NORTH COAST RESOURCE PARTNERSHIP

A. General Project Information

1. Organization / Project Sponsor Name:
   Humboldt Bay Municipal Water District

2. Project Name:
   Ranney Collector 2 Rehabilitation Project - Round 2

3. Has the organization implemented similar projects in the past? ☒ yes ☐ no

4. If the project sponsor has worked with NCRP in the past, describe the project and outcome.
   Prop 84 Mad River Crossing - successful project. Tech Assistant grant for forestry - waiting for report. Prop 1, Round 1 Collector 2 lateral rehab - $600K award- bids rejected, too high, not enough project funding. Applying for Round 2 to supplement funding for Round 1 project and re-bid project.

5. Please describe the qualifications, experience, and capacity of the project team that will be overseeing project implementation.
   HBMWD and GHD teams have capacity and successfully implemented NCRP grants in the past. The Contractor Team will need to satisfy RFP qualifications requirements and will be fully screened by HBMWD and GHD as being a responsive and responsible bidder for the project.

6. Is this project part of a larger project or program? If so, what effectiveness monitoring is being conducted and what are the results?
   This Project is in HBMWD Capital Improvement plan which spans 50 years into the future. HBMWD has achieved several milestones including lateral and caisson assessments, attempted rehab (not replacement which is current project) of existing Collector 2 laterals (failed), development of groundwater model to assess potential lateral locations and yield, and the successful rehabilitation of Collectors 1 and 3. This critical Collector rehab in comprehensive measured approach to our CIP implementing.

7. Project Abstract [500 characters max.]
   Ranney Collector rehabilitation consists of replacing laterals that project out into the aquifer. Once the new flow rates are determined, then new energy-efficient pumps and motors are sized to efficiently and cost-effectively pump the water. Once the pump and motors are sized, then new electrical controls, circuitry, and station 12kV transformer are installed to efficiently operate the new system. Original pumps, motors, electrical circuitry and transformer were install in 1960.

8. Project Description [3,000 characters max.]

HBMWD supplies wholesale treated groundwater to 90,000 people through 7 municipal agencies and serves water to numerous other industrial and public entities in the region. HBMWD obtains water from 4 Ranney Collectors installed along the banks of the Mad River. The Collectors are large concrete caissons that extend from the surface to 80-100 ft below grade. Laterals, 1-ft diameter steel well screens, are projected horizontally from the caissons into the surrounding aquifer and direct the water to the Collector. The water is then pumped from the Collector through the treatment and distribution system. For the past 50+ years, the Collectors have been maintained and upgraded; however, they are nearing the end of their useful life and need to be rehabilitated. Investigations have shown that some of the laterals have collapsed and all of them have calcium and iron oxide deposits on the lateral screens that reduce their flow capacity. HBMWD is working on a phased rehabilitation of each collector and replacement of all the laterals in all of the collector wells and has completed rehabilitation on Collectors 1 and 3.

This project focuses on the next phase which is the rehabilitation of Collector 2. The rehabilitation process begins with the replacement of the laterals. For Collector 2, three or four new stainless steel laterals will be projected from the existing caisson. Cores will be cut through the sides of the existing caisson so the new laterals can be projected out horizontally into the surrounding aquifer. The new laterals will be spiral wound, stainless steel well screens, with a much larger ratio of open space per foot of screen than the existing lateral screens. This will reduce the flow velocities in the subsurface, thereby reducing the associated turbidity of the water and the energy and cost to treat the turbidity. Given the greater capacity and lower flow velocities, the drawdown in the Collector will be reduced. This will reduce the energy required to pump the water from the caisson through the treatment and distribution system, thereby reducing energy consumption and greenhouse gas (GHG) emissions. HBMWD provides groundwater recharge to the aquifers below the collectors by releasing water from Ruth Lake. In addition to assuring water supply reliability for the regional water system, this project will maintain beneficial flows for salmonids throughout approximately 75 miles of the Mad River below Ruth Lake.

The Project protects and enhances drinking water quality, and is the most cost-effective, environmentally sensitive method of ensuring a reliable, drought-resilient, high-quality drinking water supply for the region in and around Humboldt Bay for approximately 2/3rds of the County's population. 88% of the county's population in HBMWD's service area are Disadvantaged Communities based on the DAC tracts, block groups, and places methodology computations.

See Financial Need under item 12 below.

9. Specific Project Goals/Objectives

Goal 1: Provide a reliable supply of high-quality drinking water to HBMWD customers [100 characters max.]
Goal 1 Objective: Rehabilitate Collector infrastructure components that are 50+ yrs old. [200 characters max.]
Goal 1 Objective: Continue to implement the phased rehabilitation of the Collector system.
Goal 1 Objective: Provide adequate water supply with minimal environmental impact.
Goal 1 Objective: Reduce energy consumption and GHG emissions via new efficient pumps/motors.

Goal 2: Reduce impacts on water quality
Goal 2 Objective: Reduce the influence of the collectors on water quality by increasing the area from which water is extracted, thus reducing the localized impacts on the aquifer recharge areas.
Goal 2 Objective: Develop an extraction pumping schedule that results in the least impact on the recharge area with the greatest production.
Goal 2 Objective:
Goal 2 Objective:

Goal 3: During rehabilitation, minimize impacts to the surrounding environment and river channel
Goal 3 Objective: Contain construction activities to the existing confines of Collector 2, eliminating additional work in the river channel.
Goal 3 Objective: Implementation of a Storm Water Pollution Prevention Plan for the Project.
Goal 3 Objective:
Goal 3 Objective:

Additional Goals & Objectives (List)
Improve the energy efficiency of the regional water system.
Increase access to a larger recharge area thus reducing water drawdown in the well, resulting in reduced energy required to pump water to the regional treatment system.
Provide additional flexibility in the timing of pumping, allowing for pumping during off-peak hours at a reduced cost to the water ratepayers.
Maintain the status quo for releases from Ruth Lake, sustaining the carrying capacity and cold water refugia for juvenile salmonid rearing in the Mad River.
Provide the most cost-effective alternative for maintaining a reliable water supply for 2/3rds of Humboldt County's population, 88% of which are DAC for the next 50 years.

