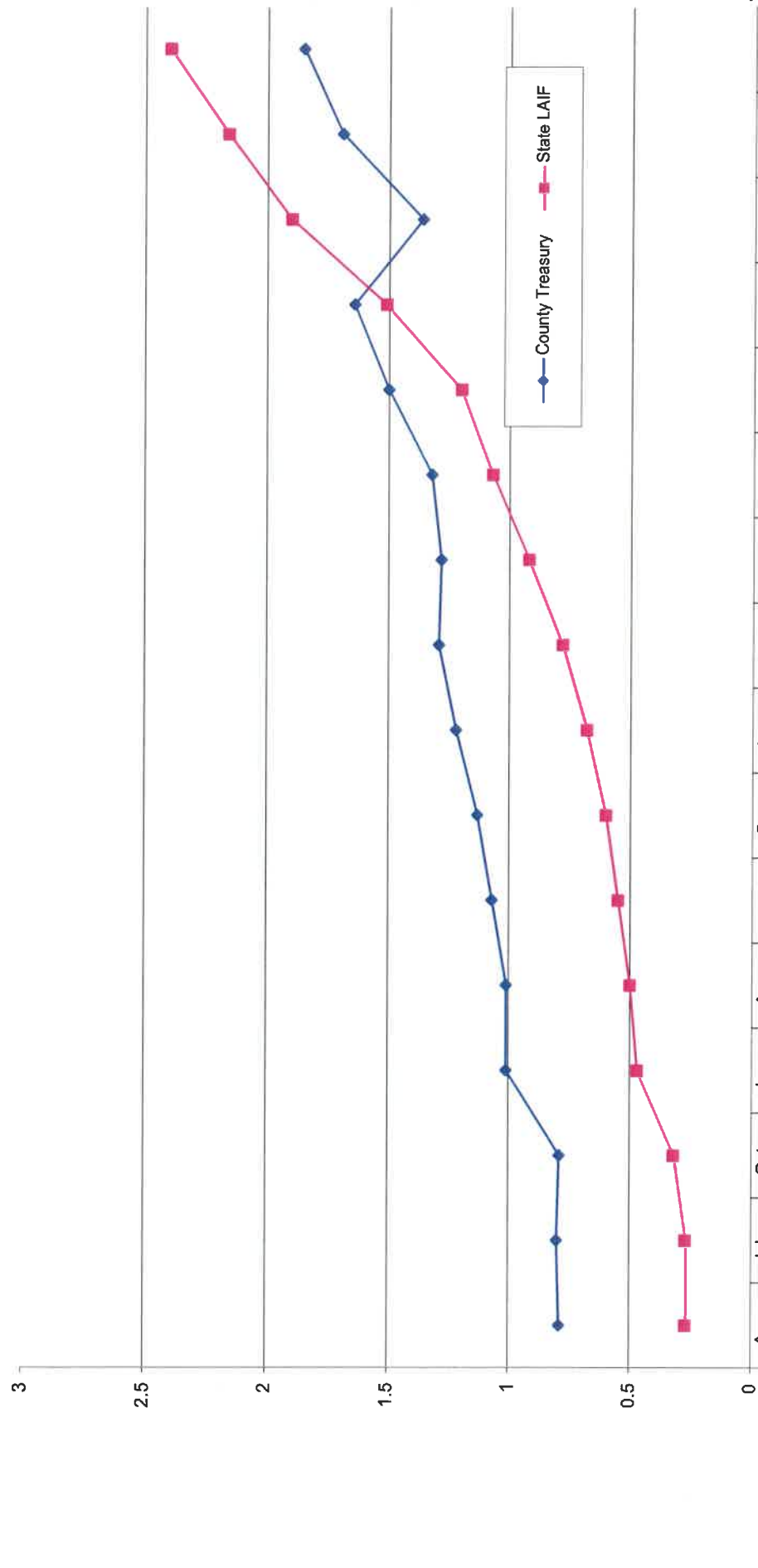
John Bartholomew  
Treasurer-Tax Collector

Humboldt County Treasury Team:

Whitney Morgan – Treasury Assistant  
Amy Christensen – Treasury Assistant



Comparison of County Treasury and State LAIF Investment Earning Rates  
April 2015 - March 2019



Month	County Treasury	State LAIF
Apr - Jun 2015	0.79	0.27
Jul - Sept 2015	0.80	0.32
Oct - Dec 2015	0.79	0.47
Jan - Mar 2016	1.01	0.55
Apr - Jun 2016	1.01	0.68
Jul - Sept 2016	1.07	0.78
Oct - Dec 2016	1.13	0.92
Jan - Mar 2017	1.22	1.07
Apr - Jun 2017	1.29	1.32
Jul - Sept 2017	1.28	1.64
Oct - Dec 2017	1.32	1.85
Jan - Mar 2018	1.5	1.9
Apr - Jun 2018	1.64	2.16
Jul - Sept 2018	1.36	2.4
Oct - Dec 2018	1.69	
Jan - Mar 2019	1.85	

FUND BALANCES  
Allocation Account Activity  
April 1, 2019 - April 1, 2019

*Interest January - March 2019*

Account	Fund	Security ID	Current Transaction Date	Receipt	Trans. Type	Contributions / Transfer In	Disbursements / Transfer Out / Fees	Allocated Earnings	Balance
<b>Fund Participant</b>									
2710	2710	SYS							
	<i>1970 Taxes</i>		1.852	04/01/2019	Alloc/Fee			2,155.00	471,950.69
	Subtotal and Ending Balance		1.852			0.00	0.00	2,155.00	474,105.69
2711	2711	2711							
	<i>MSRA</i>		1.852	04/01/2019	Alloc/Fee			1,980.69	433,777.05
	Subtotal and Ending Balance		1.852			0.00	0.00	1,980.69	435,757.74
2712	2712	2712							
	<i>Re Mat</i>		1.852	04/01/2019	Alloc/Fee			1,533.51	341,766.58
	Subtotal and Ending Balance		1.852			0.00	0.00	1,533.51	343,300.09
3873	3873	3873							
	<i>Investment Account</i>		1.852	04/01/2019	Alloc/Fee			6,357.76	1,392,348.02
	Subtotal and Ending Balance		1.852			0.00	0.00	6,357.76	1,398,705.78
3874	3874	3874							
	<i>DWFP</i>		1.852	04/01/2019	Alloc/Fee			1,082.20	237,004.31
	Subtotal and Ending Balance		1.852			0.00	0.00	1,082.20	238,086.51
3876	3876	3876							
	<i>SRF Payment</i>		1.852	04/01/2019	Alloc/Fee			282.61	4,607.32
	Subtotal and Ending Balance		1.852			0.00	0.00	282.61	4,889.93

# **OPERATIONS**

Memo to: HBMWD Board of Directors  
From: Dale Davidsen, Superintendent  
Date: June 28, 2019  
Subject: Essex/Ruth June 2019 Operational Report

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

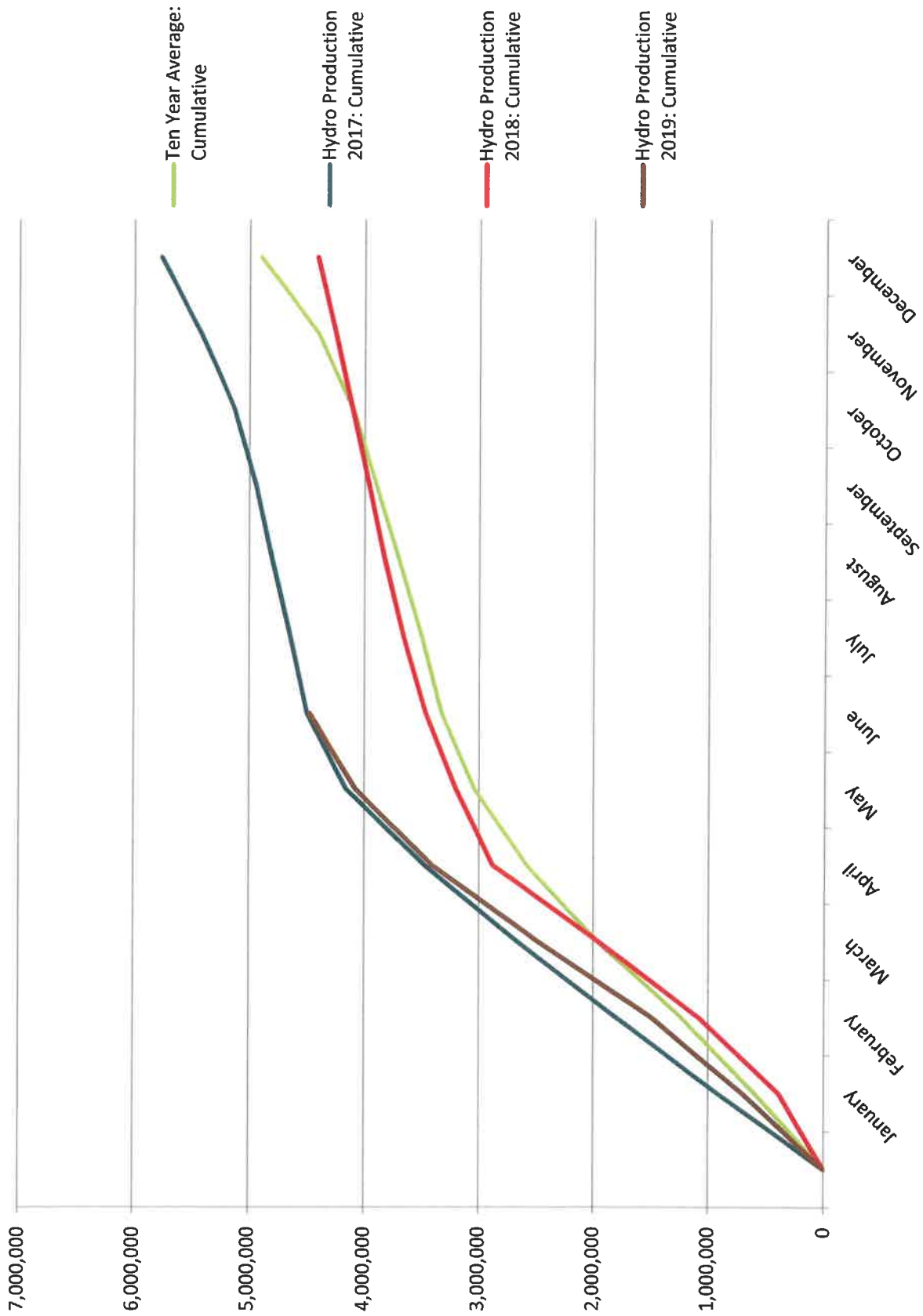
1. The flow at Mad River above Ruth Reservoir (Zenia Bridge) averaged 32 cfs. The low flow of 11 cfs was on June 28<sup>th</sup> and the high flow of 81 cfs was on June 1<sup>st</sup>.
2. The conditions at Ruth Lake for the month of June were as follows:
  - a. The lake level on June 28<sup>th</sup> was 2650.14 feet which is:
    1. 3.23 feet lower than May 31<sup>st</sup>, 2019
    2. 0.78 feet higher than June 28<sup>th</sup>, 2018
    3. 0.51 feet lower than the ten year average
    4. 3.86 feet below the spillway
3. There was 0.03 inches of recorded rainfall for June at Ruth Headquarters.
4. Ruth Hydro produced 398400 KWh till June 28<sup>th</sup>. The hydro plant ran all month with one PG&E outage with 297 KW lost.
5. The discharge from the lake averaged 102 cfs with a high of 237 cfs on June 2<sup>nd</sup>.