10. Describe how the project addresses the NCRP Goals and Objectives selected. [1,000 characters max.]
The Project addresses the objectives of the NCRP and NCIRWMP goals:

Conserving native salmonid populations in the Mad River through flow releases from Ruth Lake.

Enhancing drinking water quality by increasing the area of the lateral screens and decreasing flow velocities and associated turbidity.

Most cost-effective regional approach for ensuring adequate water supply and drought resiliency.

Addressing environmental justice issues by controlling the cost burden to the customers, many of whom are from disadvantaged communities.

11. **Describe the physical, biological and/or community need for the project**. [1,000 characters max.]

The Project will replace critical aging infrastructure of regional importance to ensure water supply and drought resiliency while decreasing GHG emissions. The system design and operation recharge groundwater in the process of providing a reliable drinking water source for nearly two-thirds of Humboldt County's population. Maintaining the regional water supply infrastructure is essential for its operation for the next 50 years.

12. **Describe the financial need for the project**. [1,000 characters max.]

NCRP awarded $600K in Round 1. Project was bid. One bidder at $4,591,400. Based on similar past projects cost, we had anticipated $1,600,00 cost. Bid was rejected. We are seeking some additional funding in Round 2. $900,000 is our desired amount of funding, but will scale back to $700,000 to make limited funds available to others in the NCRP region.

13. **Describe potential adverse impacts from project implementation and how they will be mitigated.**

The laterals are pushed with a hydraulic press into the gravel but that is concealed within the caisson and 80" below ground so any noise generated will be minimal to those standing outside the structure. During installation, there may be minimal ground disturbance associated with percolation pond construction conforming to County grading permit requirements, including sediment and erosion control measures.

14. **Will this project mitigate an existing or potential Cease and Desist Order or other regulatory compliance enforcement action?** ☐ yes ☒ no

If yes, please describe. [500 characters max.]

There are no regulatory compliance enforcement actions associated with this property or project.

15. **Does the project address a contaminant listed in AB 1249 (nitrate, arsenic, perchlorate, or hexavalent chromium)?**

☐ yes ☒ no

If yes, provide a description of how the project helps address the contamination. [500 characters max.]

This project does not include a contamination concern.

16. **Describe how the project contributes to regional water self-reliance and addresses climate change.** [1,000 characters max.]

New laterals, pumps & motors, and electrical systems will increase the inflow rate at the Collector which decreases the drawdown, increases pump efficiency, and decreases energy consumption and corresponding GHG emissions. The increased surface area of lateral's screens reduces velocities of water flowing into the screens and will reduce associated turbidity. This will reduce energy consumption & GHG emissions associated with the treatment of the water for turbidity. Decreased flow rates lessen burden on aquifer and reduces recharge delay times.

17. **Does the project increase public safety with regards to flood protection, wildfire hazard risk reduction, increasing firefighting capacity, or in other ways contribute to regional emergency resiliency?**

☒ yes ☐ no

Please explain. [500 characters max.]

Increased water supply for firefighting capacity reliance.

18. **Does the project employ new or innovative technologies or practices, including Decision Support Tools that support the integration of multiple jurisdictions, including, but not limited to, water supply, flood control, land use, and sanitation?** ☒ yes ☐ no

If yes, please describe. [500 characters max.]

Used Sonar mapping to identify locations of water below sureface and major rock inhibitors to determine most efficient and reliable drilling locations near collector. Stainless steel materials vs. cast iron. Resist corrosion and prolongs operating efficiencies.

19. **Describe the population served by this project, including any economically disadvantaged communities or Tribes that will directly benefit.**

Eureka, Arcata, Manila, Freshwater, Bayside, Samoa, Humboldt Hill, Fields Landing, Indianola, McKinleyville, Fieldbrook, and Blue Lake.

20. **Describe local and/or political support for this project.** [500 characters max.]

The Humboldt County population served by the HBMWD regional water system is approximately 90,000 residents in and around the Humboldt Bay area, 88% of which are DAC.

21. **List all collaborating partners and agencies and nature of collaboration.** [750 characters max.]

HBMWD has existing formal agreements with our wholesale customers: Cities of Arcata, Eureka, and Blue Lake; and Humboldt, McKinleyville, Fieldbrook-Glendale, and Manila Community Services Districts with regards to providing water and performing infrastructure

upgrade and rehabilitation projects such as the Collector 2 rehabilitation. HBMWD meets with these agencies every month to collaborate on upcoming and ongoing projects, and issues of mutual interest. The Collector 2 rehabilitation project has been included in these discussions. HBMWD coordinates routinely with the State Water Resources Control Board regarding our operations. See attached letters of support evidencing other collaborations.

22. Is this project part or a phase of a larger project? ☒ yes ☐ no
Are there similar efforts being made by other groups? ☐ yes ☐ no
If yes to either, please describe. [500 characters max.]
This Project is in HBMWD Capital Improvement plan which spans 50 years into the future. HBMWD has achieved several milestones including lateral and caisson assessments, attempted rehab (not replacement which is current project) of existing Collector 2 laterals (failed), development of groundwater model to assess potential lateral locations and yield, and the successful rehabilitation of Collectors 1 and 3. This Project is the next critical step in our comprehensive measured approach to our CIP.