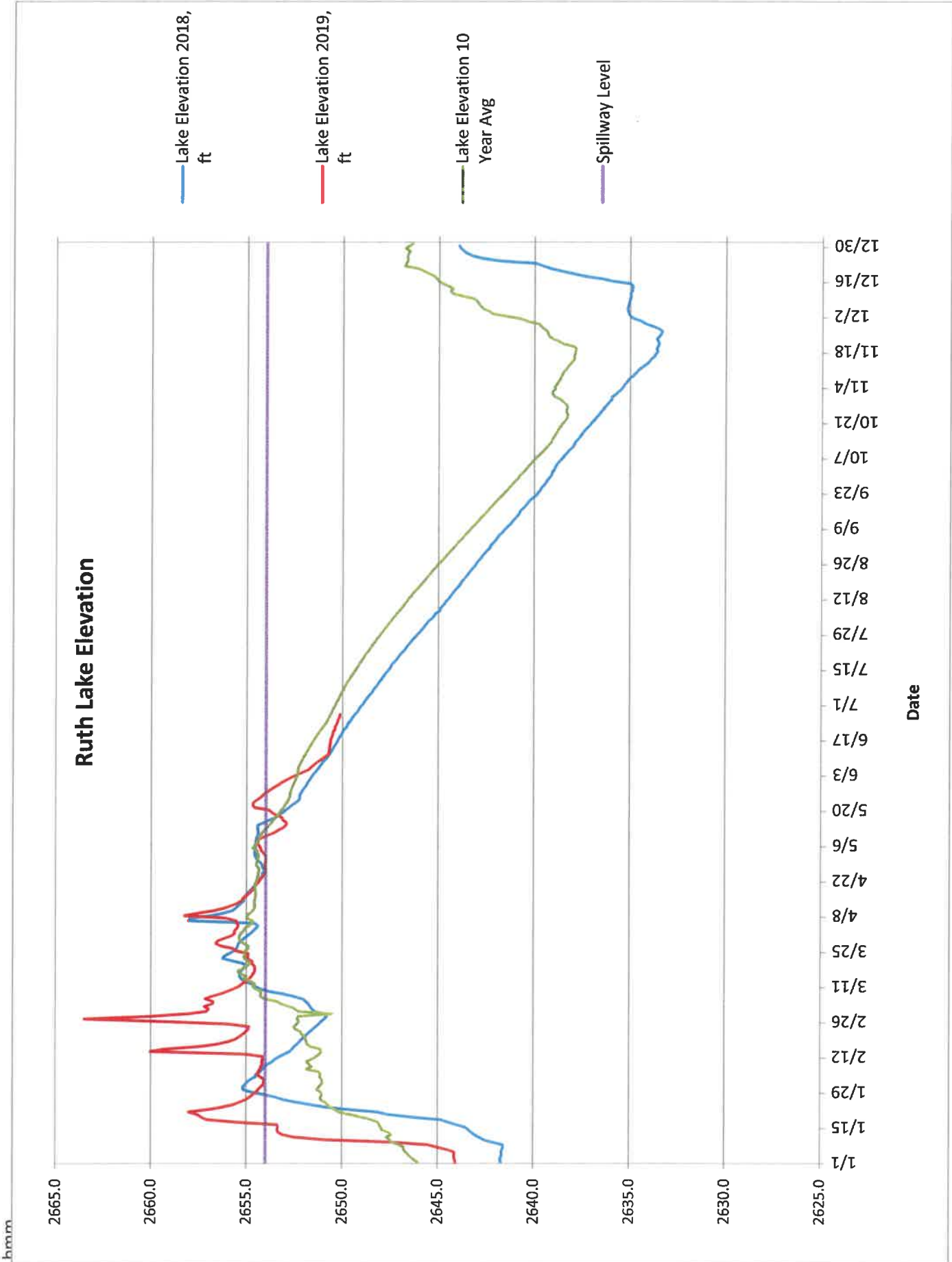
### **Lower Mad River, Winzler Control, and TRF**

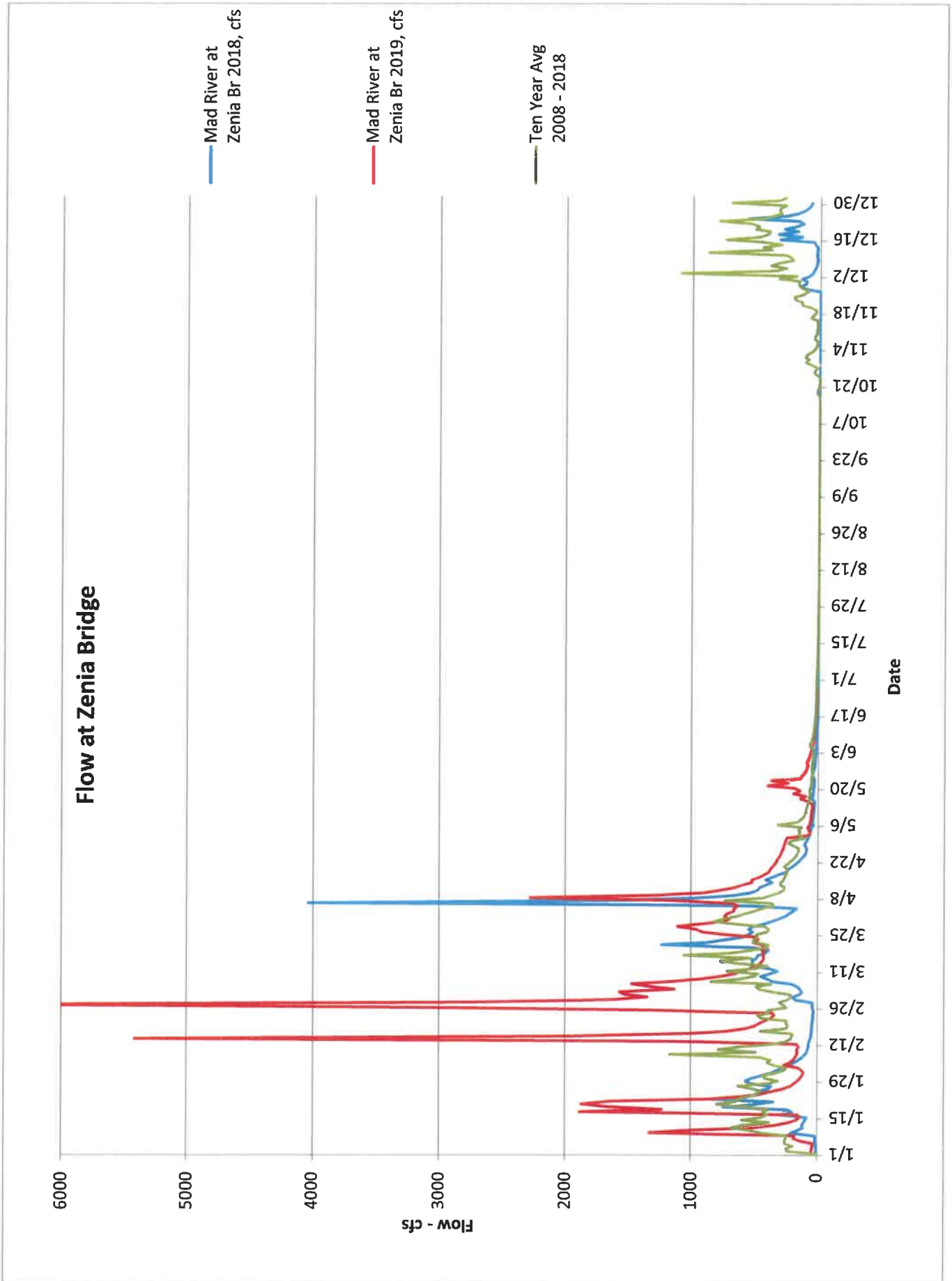
6. The river at Winzler Control Center for June had an average flow of 361 cfs. The river flow reached a high flow of 770 cfs on June 1<sup>st</sup>.
7. The domestic water conditions were as follows:
  - a. The monthly turbidity average was 0.05 NTU, which meets Public Health Secondary Standards.
  - b. As of June 28<sup>th</sup>, we pumped 224.227 million gallons at an average of 8.554 MGD.
  - c. The maximum metered daily municipal customer use was 10.102 MGD on June 15<sup>th</sup>.
8. June 3<sup>rd</sup>, - Maintenance started exploratory digs at 3 valve replacement locations
9. June 7<sup>th</sup> – Figas Construction fell Surge tower.
10. June 17<sup>th</sup> – First Aid and CPR training for two staff members.

11. June 18<sup>th</sup> – Ryan met with International Water Screens to get a quote for PS 6 screen replacement
12. June 21<sup>st</sup> – Operations valved out and de-watered 1 Mg Reservoir in prep for painters.
13. June 24<sup>th</sup> - 25<sup>th</sup> – Simpson Coatings onsite to prep for and do warranty paint repairs to 1 Mg reservoir. Paint inspector Dana Gaya was here also to inspect paint prep.
14. June 25<sup>th</sup> - RCAC training in Crescent City, Water Regulations 7 people attended this training.
15. June 25<sup>th</sup> – Pacific Lift was onsite to inspect Vehicle Lift. This is a OSHA required inspection.
16. June 26<sup>th</sup> - Operations starting filling reservoir and took required samples to get reservoir back online.
17. June 26<sup>th</sup>
  - a. RCAC training in Fortuna, Total Coliform Rule, 7 people attended this training.
  - b. JPIA Sexual Harassment Prevention training at Main Office. All other available staff attended this training.
18. June 27<sup>th</sup> – I met with E&O Lanes to start planning for installation of a new fire service meter.
19. Current and Ongoing Projects
  - a. Ruth Bunkhouse remodel – We have decided to build the handrails with District staff instead of doing a change order. Handrails are complete and we just have a 3'x 6' landing to finish at the bottom of the steps. Upon completion we will take photos and send them to Trinity County and the contractor so the project can be closed out. The Contractor has also finished the punch list items.
  - b. Maintenance is working on 3 large valve replacements and 1 new valve installation. 3 – 30” valves and 1-24” valve.

### Ruth Hydro Production: kW per Month

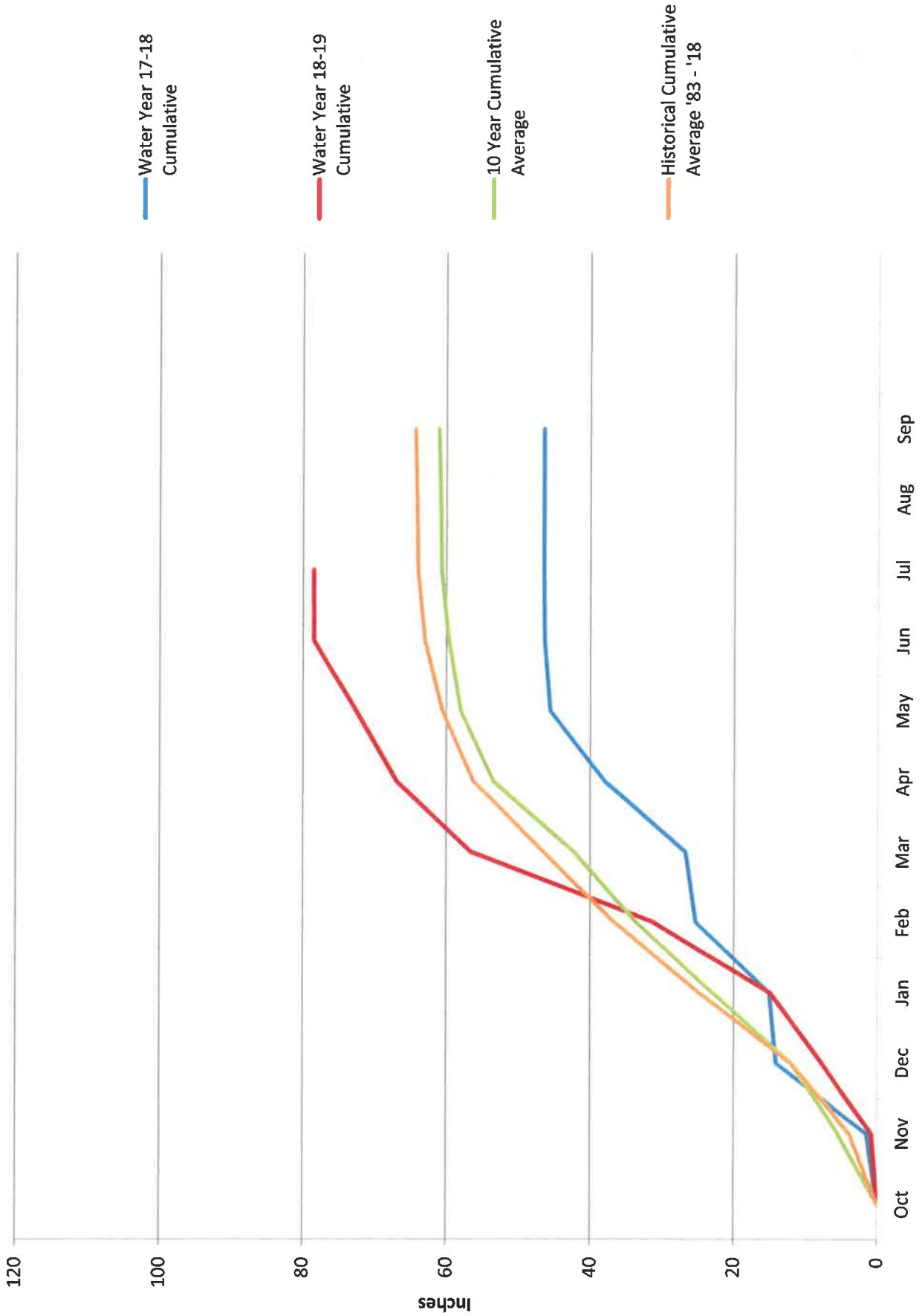


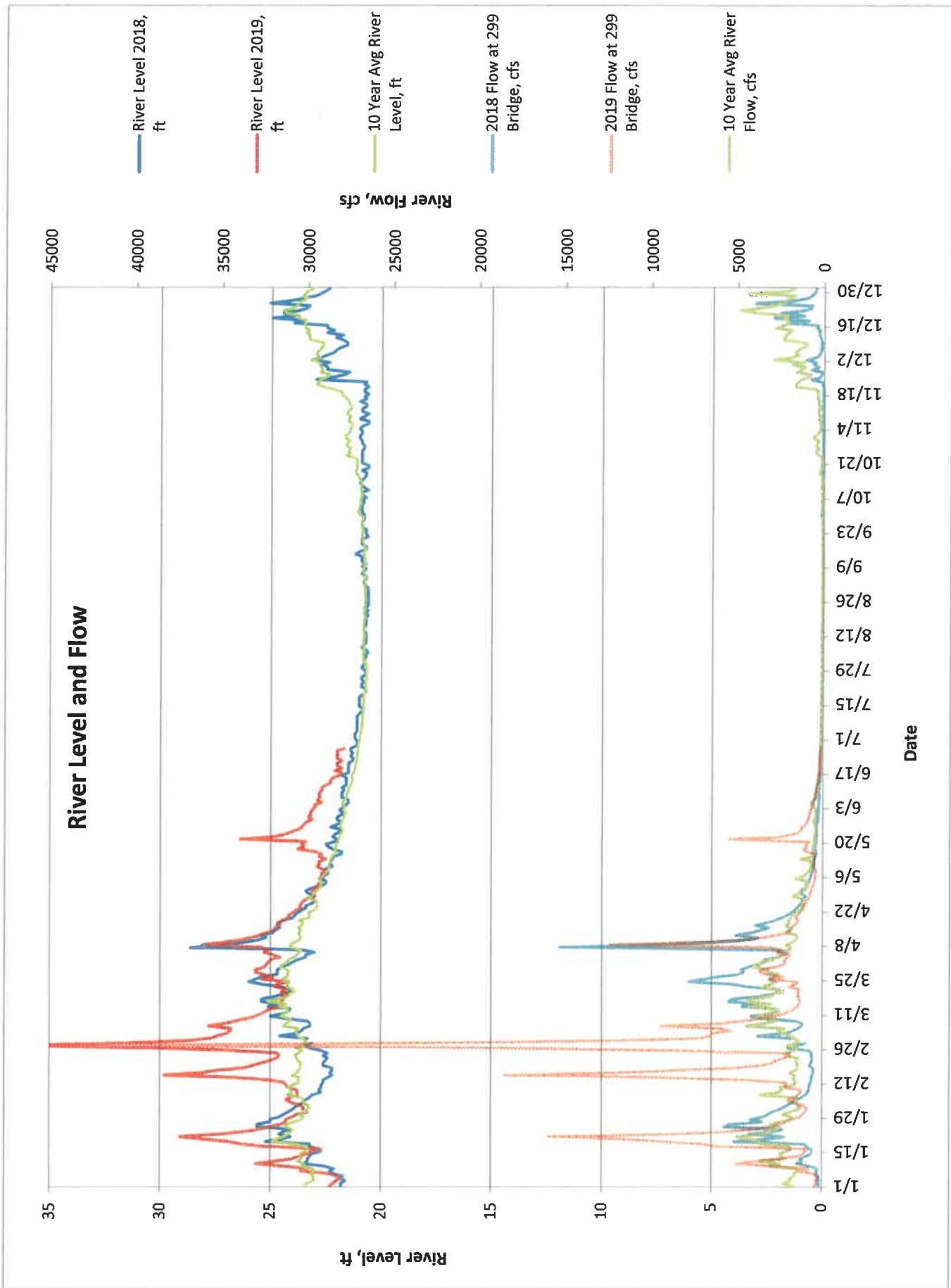






Ruth Rainfall - Water Year 2018-2019





**MANAGEMENT**

*at a glance*  
**SCHEDULE**

**SUNDAY, JUNE 23, 2019**

- 8:00 a.m. – 4:00 p.m. So You Want to Be A General Manager? Workshop (separate registration and payment required)  
5:30 – 7:00 p.m. Welcome Reception and Registration