B. Project Location

1. Describe the latitude and longitude of the project site.
Latitude: 40 54' 27.1656" Longitude: -124 2" 53.433"

2. Site Address (if relevant):
7270 West End Road, Arcata, CA 95521

3. Does the applicant have legal access rights, easements, or other access capabilities to the property to implement the project?
☒ yes If yes, please describe below
☐ no If no, please provide a concise narrative below with a schedule, to obtain necessary access
☐ NA If NA, please describe below why physical access to a property is not needed
Explanation. [500 characters max.]
HBMWD owns the property where the Project is located.

4. Project Location Notes:
HBMWD owns Park 1 on West End Road, which is located between Collectors 1 and 2. HBMWD successfully completed a lateral rehabilitation on Collector 1 by using Park 1 land to construct a sedimentation settling pond. The same will be done for the Collector 2 project.

C. Benefits To Disadvantaged Communities and/or Tribes

1. **Does the project provide direct water-related benefits to a project area comprised of Disadvantaged Communities or Economically Distressed Communities?** If partially, please estimate percentage of project that benefits disadvantaged communities and list the communities.
   ☐ Entirely
   ☒ Partially; estimate the percentage of benefits provided directly to DAC: 80%
   ☐ No
   List the Disadvantaged Community(s)
   Eureka, Arcata, Manila, Freshwater, Bayside, Samoa, Humboldt Hill, Fields Landing, Indianola, McKinleyville, Fieldbrook, and Blue Lake.

2. **Does the project provide direct water-related benefits to a project area comprised of Severely Disadvantaged Communities (SDAC)**? If partially, please estimate percentage of project that benefits disadvantaged communities and list the SDACs.
   ☐ Entirely
   ☒ Partially; estimate percentage of benefits provided directly to SDAC: 35%
   ☐ No
   List the Severely Disadvantaged Community(s)
   Eureka, Samoa, Manila, Arcata, McKinleyville, Sunny Brae.

3. **Does the project provide direct water-related benefits to a Tribe or Tribes**? If partially, please estimate percentage of project that benefits Tribe(s) and list the Tribes.
   ☐ Entirely
   ☒ Partially; estimate percentage of benefits provided directly to Tribe(s): 5%
   ☐ No
   List the Tribal Community(s)
   Blue Lake Rancheria. See grant support letter included with grant application.
   If yes, please provide a letter of support from each Tribe listed as receiving these benefits.

4. **If the project provides benefits to a DAC, EDA or Tribe, explain the water-related need of the DAC, EDA or Tribe and how the project will address the described need.** [750 characters max.]
   The water related need is human consumption of drinking water, waste water, and fire supression water at a reasonable cost. The HBMWD regional water system satisfies those basic human needs. Funding for this project lessens the capital cost to rehabilitate the HBMWD regional water system while simultaneously reducing operating costs via improved energy efficiency. Lower capital costs reduces the burden of water rate increase to all of the disadvantaged communities and tribe served by HBMWD. Various other local Tribe members

who travel into the HBMWD service area consume our water at restaurants, lodging, business and personal residence locations.

5. **Describe the kind of notification, outreach and collaboration that has been completed with the county(ies) and/or Tribes within the proposed project impact area, including the source and receiving watersheds, if applicable.** [500 characters max.]
   HBMWD frequently collaborates with Humboldt and Trinity Counties on land use, environmental, and economic issues. See attached support letter from Economic Development. HBMWD's collaboration with our 7 municipal customers occurs monthly. HBMWD has worked closely with Tribes on many infrastructure projects. See attached support letters from various entities.

D. Project Benefits & Justification

1. **For each of the Potential Benefits that the project claims, complete the following table to describe an estimate of the benefits expected to result from the proposed project. Provide quantitative benefit amounts for at least the primary and secondary benefits. Provide a qualitative narrative description of expected benefits that cannot be quantified.** *See the NCRP Project Application Instructions for more information and a listing of potential benefits.*

PROJECT BENEFITS TABLE

Benefit Description	Units	Quantitative Amount	Qualitative Description
Water Supply			
Increased groundwater recharge	acre feet	10%	Lower flow rates.
Increased water supply reliability	# of households	Approx 36,000	Lower depletion rate
Avoided electric costs	Kw	$16,800/year	Electrical Motors
Water Quality			
Improved Groundwater	degrees C or F	Not monetized	Unknown
Additional Water Quality Projects Avoided	Avoided Projects	---	$5 million
Avoided water treatment costs	Dollars	Unknown	Lower Turbidity
Climate Change			

Benefit Description	Units	Quantitative Amount	Qualitative Description
Carbon Emissions Reduction from Reduced Electricity	KWH	unknown	Reduction in CO2
Other Ecosystem Service Benefits			
Fishery Improvement	Miles of river	unknown	Water levels
Aquatic habitat Impr	Miles of river	unknown	Water levels
Jobs Created or Maintained			
Other Benefits			
Carbon Emmissions reduction	Co2E per year - tons	unknown	Motor efficiency
Decreased operation & maintenance costs	impacted laterals	unknown	Operating efficiency

2. Does the proposed project provide physical benefits outside of the North Coast Region?
   ☐ yes ☒ no
   If yes, describe the impacts to areas outside the North Coast Region. [500 characters max.]