**MONDAY, JUNE 24, 2019**

- 8:00 a.m. Conference Registration Opens  
8:00 – 8:30 a.m. Continental Breakfast with Exhibitors  
8:30 – 10:00 a.m. OPENING KEYNOTE: Speed Leading - How to Become a Better Leader, Faster!  
10:00 – 10:30 a.m. Break and Networking with the Exhibitors  
10:45 a.m. – 12:00 p.m. BREAKOUT OPTIONS: Enhancing Special District Revenues and Current Developments in the Law of District Revenues; Take It From Me; Cyber Sense  
12:00 – 1:15 p.m. Networking Lunch with Exhibitors  
1:30 – 3:00 p.m. BREAKOUT OPTIONS: A Field Guide to Surviving a Catastrophe; Prevailing Wage Law Compliance & Updates; Managing People and Projects for Leaders  
3:00 – 3:30 p.m. Break and Networking with the Exhibitors  
3:30 – 5:00 p.m. BREAKOUT OPTIONS: Tell Me About It; Getting to the Point; Employment Law Update for Managers  
5:15 – 6:45 p.m. Food & Wine Experience Reception

**TUESDAY, JUNE 25, 2019**

- 8:30 – 9:00 a.m. Continental Breakfast with Exhibitors  
9:00 – 10:15 a.m. GENERAL SESSION: Creating a "Yes, And" Culture of High-Level Performance & Engagement  
10:15 – 10:45 a.m. Break and Networking with the Exhibitors  
10:45 a.m. – 12:15 p.m. BREAKOUT OPTIONS: A General Manager's Guide to Bringing Out the Best in Their Boards, Commissions and Elected Officials; Leading Your District Through Pension Challenges  
12:15 – 1:30 p.m. LUNCH AND PRESENTATION:  
State Capitol Insights for District Leaders  
1:45 – 2:45 p.m. BREAKOUT OPTIONS: Readyng Your District for Climate Change; Financing Options, Trends & Considerations; A Manager's Guide to Emotional Intelligence  
3:00 – 4:00 p.m. BREAKOUT OPTIONS: Special District Manager's Guide to Navigating the Markets and Public Funds Investing; The Post-Janus Tug-of-War; Performance Measurement - Continuous Improvement  
4:00 p.m. Event Adjourns

**CSDA**

## California Special Districts Association

*Districts Stronger Together*

By [CSDA ADMIN](#) posted 18 hours ago



Galen's dynamic session captured the audience at [CSDA's 2019 General Manager Leadership Summit](#). It profoundly impacts the way you communicate, show up, and lead your team. Through simple, skill-building activities, Galen led how to create a cohesive "Yes, And" culture to skyrocket team performance and engagement. The audience laughed and learned, and came away with new, powerful tools to enhance their leadership abilities, self-awareness, emotional intelligence, and the capacity to drive exceptional culture within your organization.

### **Culture: It's Not Just for Breakfast Anymore**

As a speaker and expert on leadership and teams, I spend my days working with organizations, getting to see firsthand the dynamics and challenges associated with running a business. And in my experience, no matter the industry, business model, or size, from retail to manufacturing to hospitals; there is one commonality that determines success over struggle: organizations that prioritize culture are winning.

For the most part, companies spend their time and energy focused on developing and executing business strategy. For many, company culture is just something they hope to get right, often waiting to address it until it's broken and the consequences become too costly to keep ignoring. Business visionary and author, Peter Drucker, famously said, "Culture eats strategy for breakfast." This quote couldn't be more on the money.

### **The Case for Culture**

The most critical mistake an organization can make is to overlook the importance of culture and simply leave it up to chance. Culture is less visible and tangible on the surface than metrics like sales numbers, which makes it easy to slip down the ladder of priority. But make no mistake: the negative impact of poor company culture is destructive to every aspect of an organization and its bottom line. Employee engagement, job performance,

turnover, quality control, customer experience and loyalty, just to name a few.

I'm not just speaking from the heart, there's unlimited data to support this reality.

According to a Gallup Report on the State of the American Workplace, companies that made a concerted effort to focus on culture and employee engagement outperformed companies that didn't by 10% in customer ratings, 22% in profitability and 21% in productivity. Those companies also saw a 25% decrease in turnover and shrinkage and saw almost a 50% decrease in safety incidents throughout the year.

If that's not enough to convince you, that same report shared that companies who dedicated time and resources to building and cultivating a positive company culture resulting in highly engaged employees outperformed their peers by 147% in earnings per share. Similarly, the Workplace Research Foundation proclaims that increasing investment in culture and engagement by just 10% can increase your profits by \$2,400 per employee on an annual basis.

Flat out, culture is good for business. And companies that still need convincing are being left in the dust.

### **Where Companies Fail**

The fact is that even though companies may be aware of this reality, only about 25% of organizations today have an employee engagement and culture strategy in place, and toxic work culture is rampant. We have all either experienced it, left a job because of it, or know someone who's life is currently miserable due to it.

While things like great compensation go a long way to move the needle and improve workplace environment, it's not enough to just throw money at people and stick a ping pong table in the break room. The hard truth is that you can't pay someone enough to stay at a job they hate. When it comes down to it, culture matters more.

So yes, it's important. Yes, you're leaving money on the table if you don't address it. And yes, your employees will leave if they don't feel engaged (and you'll be stuck with the tab -- which is typically 100 - 300% the cost of the employee's annual base salary, according to Gallup).

So the question is, how can you actually create and effectively drive culture in an organization?

There is a way. Just know this with absolute certainty: hanging a poster on the wall expressing your company's core values does nothing to actually impact culture. As you may have heard, the values displayed in the lobby of Enron, the company bankrupted by fraud and whose leaders went to jail, were Integrity, Communication, Respect, and Excellence. So there's that.

The actual answer here is simple and indisputable:

***You must treat culture as a strategic priority. You must create a plan.***

No company in the world leaves anything critical to the business up to chance. When faced with having to successfully market a brand, we develop a sophisticated marketing strategy. We define an executable plan based on desired outcomes and then put that plan into action. We don't rely on hope for great sales results, we make sales a strategic priority. Same with finance, operations, IT, customer service, etc.

For the love of all that's good in the world, do not risk banking your company culture on hope. We have to approach culture the same we approach any goal where we want to achieve success: define it, create an action plan against it, and execute it. To create and drive an awesome culture you have to ask the right questions and get clear on the answers.

Here's a six step guide to help build a strategic culture plan for your company. The questions included are by no means comprehensive, but they're a jumping off point to spark conversation and define your culture plan.

1. **What's your driving story?**

What's your company story, why do you do what you do? When people show up, what are they contributing to? If everyone in the organization is holding an oar, this is why they row and what they're rowing towards.

2. **Articulate your values in practice.**

Define the values that drive your behavior as a company. Use action words. If you say integrity, get specific and clear about what integrity looks like in action. These are your ground rules to how you behave, not merely what you believe.

3. **Employee experience.**

Outline the experience of your people. What do you want it to feel like to be part of the team? What will employees tell their friends and family about how it feels to work there?

#### 4. **Traditions.**

Identify what systems and traditions you'll embrace to integrate and support this plan. This can include hiring practices, coaching and evals, training, company events, reward programs, how you start meetings, etc.

#### 3. **Success & accountability.**

Define your commitment as a team. What is expected of leaders and employees, how do you hold each other accountable? How do you measure your success, and how often? Most importantly, do you mean it: is anyone exempt from showing up this way?

#### 4. **Capture the beating heart.**

Now that you've outlined it, define the essence of your culture in one sentence or idea. Brand it. What's the heart of it? How would you describe your culture to someone outside of the organization?

#### **What Next?**

Now that you've created your strategic culture plan, share it with your team. Talk to them about the experience of creating this plan, ask for feedback, and share the next steps as a result. There's no better way to make progress, be accountable, and get buy-in than involving them in this work.

Prioritizing culture is not a nice-to-have, it's a must have. It is your competitive advantage and your way forward as a business. Ultimately, your focus on culture as a strategic priority will set you on a path to success, and those efforts will be felt throughout your organization. Your employees will be happier, your customers will be happier, your bottom line will be happier.



**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

To: Board of Directors  
From: John Friedenbach  
Date: July 5, 2019  
Subject: California Special District Association (CSDA) Programs Promoting Good Governance

Last month, President Woo inquired about District certifications for good governance through the CSDA. The Special District Leadership Foundation (SDLF) is an independent, non-profit organization formed to promote good governance and best practices among California's special district's through certification, accreditation and other recognition programs. The SDLF is supported by the CSDA.

The SDLF currently has four certification/accreditation programs:

- ❖ Recognition in Special District Governance
- ❖ Special District Administrator Certification
- ❖ District of Distinction Accreditation
- ❖ District of Transparency Certificate of Excellence

The first two programs listed are completed on an individual basis. The latter two are District based.

I have attached summary information about all four of the programs (pages ~~2-3~~) and detailed information for both the *District of Distinction Accreditation* and the *District of Transparency Certificate of Excellence* as those are District based (pages ~~4-12~~).

The District certification/accreditations are valid for two years. There are no fees associated with the District Transparency Certificate of Excellence. The District of Distinction Accreditation fees are based on a district's budget. For HBMWWD, currently the fee every two years would be \$250.

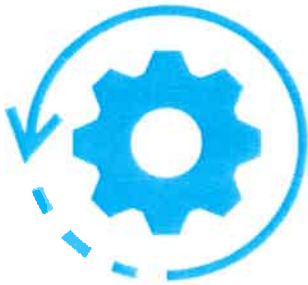
Both of these programs require ongoing work and commitment from District Board and staff before, during and after the certification/accreditation process.

Staff will discuss with the Board all of the SDLF District certification/accreditations programs.

# / PROGRAMS

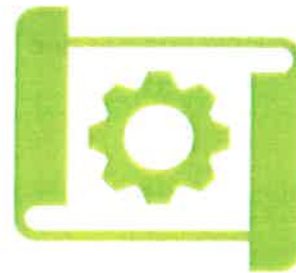
## Promoting good governance.

The Special District Leadership Foundation (SDLF) is an independent, non-profit organization formed to promote good governance and best practices among California's special districts through certification, accreditation and other recognition programs. The SDLF and its activities are supported by the California Special Districts Association and the Special District Risk Management Authority.