3. List the impaired water bodies (303d listing) that the project benefits:
   This Project benefits the Mad River, which is listed in the 2006 Clean Water Act Section 303(d) list of Water Quality Limited Segments. With the improved production capacity of

Collector 2, flow releases from Ruth Lake will be maintained with related benefit of lower temperature refugia locations in upper section of the Mad River.

4. Describe how the project benefits salmonids, endangered/threatened species and sensitive habitats.
   With the improved production capacity of Collector 2, flow releases from Ruth Lake will be maintained resulting in lower temperature refugia locations in upper section of Mad River thereby conserving native salmonid populations.

5. Have alternative methods been considered to achieve the same types and amounts of physical benefits as the proposed project?
   ☒ yes ☐ no
   Please explain. [500 characters max.]
   HBMWD has analyzed alternative methods to rehabilitate the collector laterals. These alternatives were unsuccessful. The only means to efficiently and cost effectively rehabilitate the collectors is to begin with replacing the laterals. We have past experience with the rehabilitations of Collectors 1 and 3 that prove our current methodology is successful and results in proven benefits to the environment, energy efficiency, reduction of GHG emissions while maintaining reasonable water rates.

6. Is the proposed project the lowest cost alternative to achieve the physical benefits?
   ☒ yes ☐ no
   Please explain. [500 characters max.]
   District bid project in 2022. Single bid received at 3 times project budget and was rejected. Additional funding is being sought and water rate impounding during the last and current fiscal years to increase District's financial contribution to the project. New construction bids will be sought in January 2023 with the hope to obtain lower competetive cost for the project.

7. How will the project be monitored to determine whether it is producing the desired benefits?
   District has previously provided NCRP with flow monitoring reports over a 3 year period post Collector Lateral rehabilitation to monitor achievement of post project benefits. The same methodology will be used for this project.

8. Provide a narrative for project technical justification. Include any other information that supports the justification for this project, including how the project can achieve the claimed level of benefits listed below. [3,000 characters max.]
   HBMWD has analyzed alternative methods to rehabilitate the collector laterals. These alternatives were unsuccessful. The only means to efficiently and cost effectively rehabilitate the collectors is to begin with replacing the laterals. We have past experience with the rehabilitations of Collectors 1 and 3 that prove our current methodology is successful and

results in proven benefits to the environment, energy efficiency, reduction of GHG emissions while maintaining reasonable water rates.

9. List and include any studies, plans, designs or engineering reports completed for the project as a "Technical & Reference Supporting Materials" into one document that includes a Table of Contents and is limited to approximately 50 pages. *Please see the instructions for more information about submitting these documents with the final application.*

10. Project Justification & Technical Basis Notes: Please provide any additional information *not included above* that you think is important.

1. Approx 88,000 customers divided by ave household size for Humboldt Co. (2.39) equals 36,820 multiplied by $23 (suggested econmic unit per household per month) equals $846,862 per month or $10,162,344 per year.

2. Project will improve groundwater quality by spreading out grandwater production and recharge areas. New laterals will be placed in currently underutilized protion of the Holocen quaifer. The draw-down impacts will be mitigated by increasing surface water releases from Ruth Lake to recharge areas. The overall groundwater quality will be increased because groundwater flow per area is reduced by increasing the total production area.

3. Energy savings are realize by reduced pumping dut to higher water levels in the collector. Assumes $10 per million gallongs pumped multiplied by 6 mgd, multiplied by 280 days per year, equaling $16,800. Basis is savings realized after Collector 3 rehabilitation.

E. Project Tasks, Budget, And Schedule

1. Projected Project Start Date: 5/1/23
   Anticipated Project End Date: 12/31/23

2. Describe the basis for the costs used to derive the project budget in each budget category. [500 characters max.]

Basis for project cost is single bid received from Mercer Fraser in the amount of $3.8M. This exceeded project budget, so bid was rejected. Additional funding sources coupled with increased funding from current and prior year water rates has be utilized. Project will again be put out for competetive bid in January 2023 with the hope that multiple bids will be received. Bid is included in supplemental documents to this application.

3. Provide a narrative on cost considerations including alternative project costs. [500 characters max.]

Prior costs for lateral replacement projects at Collectors 1 and 3 were used to determine anticipated cost for Collector 2 lateral replacement.

4. **List the sources of non-state matching funds, amounts and indicate their status**. Proposition 1 requires a minimum cost share of 50% of the total project costs, though a waiver may apply (see Question 6 below).

HBMWD general fund which is supported by wholesale water contracts with our 7 municipal agencies. Current general fund reserve balance is $2.4M. Our reserves are augmented annually by $350K (maximum allowable under contracts).

5. **List the sources and amount of State matching funds.**

$600,000 awarded from NCRP Prop 1, Round 1.

6. **Cost Share Waiver Requested (DAC or EDA)?** ☒ yes ☐ no

Describe what percentage of the proposed project area encompasses a DAC/EDA, how the community meets the definition of a DAC/EDA, and the water-related need of the DAC/EDA that the project addresses. In order to receive a cost share waiver, the applicant must demonstrate that the project will ***directly*** provide benefits that address a water-related need of a DAC/EDA.

88% using the Tracts, Block Groups and Places methodology. The American Community Survey Median Houlsehold Income for 2016 was appended to the Census Place GIS data and provided via the Division of Integrated Regional Water Management's DAC Mapping Tool was utilized. HBMWD is a regional drinking water provider to 90,000 residents of Humboldt County in the Humboldt Bay area. The computed DAC's reside within our District's boundaries. See attached DAC areas map depicted within district boundary.

7. **Is the project budget scalable?** ☒ yes ☐ no

8. **Describe how a scaled budget would impact the overall project,** its expected benefits and state the minimum budget amount that would be viable (see Instructions E.7 for scaled budget examples). [500 characters max.]