### Recognition in Special District Governance

Designed to honor special district board members and trustees, and is comprised of two distinct parts: the completion of the Special District Leadership Academy and 10 hours of continuing education. The Special District Leadership Academy is comprised of four courses unique in that the curriculum has been created by special districts and agreed upon as what governing officials of special districts should know. SDLF has endorsed the Academy as the core special district governance training in California.



### Special District Administrator Certification

This is a voluntary designation sought by individuals who strive to be the best. Administrators with various academic and professional backgrounds can be candidates for the program. Guided by the SDLF Board, Certification Advisory Committee, and under direction by a professional examination development firm, this certification will give successful candidates recognition unmatched by other programs. This certification helps document and recognize a candidate's knowledge, skills and capabilities as a special district administrator.



## District of Distinction Accreditation

In a time where proper fiscal management and responsibility in public agencies is paramount and the task of governing these agencies has become even more complex, regulated and costly, it has become increasingly important to demonstrate to constituents that districts have sound fiscal management policies and practices in place among other areas of importance in district operations. This accreditation is designed as a way for districts to highlight their prudent fiscal practices along with other areas important to effectively operate and govern a special district.



## District Transparency Certificate of Excellence

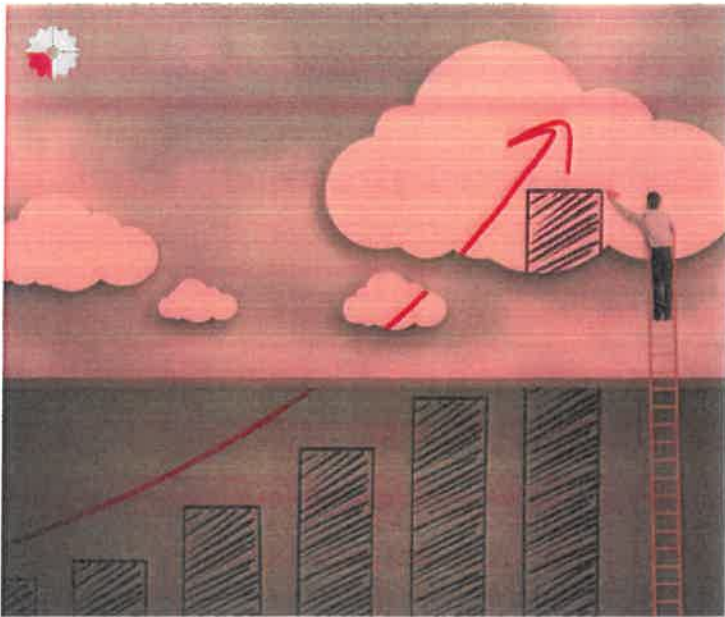
This program was created in an effort to promote transparency in the operations and governance of special districts to the public and to provide special districts with an opportunity to showcase their efforts in transparency. There are no fees for this certificate and recognition is two years. Three main subject areas: Basic Transparency Requirements; Website Requirements; and Outreach Requirements - These are only a sampling of all the requirements needed to complete the transparency certificate.



1112 I Street, Suite 200, Sacramento, CA 95814 | [info@sdlf.org](mailto:info@sdlf.org) | Tel: 916.231.2939 | Fax: 916.520.2469



# / PROGRAMS



## District of Distinction Accreditation

In a time where proper fiscal management and responsibility in public agencies is paramount and the task of governing these agencies has become even more complex, regulated and costly, it has become increasingly important to demonstrate to constituents that districts have sound fiscal management policies and practices in place among other areas of importance in district operations.

This accreditation is designed as a way for districts to highlight their prudent fiscal practices along with other areas important to effectively operate and govern a special district.

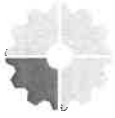
## Requirements

## Application

- The accreditation criterion gets to the heart of best practices in public agencies. Demonstrate that your district:
- Understands and respects the responsibilities inherent in providing essential public services.
- Has clean financial audits and operates in a fiscally responsible and transparent manner.
- Is conscious of the ever-changing operating environment by having current and relevant policies and procedures in place that conform to all statutes and regulations under state law.
- Places an emphasis on continuing education completed by having each of the district's board members and executive staff in ethics, governance and leadership training.
- Focuses on having sound policies in the areas of governance, board conduct, district finances, transparency and reserves.
- They undergo regular financial audits, have no major deficiencies and apply any recommendations to future years.
- Their operations conform to all statutes and regulations under state law as reflected in a policies and procedures manual.
- All directors/trustees, general manager and executive staff (as designated by the district) have received training in governance as well as compliance with AB 1234 Ethics Training and AB 1825 Harassment Prevention Training.
- They have completed SDLF's District Transparency Certificate of Excellence.

1. Complete the application
2. Send application and all supporting materials to SDLF.
3. Approval process review performed by SDLF staff
4. Receive your certificate and recognition

[Download application](#)



SHOWCASE YOUR COMMITMENT TO EXCELLENCE

## District of Distinction Application

The District of Distinction is an accreditation program that enables districts to demonstrate to their communities, the media and legislators their commitment to operate in a sound, responsible manner. Districts apply for designation as a District of Distinction by submitting financial audits, policies and procedures and proof of training received by directors and executive staff.

### Requirements:

#### FINANCIAL AUDITS

Districts must demonstrate they undergo regular financial audits, have no major deficiencies and apply any recommendations to future years.

##### **What to submit:**

- Copies of the three most recent district audits, including financial statements (3), SAS 114 and management letters (3). Each audit, including findings and recommendations, will be reviewed by a member of the Certification & Audit Review Advisory Committee. Committee members are volunteers from the special district community, including district controllers, directors of finance and SDA certified general managers.

#### POLICIES AND PROCEDURES

Districts must demonstrate that their operations conform to all statutes and regulations under state law as reflected in a policies and procedures manual. Policies and procedures should focus on governance, ethics, board conduct, district finances, reserves, reimbursement/compensation, etc.

##### **What to submit:**

- Copy of your district's current approved policies and procedures manual.
- Copy of your district's Board minute action adopting and/or having reviewed the policies and procedures manual within the past year.

#### TRAINING

##### **What to submit:**

Documentation showing class attendance, such as certificate of completion for each board member, general manager and other executive staff members (as identified by the board) in the following areas:

- Governance Training:** Six hours of basic governance training within the past five years. *Governance Foundations*, offered by CSDA's Special District Leadership Academy, satisfies this requirement. Other courses may qualify as well, however will need to be submitted for review by SDLF. Also, *Board Member Best Practices* (3 hours) plus 2 approved webinars will satisfy that requirement. Approved webinars are:  
*Board Member and District Liability Issues, Must Have Communication Protocols for Board & Staff, and Who Does What? Best Practices in Board Staff Relations.*  
*\*Districts with boards larger than 7 need at least a majority of total board members completing this training requirement.*
- Ethics Training:** Documentation verifying completion of AB 1234 ethics compliance training within the last two years.
- Harassment Prevention Training:** Documentation verifying completion of AB 1825 harassment prevention training within the last two years.

#### OTHER

Districts must also include the following items with the accreditation/re-accreditation application:

##### **What to submit:**

- Board of Directors roster
- List of executive staff, including titles
- Completed application for accreditation/re-accreditation
- Accreditation/re-accreditation application fee
- Completed SDLF District Transparency Certificate of Excellence

**Who should apply to be a District of Distinction?**

Any California special district that wants to demonstrate publicly the effectiveness of its operations. Applying for this designation shows that your district understands and respects the responsibilities inherent to providing essential public services in a fiscally responsible manner.

**What does a district receive for completing the program?**

Districts of Distinction earn the right to use the program's seal on district materials and a plaque honoring their accomplishment. SDFL will also send a letter to a local publication and notify legislators on a district's behalf. The District will also receive a Legislative Resolution.

**How does a district apply?**

Districts interested in earning the Districts of Distinction designation must complete the application and submit it along with the required documentation. Applications must also be accompanied by an application fee.

**If my district is a member of the Special District Risk Management Authority (SDRMA), will getting a District of Distinction accreditation save me money on my premiums?**

Yes. SDRMA offers Credit Incentive Points (CIPs) if your district earns the District of Distinction accreditation which can provide significant premium discounts. For more information, contact SDRMA at 800.537.7790 or visit [www.sdrma.org](http://www.sdrma.org).

**RE-ACCREDITATION**

**For how long is the designation valid?**

The Districts of Distinction designation is valid for two years and a district may be re-accredited by submitting the application and all current required documents for review along with the re-accreditation fee.

**Fees**

The fees are on a sliding scale, based on a district's budget:

**INITIAL ACCREDITATION & RE-ACCREDITATION**

<b>Annual operating budget</b>	<b>Fee</b>
\$0-299,999	\$125
\$300,000-749,999	\$150
\$750,000-999,999	\$175
\$1,000,000--2,999,999	\$200
\$3,000,000 or more	\$250

**Submit this application along with all required documentation and payment to:**

Special District Leadership Foundation  
 1112 I Street, Suite 200  
 Sacramento, CA 95814  
 Phone: 916-231-2909 • Fax: 916-442-7889 • [sdlf.org](http://sdlf.org)

**Electronic filing is preferable.**

Contact SDFL for instructions.

District:	
Mailing Address:	
City:	State: Zip:
Contact Name:	Title:
Phone:	Fax:
Email:	Website:
Assembly Member(s)*:	
Senator*:	
Local Newspaper(s):	
I certify that the information submitted is accurate and complete to the best of my knowledge.	Signature:
<b>SILVER, GOLD OR PLATINUM RECOGNITION</b>	
Board Members who have received Recognition in Special District Governance: (attach additional pages if necessary)	
	Date:
	Date:
	Date:
General Manager:	
<input type="checkbox"/> Has completed Recognition in Special District Governance	<input type="checkbox"/> Has completed Recognition in Special District Administrator
<b>PAYMENT</b>	
Total: \$	<input type="checkbox"/> Check <input type="checkbox"/> Visa <input type="checkbox"/> Mastercard <input type="checkbox"/> Discover <input type="checkbox"/> American Express
Acct. Name:	Acct. Number:
Expiration Date:	Authorized Signature:

# / PROGRAMS



## District Transparency Certificate of Excellence

This program was created in an effort to promote transparency in the operations and governance of special districts to the public and to provide special districts with an opportunity to showcase their efforts in transparency.