The entire project needs to be completed to render it effective. However, if more match is required, HBMWD could potentially adjust our match amount to address the needs and limitations of the NCRP funding Round 2 and other planning area partner needs.

9. **Major Tasks, Schedule and Budget for Project Solicitation**

Please complete MS Excel table available at https://northcoastresourcepartnership.org/ncrp-proposition-1-irwm-round-2-solicitation/see instructions for the information to be included

in this document and for how to submit the required excel document with the application materials.

10. Project Tasks, Budget and Schedule Notes:

1. The Project benefits the Mad River by reducing terperature impairment. Improved production capacity in Collector 2 maintains existing flow releases along 75 miles of river from Ruth Lake to the Project site.

2. $5 million savings based on the avoided costs to expand the HBMWD Turbidity Reduction Facility.

3. Assumes an increase in turbidity/treatment costs of approx. 10% resulting from failed laterals. Cost = 5 gallons of Alum/day multiplied by $2/gallon multiplied by 180 days/year = $1,800/year.

4. The Project will conserve & enhance native salmonid populations by protecting their habitat, water quality and watershed processes. The Project will sustain and create more carrying capacity and cold water refugia for juvenile salmonid rearing.

5. $40,000 physical benefit assumption based on an old lateral collapsing and remvoing gravel from Collector with a dive crew. Improved prodcution capacity of Collector 2; additional flow released from Ruth Lake, increased flows to 75 miles of Mad River which has historically gone dry during summer, all substantially improve the river aquatic and riparian habitat.

6. Modern pumps/motors/electrical system will reduce emission from electricity use. The Project reduces the cost burden on ratepayers or regional water systems while maintaining high-quality, energy-efficient systems. Using assumptions in note 3 above, and a cost of$0.10 per kWh, energy reduction would be 168 MWh per year. Assuming a CO2E emission factor of 445 lbs per MWh (Climate Registry website) results in an emission reduction of 37.4 tons of CO2E per year. Assuming a cost of $15 per ton of CO2E results in an economic value of $561 per year.

11. Project Information Notes. Please provide any information that that has not been specifically requested that you feel is important for the NCRP to know about your project.

We are requesting supplemental funding to what was awarded in the NCRP Prop 1, Round 1. The additional funding need was identified when the project was put out for competetive bid in 2021 and only one company bid the project at $3.8 million. This was 3 times the project budget which was based on prior similar projects. The District has increased its internal match for the project through our water rate revenue for the current and last fiscal year, but the need remains for additional grant funding. The District recognizes the limited funding available and is willing to scale our project funding budget request to accommodate planning area partners.

Project Name: Ranney Collector 2 Lateral Rehabilitation Project - Round 2
Organization Name: Humboldt Bay Municipal Water District

Task #	Major Tasks	Task Description	Major Deliverables	IRWM Task Budget	Non-State Match	Other Match	Total Task Budget	25% Scaled IRWM Budget	50% Scaled IRWM Budget	Current Stage of Completion (%)	Start Date	Completion Date
A	**Category (a): Direct Project Administration**											
1	Project Management	In cooperation with the County of Humboldt sign a sub-grantee agreement for work to be completed on this project. Develop invoices with support documentation. Provide audited financial statements and other deliverables as required	Invoices, audited financial statements and other deliverables as required	$0.00	$0	$0	$0	$0	$0	0%		
2	Reporting	Develop monthly reports describing work completed, challenges, and strategies for reaching remaining project objectives. Develop Final Report	Quarterly and Final Reports	$0.00	$0	$0	$0	$0	$0	0%		
B	**Category (b): Land Purchase/Easement**											
1	N/A	HBMWD owns all of the land where the project will take place.	N/A	$0.00	$0	$0	$0	$0	$0	0%		
C	**Category (c): Planning/Design/Engineering/Environmental Documentation**											
1	Final Design /Plans		100% Plans and Specifications	$0.00	$0	$0	$0	$0	$0			
2	Project Performance Monitoring Plan	Develop Monitoring Plan to include goals and measurable objectives. Based on performance data from prior projects, flow rates and engergy consumption will be used to measure performance.	Final Monitoring Plan	$0.00	$0	$0	$0	$0	$0	0%		
2	Environmental Documentation: CEQA	A <MND/EIR/NOE> was filed for this project with the <enter State Clearinghouse and/or County> in <Month Year>. OR Complete environmental review pursuant to CEQA. Prepare all necessary environmental documentation.	Environmental Information Form approved by DWR	$0	$0	$0	$0	$0	$0	0%		
3	Environmental Documentation: NEPA (if required)	N/A		$0	$0	$0	$0	$0	$0	0%		
4	Permit Development: CDFW 1600 Permit	Streambed Alteration Agreement	Permit or Waiver	$0	$0	$0	$0	$0	$0			
5	Permit Development: Humboldt County Grading permit	Grading	Permit or Waiver	$0	$0	$0	$0	$0	$0	0%		
6	Permit Development: Water Board/NPDES permit	Either a Low Threat Discharge Permit or NPDES Permit from Regional Board.	Permit or Waiver	$0	$0	$0	$0	$0	$0	0%		
7	Geophysical Assessment	Install geophones to map bedrock locations & assess subsurface geology.	Geophysical Report	$0	$0	$0	$0	$0	$0	0%		
8	Feasibility Study	Includes modeling, lateral location recommendations and development water disposal plan.	Final Feasibility Report with Cost Estimates and Preliminary Design.	$0	$0	$0	$0	$0	$0	0%		
D	**Category (d): Construction/Implementation**											
1	Contract Services	Develop advertisement for bids and contract documents; conduct pre-bid contractors meeting; perform evaluation of bids; award contract.	Bid Documents; Proof of Advertisement; Award of Contract; Notice to Proceed			$0	$0	$0	$0	0%	2/1/23	6/1/23
2	Construction Administration		Construction Management Logs; Completed construction administration tasks documented in monthly progress reports; DWR Certificate of Project Completion								6/1/23	12/31/24
3	Mobilization and Site Preparation			$0	$600,000	$0	$600,000	$0	$0	0%	6/1/23	7/15/23
4	Project Construction/Implementation	Dewatering Pumps & Piping within Caisson		$0	$300,000	$0	$300,000	$0	$0	0%		
5	Project Construction/Implementation:	Installation of Ports & 10-foot Blanks		$0	$200,000	$0	$200,000	$0	$0	0%		
6	Project Construction/Implementation:	Setup for Lateral Jacking		$0	$160,000	$0	$160,000	$0	$0	0%		
	Project Construction/Implementation:	Furnish, Install & Develop 12" diameter, stainless steel lateral screen. 4 @ 150' w/ 140' screening.		$950,000	$1,458,000	$0	$2,408,000	$712,500	$0	100%		
	Project Construction/Implementation:	Furnish & Install 2 12" stainless gate vales and install 2 gate valves furnished by Owner		$0	$75,000	$0	$75,000	$0	$0	200%		
7	Performance Testing	Initial and Final Performance Tests		$0	$65,000	$0	$65,000	$0	$0	0%		
8	Project Signage			$0	$2,000	$0	$2,000	$0	$0	0%	6/1/23	12/31/24
9	Project Close Out, Inspection & Demobilization	Inspect project components and establish that work is complete. Verify that all project components have been installed and are functioning as specified will be conducted as part of construction inspection and project closeout. Conduct project completion photo monitoring. Prepare record drawings.	As-Built and Record Drawings; Project completion site photos	$0	$0	$0	$0	$0	$0	0%	11/1/23	1/31/24
10	Project Performance Monitoring	The performance of the project will be monitored in accordance to the Monitoring Plan using the following measurement tools and methods: [PLEASE COMPLETE}		$0	$0	$0	$0	$0	$0	0%		
	Total North Coast Resource Partnership IRWM Grant Request			**$950,000**	**$2,860,000**	**$0**	**$3,810,000**	**$712,500.00**	**$0.00**			
	Percentage of Total Project Cost			**25%**	**75%**	**0%**	**100%**	**19%**	**0%**			