There are no fees for this certificate and districts will be recognized for two full years. Three main subject areas include:

- Basic Transparency Requirements
- Website Requirements
- Outreach Requirements

These are only a sampling of all the requirements needed to complete the transparency certificate. While it takes time to compile these requirements, being able to shine a light on all of the efforts your district has taken to be transparent is invaluable to the public.



## Why earn it?

1. The certificate covers all general, website, and outreach best practices and requirements regarding transparency for special districts.
2. Earning the certificate is a tangible acknowledgement of your transparency efforts.
3. Demonstrate to your constituents and other stakeholders your district's commitment to being open and accessible to them.
4. Earning the certificate demonstrates a commitment to engaging the public and creating greater awareness of your district's activities.

Earning the certificate is a tangible acknowledgement of transparency efforts.

Demonstrate to your constituents and other stakeholders your district's commitment to being open and accessible to them.

## Sample Policies

Included for your review are sample policies similar to those requested in the application. These are samples that can be used as a starting point for policy/document development. SDLF always recommends you seek legal review prior to adopting district policy to ensure full compliance with any applicable laws and/or regulations.

- [Brown Act Compliance](#)
- [Public Records Act Requests](#)
- [Reimbursement Policy](#)
- [Annual Disclosure](#)
- [Conflict of Interest Policy](#)
- [Code of Ethics Policy](#)
- [Board Vacancy Announcement](#)
- [Public Budget Hearing](#)

## Application

1. Complete the application
2. Send application and all supporting materials to SDLF.
3. Approval process review performed by SDLF staff
4. Receive your certificate and recognition

[Download application](#)





SHOWCASE YOUR DISTRICT'S COMMITMENT TO TRANSPARENCY

## District Transparency Certificate of Excellence

### Purpose

To promote transparency in the operations and governance of special districts to the public/constituents and provide special districts with an opportunity to showcase their efforts in transparency.

### Duration

2 Years

### Application Cost

FREE

### District Receives

- Certificate for display (covering 2 years)
- Press release template
- Recognition on the SDLF website
- Letter to legislators within the district's boundaries announcing the achievement
- Recognition in social media, letter to the editor of local media outlet, and the CSDA eNews
- Window cling

### Basic Requirements

#### Current Ethics Training for All Board Members *(Government Code Section 53235)*

- Provide names of board members and copies of training certificates along with date completed

#### Compliance with the Ralph M. Brown Act *(Government Code Section 54950 et. al)*

- Provide copy of current policy related to Brown Act compliance  
 Provide copy of a current meeting agenda (including opportunity for public comment)

#### Adoption of Policy Related to Handling Public Records Act Requests

- Provide copy of current policy

#### Adoption of Reimbursement Policy, If District Provides Any Reimbursement of Actual and Necessary Expenses

*(Government Code Section 53232.2 (b))*

- Provide copy of current policy

#### Annual disclosure of board member or employee reimbursements for individual charges over \$100 for services or products. This information is to be made available for public inspection. "Individual charge" includes, but is not limited to: one meal, lodging for one day, or transportation. *(Government Code Section 53065.5)*

- Provide copy of the most recent document and how it is accessible.

#### Timely Filing of State Controller's Special Districts Financial Transactions Report - Includes Compensation Disclosure. *(Government Code Section 53891)*

- Provide copy of most recent filing.

*SDLF staff will verify that district is not listed on the State Controller's 'non-compliance list'*

#### Conduct Audits As Required By Law *(Government Code Section 26909 and 12410.6)*

- Provide copy of most recent audit, management letter, and a description of how/where documents were made available to the public

#### Other Policies – Have Current Policies Addressing the Following Areas

*Provide copies of each:*

- Conflict of Interest  
 Provide copies of Form 700 cover sheet for board members and general manager  
 Code of Ethics/Values/Norms or Board Conduct  
 Financial Reserves Policy

**Website Requirements**

Maintain a district website with the following items Required. (provide direct website links for each item) - Required items available to the public:

- Names of board members and their full terms of office to include start and end date
- Name of general manager and key staff along with contact information
- Election/appointment procedure and deadlines
- Board meeting schedule  
(Regular meeting agendas must be posted 72 hours in advance pursuant to *Government Code Section 54954.2 (a)(1) and Government Code Section 54956 (a)*)
- District's mission statement
- Description of district's services/functions and service area
- Authorizing statute/Enabling Act (Principle Act or Special Act)
- Current District budget
- Most recent financial audit
- Archive of Board meeting minutes for at least the last 6 months
- Link to State Controller's webpages for district's reported board member and staff compensation (*Government Code Section 53908*)
- Link to State Controller's webpages for district's reported Financial Transaction Report (*Government Code Section 53891 (a)*)
- Reimbursement and Compensation Policy
- Home page link to agendas/board packets (*Government Code Section 54957.5*)
- SB 272 compliance-enterprise catalogs (*Government Code Section 6270.5*)

Additional items – website also must include at least 4 of the following items:

- Post board member ethics training certificates
- Picture, biography and e-mail address of board members
- Last (3) years of audits
- Financial Reserves Policy
- Online/downloadable public records act request form
- Audio or video recordings of board meetings
- Map of district boundaries/service area
- Link to California Special Districts Association mapping program
- Most recent Municipal Service Review (MSR) and Sphere of Influence (SOI) studies (full document or link to document on another site)
- Link to [www.districtsmakethedifference.org](http://www.districtsmakethedifference.org) site or a general description of what a special district is
- Link most recently filed to FPPC forms
- Machine readable/searchable agendas (*required in 2019*)

**Outreach/Best Practices Requirements - (Must complete at least 2 of the following items)**

**Regular district newsletter or communication (printed and/or electronic) that keeps the public, constituents and elected officials up-to-date on district activities (at least twice annually)**

- Provide copy of most recent communication and short description on the frequency of the communication, how it's distributed and to whom.

**Community notification through press release to local media outlet announcing upcoming filing deadline for election or appointment and process for seeking a position on the district board, prior to that election (or prior to the most recent deadline for consideration of new appointments for those districts with board members appointed to fixed-terms).**

- Provide copy of the press release (and the printed article if available)

**Complete salary comparison/benchmarking for district staff positions using a reputable salary survey (at least every 5 years)**

- Provide brief description of the survey and process used as well as the general results

**Special Community Engagement Project**

Designed and completed a special project promoting community engagement with the district (potential projects may be broad in nature or focus on specific issues such as rate-setting, recycled water, identifying community needs, etc.)

- Submit an overview of the community engagement project reviewing the process undertaken and results achieved

**Hold annual informational public budget hearings that engage the public (outreach, workshops, etc.) Prior to adopting the budget**

- Provide copy of most recent public budget hearing notice and agenda.

**Community Transparency Review**

The district would be required to obtain a completed overview checklist from at least 2 of the following individuals (the district may choose to conduct the overview with these individuals simultaneously or separately):

- Chair of the County Civil Grand Jury
- Editor of a reputable local print newspaper (only one may count toward requirement)
- LAFCO Executive Officer
- County Auditor-Controller
- Local Legislator (only one may count toward requirement)
- Executive Director or President of local Chamber of Commerce
- General Manager of a peer agency (special district, city, county, neighborhood association, community organization or county administrative officer)

- Provide proof of completion signed by individuals completing Community Transparency Review

**DISTRICT OF TRANSPARENCY CERTIFICATE OF EXCELLENCE APPLICATION**



SHOWCASE YOUR DISTRICT'S COMMITMENT TO TRANSPARENCY

**District Transparency Certificate of Excellence**

**Submit Application**

Submit this application along with all required documentation to:

Special District Leadership Foundation  
 1112 I Street, Suite 200  
 Sacramento, CA 95814  
 Phone: 916-231-2909 • Fax: 916-442-7889

**Electronic filing is preferable.**

Contact SDF for instructions.

District:		
Mailing Address:		
City:	State:	Zip:
Contact Name:		
Contact Title:		
Phone:	Fax:	
Email:	Website:	
Assembly Member(s)*:		
Senator*:		
Local Newspaper(s):		
I certify that the information submitted is accurate and complete to the best of my knowledge.		Signature:

*\*include all state legislators representing the district's area of operation*

**ACWA**



YOUR BEST PROTECTION

H.B.M.W.D. JUN 20 2019

June 18, 2019

**ACWA JPIA**P. O. Box 619082  
Roseville, CA 95661-9082phone  
916.786.5742  
800.231.5742direct line  
916.774.7050  
800.535.7899fax  
916.774.7040claims fax  
916.786.0209[www.acwajpia.com](http://www.acwajpia.com)**President**  
E.G. "Jerry" Gladbach**Vice President**  
Tom Cuquet**Chief Executive Officer**  
Walter "Andy" Sells**Executive Committee**  
Fred Bockmiller  
Tom Cuquet  
David Drake  
E.G. "Jerry" Gladbach  
Brent Hastey  
Steven LaMar  
Melody A. McDonald  
J. Bruce Rupp  
Kathleen TiegsJohn Friedenbach, General Manager  
Humboldt Bay Municipal Water District  
P.O. Box 95  
Eureka, CA 95502-0095

Dear Mr. Friedenbach:

The JPIA appreciates your membership and your participation in our training program. Training designed specifically for water agencies reduces losses, improves employee skills and contributes to a positive working environment.

Thank you for the use of your staff and facility on June 11, 2019 for Defensive Driver and Ergonomics training. We hope your staff found it a valuable experience.

We also appreciate you allowing neighboring JPIA member agencies to attend. Your generosity is what makes our training program benefit the entire pool. *We couldn't do it without you.*

Please feel free to contact us regarding any future training questions or needs.

Sincerely,

MBA, SPHR-CA, IPMA-CP  
ACWA JPIA Director of Human Resources & Administration

Sent June 19, 2019 DRAFT 3

**SAFE DRINKING WATER FUNDING SOLUTION**  
**TRAILER BILL LANGUAGE**  
**OPPOSITION TO INSERTS RELATED TO**  
**AB 134 (Bloom) and AB 217 (E. Garcia)<sup>1</sup>**

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The organizations listed below support the safe drinking water funding agreement that came together because of the leadership of Governor Newsom, Senate President pro Tem Atkins and Assembly Speaker Rendon, the work of the Conference Committee on the Budget and action by the Legislature. The organizations listed below support having a budget trailer bill (BTB) enacted in a timely fashion that appropriately implements that agreement and that is based on SB 200 (Monning). However, **these organizations oppose BTB inserts based on AB 134 (Bloom) and AB 217 (E. Garcia) that would unnecessarily delay and add to the cost of the program.** Following are examples (not a complete list):

- One insert would repeal the program as of January 1, 2021, including the creation of the Safe and Affordable Drinking Water Fund, if AB 134 (Bloom) is not enacted in the 2019-20 Legislative Session. This provision would make uncertain the implementation of safe drinking water funding agreement just reached. This provision is unnecessary and counterproductive.
- While well intended, the AB 134 funding process is so extensive that it could end up **bogging down the progress toward solutions while driving up the program implementation costs.** The Assembly Appropriations Committee estimated that AB 134 implementation would cost the State Water Board between \$122 million and \$1.1 billion per year.
- The proposed new Article 6 would **add a regional distribution program** based on AB 217 and require that the State Water Board annually **allocate 20 percent of planned expenditures** to the Division of Drinking Water **regions.** This provision would **unnecessarily add to the administrative costs.** Instead, the State Water Board can more efficiently implement one program as proposed in SB 200.

The Governor and Legislature are enacting a historic funding solution so that disadvantaged communities that do not have access to safe drinking water will have safe drinking water. The trailer bill should focus on implementing the funding solution in an effective and efficient manner. The proposed AB 134- and AB 217-related inserts to the trailer bill would work against that goal.

**ORGANIZATIONS OPPOSED TO AB 134- and AB 217- RELATED BTB INSERTS**

Association of California Water Agencies  
Building Owners and Managers Association of California  
California Business Properties Association  
California Municipal Utilities Association

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<sup>1</sup> May 21, 2019 Version

Eastern Municipal Water District  
Elsinore Valley Municipal Water District  
International Council of Shopping Centers  
Kern County Water Agency  
Mojave Water Agency  
National Association of Industrial and Office Properties – California Chapters  
Palmdale Water District  
Regional Water Authority  
Rincon de Diablo Municipal Water District  
Rowland Water District  
San Bernardo Valley Municipal Water District  
San Diego County Water Authority  
Western Municipal Water District  
Westlands Water District



**RREDC/RCEA**



Redwood Coast Energy Authority  
 633 3<sup>rd</sup> Street, Eureka, CA 95501  
 Phone: (707) 269-1700 Toll-Free (800) 931-7232 Fax: (707) 269-1777  
 E-mail: [info@redwoodenergy.org](mailto:info@redwoodenergy.org) Web: [www.redwoodenergy.org](http://www.redwoodenergy.org)

## **BOARD OF DIRECTORS MEETING AGENDA**

**Humboldt Bay Municipal Water District Office**  
**828 7<sup>th</sup> Street, Eureka, CA 95501**

**June 27, 2019**  
**Thursday, 3:30 p.m.**

In compliance with the Americans with Disabilities Act, if you need assistance to participate in this meeting, please contact the Clerk of the Board at the phone number, email or physical address listed above at least 72 hours in advance.

Pursuant to Government Code section 54957.5, all writings or documents relating to any item on this agenda which have been provided to a majority of the Board of Directors, including those received less than 72 hours prior to the RCEA Board meeting, will be made available to the public in the agenda binder located in the RCEA lobby during normal business hours, and at [www.redwoodenergy.org](http://www.redwoodenergy.org).

PLEASE NOTE: Speakers wishing to distribute materials to the Board at the meeting are asked to provide 12 copies to the Clerk of the Board.

### **OPEN SESSION** Call to Order

#### **1. REPORTS FROM MEMBER ENTITIES**

#### **2. ORAL COMMUNICATIONS**

This time is provided for people to address the Board or submit written communications on matters not on the agenda. At the conclusion of all oral communications, the Board may respond to statements. Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

#### **3. CONSENT CALENDAR**

All matters on the Consent Calendar are considered to be routine by the Board and are enacted in one motion. There is no separate discussion of any of these items. If discussion is required, that item is removed from the Consent Calendar and considered separately. At the end of the reading of the Consent Calendar, Board members or members of the public can request that an item be removed for separate discussion.

**3.1** Approve Minutes of May 23, 2019, Board Meeting.

**3.2** Approve Disbursements Report.

**3.3** Accept Financial Reports.

#### **4. REMOVED FROM CONSENT CALENDAR ITEMS**

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

#### **5. OLD BUSINESS**

##### **5.1** FY 2019-2020 Budget

Adopt the RCEA fiscal year 2019-2020 annual budget.

##### **5.2** Comprehensive Action Plan for Energy Update

Provide input and/or direction to staff on 2019 CAPE update draft and process.

##### **5.3** Special District Risk Management Authority Board Election

Approve the official 2019 SDRMA Board of Directors election ballot casting RCEA's vote for up to three of the five candidates for a four-year term.

**6. NEW BUSINESS – None.**

**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. Community Choice Energy Updates on Rate Change, Regulatory Compliance and Public Disclosure (Information only)

7.2. Energy Risk Management Plan Quarterly Report

Accept Energy Risk Management Quarterly Report.

7.3 Renewable Power Request for Proposals Update

Approve renewable energy RFP respondent short list of Terra-Gen LLC, Candela Renewables LLC, and Snow Mountain Hydro LLC and authorize staff to negotiate power purchase agreements to present to the Board for final approval.

**8. NEW CCE BUSINESS – None.**

**END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS**

**9. STAFF REPORTS – None.**

**10. FUTURE AGENDA ITEMS**

Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

**11. CLOSED SESSION**

11.1. Closed Session to meet with legal counsel per Government Code Section 54956.9(d)(4), in re PG&E, Bankruptcy Court, 19-30088, Northern District of California.

**12. ADJOURNMENT**

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**NEXT REGULAR MEETING**

Thursday, July 25, 2019, 3:30 p.m.  
Humboldt Bay Municipal Water District Office  
828 7<sup>th</sup> Street, Eureka, CA 95501



Redwood Coast Energy Authority  
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## **BOARD OF DIRECTORS DRAFT MEETING MINUTES**

**Humboldt Bay Municipal Water District Office**  
**828 7<sup>th</sup> Street, Eureka, CA 95501**

**May 23, 2019**  
**Thursday, 3:30 p.m.**

Chair Michael Winkler called a regular meeting of the Board of Directors of the Redwood Coast Energy Authority to order on the above date at 3:30 p.m. Notice of this meeting was posted on May 17, 2019. PRESENT: Alternate Director Stephen Avis (arrived 3:32 p.m.), Vice-Chair Austin Allison (departed 5:10 p.m.), Summer Daugherty, Estelle Fennell, Dwight Miller, Frank Wilson, Chair Michael Winkler, Sheri Woo. ABSENT: Dean Glaser, Robin Smith.

### **REPORTS FROM MEMBER ENTITIES**

Director Wilson reported that the Cities of Rio Dell and Scotia have reservations about TerraGen's Humboldt Wind Energy Project environmental impact report due to perceived lack of due diligence.

Director Fennell reported citizen concerns about the need for more public process notification related to the Humboldt Wind Energy Project; that the community gave thoughtful input at Senator McGuire's offshore wind, fisheries and wildlife hearing; and that the directors may want to discuss RCEA representation of the Eel River basin's energy interest in the Potter Valley Project since the Sonoma County Water Agency, California Trout and the Mendocino Valley-based interim water and power project submitted a notice of intent to pursue Federal Energy Regulatory Commission licensing.

Director Daugherty reported that she will be participating in a County Climate Action Plan agricultural stakeholders meeting on Thursday.

Chair Winkler reported on Arcata's Climate Action Plan work, contacts made at the offshore wind hearing, and on the proposed formation of an ad hoc California offshore wind working group. He suggested offshore wind pursue a similar regulatory and legislative approach as the building decarbonization advocates.

(Alternate Director Stephen Avis arrived at 3:32 p.m.)

### **ORAL COMMUNICATIONS**

Chair Winkler invited public comment.

Andrew Breyer of Golden State Renewable Energy petitioned the Board to increase the feed-in tariff by \$10/MWh for floating PV projects that fit into a special use category of projects protecting greenfield lands.

Chair Winkler closed public comment.

## **CONSENT CALENDAR**

- 3.1 Approve Minutes of April 25, 2019, Board Meeting.**
- 3.2 Approve Disbursements Report.**
- 3.3 Accept Financial Reports.**

Directors Woo and Wilson requested discussion of item 3.3.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

**M/S: Fennell, Miller: Approve Consent Calendar items 3.1 and 3.2.**

**The motion passed on a unanimous voice vote. Ayes: Avis, Allison, Daugherty, Fennell, Miller, Wilson, Winkler, Woo. Noes: None. Absent: Glaser. Abstentions: None.**

## **REMOVED FROM CONSENT CALENDAR ITEMS**

Directors and staff discussed how the financial report's facilities and operations expenses resulted from the airport microgrid project's solar and battery down payment invoice submittal immediately after contract signing. The expense was moved to this year's budget and staff is requesting funds from the CEC project grant to cover this expense under agenda item 6.1. The lag between retail electricity use and payments and community concern about PG&E paying RCEA were discussed. Staff and legal counsel confirmed regular receipt of both customer electricity and energy efficiency payments through PG&E and that the Community Choice Aggregators are monitoring bankruptcy proceedings to ensure that existing service agreements are honored.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

**M/S: Fennell, Woo: Approve Consent Calendar item 3.3.**

**The motion passed on a unanimous voice vote. Ayes: Avis, Allison, Daugherty, Fennell, Miller, Wilson, Winkler, Woo. Noes: None. Absent: Glaser. Abstentions: None.**

## **OLD BUSINESS**

### **5.1 Offshore Wind Project Investment**

Executive Director Matthew Marshall presented a report on the community direction and agency goals behind the offshore wind project, RCEA's offshore wind project work and agreements established so far, the project's next steps, agency investment scenarios and corresponding potential risks and rewards.