BUDGET DETAIL

Row (a) Direct Project Administration Costs					
Project Management Type	**Personnel by Discipline**	**Number of Hours**	**Hourly Wage**	**% of Cost ***	**Total Admin Cost**
Labor					
Materials					
Equipment					
Total					
*** What is the percentage based on (including total amounts)?**		**n/a**			
*** How was the percentage of cost determined?**		**n/a**			

Row (b) Land Purchase/Easement

Row (c) Planning/Design/Engineering & Environmental Documentation					
Personnel (Discipline)	**Major Task Name**	**Number of Hours**	**Hourly Wage**	**Total Cost**	
Total					

Row (d) Construction/Implementation				
Personnel (Discipline)	**Work Task and Sub-Task (from Work Task Table)**	**Number of Hours**	**Hourly Wage**	**Total Cost**
Materials and Equipment	**Work Task and Sub-Task (from Work Task Table)**	**Number of Units**	**Unit Cost**	
Mobilization/DemdbilizaUon.		1	450000	$450,000
Percolation Pond		1	150000	$150,000
Dewatering Pumps and Piping with Caisson		1	300000	$300,000
Installation of Ports and 10-foot Blanks		4	50000	$200,000
Setup for lateral Jackinh		1	160000	$160,000
Furnish, Install & Develop 12" diameter Type 304 Stainless Steel Lateral screen. Four 150-foot laterals with 140 feet of screen		560	4300	$2,408,000
Furnish and Install (2) 12" diameter Type 304 Stainless Steel Gare Valves with Tags and Install (2) additional Valves to be Provided by Owner		1	75000	$75,000
Initial & Frnal Performance Tests		1	65000	$65,000
Total				**$3,808,000**

NORTH COAST RESOURCE PARTNERSHIP

ORGANIZATION INFORMATION

1. Project Name:
   Ranney Collector 2 Rehabilitation Project - Round 2

2. Applicant Organization Name:
   Humboldt Bay Municipal Water District

3. Contact Name/Title
   Name: John Friedenbach
   Title: General Manager
   Email: friedenbach@hbmwd.com
   Phone Number (include area code): 707-443-5018

4. Organization Address (City, County, State, Zip Code):
   828 7th Street, Eureka, Humboldt, CA, 95501-1114

5. Organization Type
   ☒ Public agency
   ☐ 501(c)(3) Non-profit organization
   ☐ Public utility
   ☐ Federally recognized Indian Tribe
   ☐ California State Indian Tribe listed on the Native American Heritage Commission's California Tribal Consultation List
   ☐ Mutual water company
   ☐ Other:

6. Authorized Representative (if different from the contact's name)
   Name:
   Title:
   Email:
   Phone Number (include area code):

7. List all projects the organization is submitting to the NCRP for this Solicitation in order of priority.
   Ranney Collector 2 Rehabilitation Project - Round 2

8. Organization Information Notes:

NORTH COAST RESOURCE PARTNERSHIP

ELIGIBILITY

1. North Coast Resource Partnership Goals and Objectives

GOAL 1: INTRAREGIONAL COOPERATION & ADAPTIVE MANAGEMENT

☒ Objective 1 - Respect local autonomy and local knowledge in Plan and project development and implementation