The directors discussed how the Offshore Wind Subcommittee and staff recommendation balances what the agency can afford with development of a beneficial project for the county, potential harbor upgrade and electricity transmission grants, and costs that could be recouped should the Bureau of Ocean Energy Management not award the lease to RCEA or the project be delayed.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

**M/S: Fennell, Allison: Approve RCEA investment in the Redwood Coast Offshore Wind Project, not to exceed \$300,000 in FY19-20 and \$250,000-500,000 per year in subsequent years up to total maximum investment not to exceed \$2.5 million.**

**The motion passed on a unanimous voice vote. Ayes: Avis, Allison, Daugherty, Fennell, Miller, Wilson, Winkler, Woo. Noes: None. Absent: Glaser. Abstentions: None.**

## 5.2 Comprehensive Action Plan for Energy and County Climate Action Plan Update (Information only)

Executive Director Marshall reported that the Board of Supervisors will review a professional services agreement with RCEA for work on the Humboldt County Climate Action Plan in June and that staff is updating RCEA's Comprehensive Action Plan for Energy, incorporating relevant sections of several other strategic planning documents and the board's recently adopted 100 percent renewable electricity by 2025 goal. Staff will align the updated CAPE goals with the County's CAP goals, include agency-related CAP public workshop input into the CAPE update, and incorporate RCEA's revised electricity goals in the CPUC-mandated integrated resource plan. Staff informed the directors of upcoming public workshops.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

## 5.3 Salary Schedule Update and New Deferred Compensation Plan

Executive Director Marshall reviewed biennial salary survey results, benefit package comparisons and the Board Finance Subcommittee's recommendations. The directors discussed expected agency revenue reductions, upcoming expenses, the need to track what RCEA can afford, community benefits of providing living-wage jobs, and the difficulty of retaining skilled engineering, science and technology employees.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

**M/S: Avis, Miller: Approve 1) the proposed revised salary schedule, effective July 1, 2019, and 2) the addition of a 457(b) deferred compensation plan with 4% employer contribution to RCEA employee benefits package.**

**The motion passed on a unanimous voice vote. Ayes: Avis, Allison, Daugherty, Fennell, Miller, Wilson, Winkler, Woo. Noes: None. Absent: Glaser. Abstentions: None.**

## 5.4 Airport Microgrid Project – USDA Loan Requirements

Executive Director Marshall reported that USDA officials determined that the proposed resolution was not required for the Airport Microgrid Project loan.

## NEW BUSINESS

### 6.1 FY18-19 Budget Update and Proposed Revision

Executive Director Marshall explained the proposed addition to this year's budget of airport microgrid solar, battery and microgrid controller costs and PG&E grid interconnection application expenses. California Energy Commission grant funds will offset the expenses.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

**M/S: Fennell, Daugherty: Approve proposed revisions to the FY18-19 Annual Budget.**

**The motion passed on a unanimous voice vote. Ayes: Avis, Allison, Daugherty, Fennell, Miller, Wilson, Winkler, Woo. Noes: None. Absent: Glaser. Abstentions: None.**

## 6.2 Draft FY19-20 Annual Budget

Executive Director Marshall reviewed the proposed FY 19-20 budget which the Board Finance Subcommittee provided input on and will study in more detail in June. The budget included Board-approved offshore wind project costs and personnel budget adjustments and proposed customer program funding to be discussed later in the meeting. Budget areas of uncertainty included 2020 power purchase costs, energy efficiency program funding and PG&E's electricity rates which affect RCEA's discounted electricity rate.

(Director Allison left at 5:10 p.m.)

The directors requested a representative from The Energy Authority participate in the June Board and Board Finance Subcommittee meetings to answer power purchase, forecast method and energy market questions. The potential consequences of divulging individual contract values were discussed.

Chair Winkler invited public comment.

Member of the public Ellen Golla asked how much of the wholesale power expenses are from biomass. Staff estimated that biomass accounts for roughly 20 percent of wholesale power costs.

Chair Winkler closed public comment.

## **COMMUNITY CHOICE ENERGY (CCE) BUSINESS**

Chair Winkler confirmed that a quorum was present to conduct CCE business.

## **OLD CCE BUSINESS**

### 7.1 Residential Time-of-Use Rate Transition

Account Services Manager Mahayla Slackerelli reported on PG&E's upcoming, and RCEA's proposed, residential tiered-rate customer transition to a time-of-use rate. The Energy Authority revised the previously forecast financial impact from \$739,000 to \$535,000 in lost RCEA revenues each year. The directors discussed how RCEA participation would result in rate savings for most customers and avoid increased bill confusion, how solar renewable energy's success contributed to this shift as prices go up when the sun goes down, and the opportunity to show customers how CCE can save them money. The directors inquired about

higher baseline rates for affordable housing customers with electric heating and a commercial demand response program.

Chair Winkler invited public comment.

Member of the public Gaya Kramer of Indivisible Fortuna stated, and the directors concurred, that time of use rates require very specific education about how customers can save money.

Chair Winkler closed public comment.

**M/S: Avis, Miller:**

**Direct staff to transition flat-rate residential customers to the TOU rate in June of 2021 in partnership with PG&E.**

**Direct staff to offer bill protection to appropriate rate-transition customers for the first year.**

**Direct staff to maintain CCA residential customer rates consistent in structure with PG&E's residential customer rates through the transition period to residential time-of-use rates.**

**The motion passed on a unanimous voice vote. Ayes: Avis, Daugherty, Fennell, Miller, Wilson, Winkler. Noes: None. Absent: Allison, Glaser. Abstentions: Woo (non-voting).**

**NEW CCE BUSINESS**

**8.1 CCE Customer Programs**

Demand-Side Management Director Lou Jacobson reported on the Community Advisory Committee's work on the CCE-funded customer programs since early 2018. The Committee selected proposals in alignment with Comprehensive Action Plan for Energy goals, feasibility, and non-duplication of existing programs. Staff proposed integrating the programs into services offered by the agency's existing customer service model so customers experience a single point of contact for the range of available energy programs offered by RCEA and other entities. Recommended and non-recommended proposals were described.

The directors discussed expanding services to mixed-light agriculture in the future and the Community Advisory Committee's positive contributions.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

**M/S: Miller, Daugherty and Avis: Approve Community Advisory Committee and staff-recommended CCE customer programs and associated 2019-20 funding allocations.**

**The motion passed on a unanimous voice vote. Ayes: Avis, Daugherty, Fennell, Miller, Wilson, Winkler. Noes: None. Absent: Allison, Glaser. Abstentions: Woo (non-voting).**

**END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS**



## STAFF REPORTS

### 9.1 Auditor Selection Update by Executive Director Matthew Marshall.

Executive Director Marshall reported on the Board Finance Subcommittee-supported selection of Piseni & Brinker as the agency's new fiscal auditor. The firm was the lowest bidder, had the most CCA auditing experience, and will perform two years' audits simultaneously at a reduced price, bringing the agency up-to-date with its financial audits.

### 9.2 Community Choice Energy Updates on Feed-In Tariff, Rate Change, Net Energy Metering Payout and Electric Vehicle Rate Migration by Power Resources Director Richard Engel and Account Services Manager Mahayla Slackerelli.

Account Services Manager Slackerelli reported that feed-in tariff program applications were being accepted and will pay \$80/MWh for the first program period. PG&E increased electricity generation rates twice this year and is expected to do so again in July. The Board decision to adjust RCEA's rates to 1% less than PG&E's begins in June. Eligible net energy metering customers were invited to cash out their electricity overproduction credits of over \$100 or to rollover credits. There is \$78,000 in credit available for payout. The CPUC directed PG&E to restructure its electric vehicle rate; EV residential customers using over 800% of their baseline allotment will be transitioned for of EV rates to a time-of-use rate.

The directors discussed publicizing net energy metering cash outs as an incentive for CCE program participation, and an upcoming residential solar electricity and net energy metering electricity bill workshop.

## FUTURE AGENDA ITEMS

The directors requested discussion of CCA best practices for financial transparency without compromising the agency's negotiating position, RCEA's possible role as a local energy ordinance information clearinghouse, and whether RCEA has a role in notifying builders of the January 1, 2020 release of the new state energy code.

Chair Winkler invited public comment. No one came forward to speak. Chair Winkler closed public comment.

Chair Winkler adjourned the meeting at 6:16 p.m.

Respectfully Submitted,

Lori Taketa, Clerk of the Board



Redwood Region Economic Development Commission  
 Prosperity Center 520 E Street, Eureka, California 95501  
 Phone 707.445.9651 Fax 707.445.9652 www.rredc.com

**REDWOOD REGION ECONOMIC DEVELOPMENT COMMISSION**  
**Regular meeting of the Board of Directors**  
 At the Prosperity Center 520 E Street, Eureka  
 June 24, 2019 at 6:30 pm  
**AGENDA**

- I. **Call to Order & Flag Salute**
- II. **Approval of Agenda and Minutes**
  - A. Approval of Agenda for June 24, 2019
  - B. Approval of Minutes of the Board of Directors Meeting April 22, 2019
- III. **Public Input for non-agenda items**
- IV. **Consent Calendar**
  - A. Acceptance of Agency-wide Financial Reports: April 30, 2019 and May 31, 2019
- V. **Reports – No Action Required**
  - A. Loan Portfolio Reports: April 2019 and May 2019
  - B. Executive Director's Report
- VI. **Old Business**
  - A. Consideration of Board Members' Mileage Reimbursement
- VII. **New Business**
  - A. Resolution and Vote for SDRMA's Board of Directors
- VIII. **Member Reports**
- IX. **Agenda/Program Requests for future Board of Directors Meetings**
- X. **Closed Session: PUBLIC EMPLOYEE PERFORMANCE EVALUATION**  
 Title: Executive Director
- XI. **Adjourn**

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 County of Humboldt · Hoopa Valley Tribe · Redwoods Community College District