☒ Objective 2 - Provide an ongoing framework for inclusive, efficient intraregional cooperation and effective, accountable NCRP project implementation

☐ Objective 3 - Integrate Traditional Ecological Knowledge in collaboration with Tribes to incorporate these practices into North Coast Projects and Plans

GOAL 2: ECONOMIC VITALITY

☒ Objective 4 - Ensure that economically disadvantaged communities are supported and that project implementation enhances the economic vitality of disadvantaged communities by improving built and natural infrastructure systems and promoting adequate housing

☒ Objective 5 - Conserve and improve the economic benefits of North Coast Region working landscapes and natural areas

GOAL 3: ECOSYSTEM CONSERVATION AND ENHANCEMENT

☒ Objective 6 – Conserve, enhance, and restore watersheds and aquatic ecosystems, including functions, habitats, and elements that support biological diversity

☒ Objective 7 - Enhance salmonid populations by conserving, enhancing, and restoring required habitats and watershed processes

GOAL 4: BENEFICIAL USES OF WATER

☒ Objective 8 - Ensure water supply reliability and quality for municipal, domestic, agricultural, Tribal, and recreational uses while minimizing impacts to sensitive resources

☒ Objective 9 - Improve drinking water quality and water related infrastructure to protect public health, with a focus on economically disadvantaged communities

☒ Objective 10 - Protect groundwater resources from over-drafting and contamination

GOAL 5: CLIMATE ADAPTATION & ENERGY INDEPENDENCE

☐ Objective 11 - Address climate change effects, impacts, vulnerabilities, including droughts, fires, floods, and sea level rise. Develop adaptation strategies for local and regional sectors to improve air and water quality and promote public health

☒ Objective 12 - Promote local energy independence, water/ energy use efficiency, GHG emission reduction, and jobs creation

GOAL 6: PUBLIC SAFETY

☐ Objective 13 - Improve flood protection, forest and community resiliency to reduce the public safety impacts associated with floods and wildfires

2. Does the project have a minimum 15-year useful life?
   a) ☒ yes ☐ no
   b) If yes, will the organization be able to provide compliance documentation outlined in the instructions should the project be selected as a Priority Project?
   ☒ yes ☐ no

3. Other Eligibility Requirements and Documentation

CALIFORNIA GROUNDWATER MANAGEMENT SUSTAINABILITY COMPLIANCE

a) Does the project directly affect groundwater levels or quality?
   ☐ yes ☒ no
b) If yes, will the organization be able to provide compliance documentation outlined in the instructions including a Groundwater Sustainability Agency letter of support, to include in the NCRP Regional Project Application should the project be selected as a Priority Project?
   ☐ yes ☐ no

CASGEM COMPLIANCE

a) Does the project overlie a medium or high groundwater basin as prioritized by DWR?
   ☐ yes ☒ no
b) If yes, list the groundwater basin and CASGEM priority:
c) If yes, please specify the name of the organization that is the designated monitoring entity:
d) If yes, please specify whether the local Groundwater Sustainability Agency has endorsed the project:

URBAN WATER MANAGEMENT PLAN

a) Is the organization required to file an Urban Water Management Plan (UWMP)?
   ☒ yes ☐ no
b) If yes, has DWR verified the current 2020 UWMP?
   ☒ yes ☐ no
c) If the 2020 UWMP has not been verified by DWR, explain and provide anticipated date for verification:
d) Has DWR verified a water loss audit report in accordance with SB 555 as submitted by the urban water supplier?
   ☒ yes ☐ no
e) Does the urban water supplier meet the water meter requirements of CWC 525?
   ☒ yes ☐ no
f) Does the urban water supplier meet the State Water Resources Control Board's Water Conservation and Production Reporting requirement?
   ☒ yes ☐ no

g) If yes, will the organization be able to provide compliance documentation outlined in the instructions, to include in the NCRP Regional Project Application should the project be selected as a Priority Project?
☒ yes ☐ no

AGRICULTURAL WATER MANAGEMENT PLAN

a) Is the organization – or any organization that will receive funding from the project – required to file an Agricultural Water Management Plan (AWMP)?
☐ yes ☒ no

b) If yes, will the organization be able to provide compliance documentation outlined in the instructions, to include in the NCRP Regional Project Application should the project be selected as a Priority Project?
☐ yes ☐ no

SURFACE WATER DIVERSION REPORTS

a) Is the organization required to file State Water Resources Control Board (SWRCB) annual surface water diversion reports per the requirements in CWC Part 5.1?
☐ yes ☒ no

b) If yes, will the organization be able to provide compliance documentation outlined in the instructions, to include in the NCRP Regional Project Application should the project be selected as a Priority Project?
☐ yes ☐ no

STORM WATER MANAGEMENT PLAN

a) Is the project a stormwater and/or dry weather runoff capture project?
☐ yes ☒ no

b) If yes, does the project benefit a Disadvantaged Community with a population of 20,000 or less?
☐ yes ☐ no

c) If this is a stormwater/dry weather runoff project but does not benefit a small DAC population, please provide documentation that the project has been included in a Stormwater Resource Plan that has been incorporated into the NCRP IRWM Plan:

d) If no, will the organization be able to provide documentation that the project is included in a Stormwater Resource Plan that has been incorporated into the NCRP IRWM Plan, should the project be selected as a Priority Project?
☐ yes ☐ no

4. Eligible Project Type under 2022 IRWM Grant Solicitation
   - ☐ Water reuse and recycling for non-potable reuse and direct and indirect potable reuse
   - ☐ Water-use efficiency and water conservation
   - ☐ Local and regional surface and underground water storage, including groundwater aquifer cleanup or recharge projects
   - ☐ Regional water conveyance facilities that improve integration of separate water systems
   - ☐ Watershed protection, restoration, and management projects, including projects that reduce the risk of wildfire or improve water supply reliability
   - ☐ Stormwater resource management projects to reduce, manage, treat, or capture rainwater or stormwater
   - ☐ Stormwater resource management projects that provide multiple benefits such as water quality, water supply, flood control, or open space
   - ☐ Decision support tools that evaluate the benefits and costs of multi-benefit stormwater projects
   - ☐ Stormwater resource management projects to implement a stormwater resource plan
   - ☐ Conjunctive use of surface and groundwater storage facilities
   - ☐ Decision support tools to model regional water management strategies to account for climate change and other changes in regional demand and supply projections
   - ☒ Improvement of water quality, including drinking water treatment and distribution, groundwater and aquifer remediation, matching water quality to water use, wastewater treatment, water pollution prevention, and management of urban and agricultural runoff
   - ☐ Regional projects or programs as defined by the IRWM Planning Act (Water Code §10537)
   - ☐ Other:

5. Describe how the project provides a benefit that meets at least one of the Statewide Priorities as defined in DWR's Final 2022 Guidelines (see page 7) and Tribal priorities as defined by the NCRP?

   The project and HBMWD's system promotes a regional approach among water users and 7 municipal water agencies sharing the Mad River watershed.

NORTH COAST RESOURCE PARTNERSHIP

CERTIFICATION OF AUTHORITY

By signing below, the Authorized Representative executing the certificate on behalf of the Project Sponsor affirmatively represents that s/he has the requisite legal authority to do so on behalf of the Project Sponsor. The Authorized Representative executing this proposal on behalf of the project sponsor understands that the NCRP is relying on this representation in receiving and considering this proposal. The person signing below hereby acknowledges that s/he has read the entire NCRP 2022 Project Review and Selection Process Guidelines and the NCRP 2022 Proposition 1 IRWM Round 2 Project Application & Instructions documents and has complied with all requirements listed therein.

Official Authorized to Sign for Proposal

John Friedenbach, General Manager

Signature

John Friedenbach, General Manager

Date
11/4/2022

HBMWD Ranney Collector 2 Rehabilitation Project – Round 2

Supporting Documentation

Table of Contents

BLUE LAKE RANCHERIA
P.O. Box 428
Blue Lake, CA 95525

Office: (707) 668-5101
Fax: (707) 668-4272

www.bluelakerancheria-nsn.gov

March 14, 2019

North Coast Resource Partnership
c/o Humboldt Bay Municipal Water District
PO Box 95
Eureka, CA 95502-0095
Via email to: friedenbach@hbmwd.com

RE: Blue Lake Rancheria Support for HBMWD Grant Proposal for Ranney Collector 2 Project

Dear North Coast Resource Partnership Grant Review Team,

The Blue Lake Rancheria, a federally recognized tribal government (BLR), supports the North Coast Resource Partnership (NCRP) grant proposal from the Humboldt Bay Municipal Water District (HBMWD) to rehabilitate one of its Ranney Collectors.

The HBMWD has a proven record of successful rehabilitation projects of this kind, resulting in cost-savings and significant success in the operation of its drinking water system that serves a large rural region, including BLR. HBMWD supplies drinking water to approximately 88,000 people in the Humboldt Bay area via seven municipal agencies. Any constrictions of HBMWD's water supply or water quality would impact the entire service area. BLR believes it is wise and necessary planning to replace aging water infrastructure before it becomes a problem (with far greater expense) and this proposed project achieves this goal. A timely and well-planned project as proposed by HBMWD will be more cost-effective and certainly have less impact than an emergency/crisis situation and response.

The Ranney Collectors are a critical component of HBMWD's water system in that they collect water far below the river bottom, which is of superior quality than direct diversion from the river. This indirect withdrawal is much more protective of aquatic life in the Mad River than a surface diversion, but it requires ongoing investment and maintenance. The rehabilitation of the Ranney Collector laterals will also reduce potential impacts to aquatic species by reducing the localized 'velocity pull' created by the water withdrawal. New intake screens and repaired lateral lines will increase the effective surface area for water intake and therefore reduce the force of the current created by the water withdrawals. This project will replace the old and deteriorated laterals, screens, pumps, motors, and electrical equipment for Ranney Collector 2.

BLR fully supports this project and any level of grant funding that NCRP can provide. These refurbishments help ensure the reliability and high quality of HBMWD's water supply for the foreseeable future and is beneficial to aquatic life in the Mad River. HBMWD's prior work to refurbish and extend the life of this collection system has been exceptional, winning regional engineering project awards. Working in and below the river bed will require careful minimization and mitigation efforts to protect environmental resources from short term construction impacts, however, as noted above, the HBMWD has conducted these exact tasks before on other Collectors without incident.

This project has co-benefits in terms of preserving a rare and effective drinking water system in the main stem of a river, and protecting the necessary instream flows in the Mad River dedicated for that purpose. Preserving instream flows in the Mad River is a well-established BLR priority for water quality and to protect endangered and threatened species in this watershed, which is also BLR's aboriginal territory.

BLR asks for your support and funding of this HBMWD grant application. Please contact Jana Ganion with questions, or for more information at jganion@bluelakerancheria-nsn.gov and/or (707) 668-5101 x1044.

Sincerely,

Arla Ramsey

Arla Ramsey
Vice Chairperson

COUNTY ADMINISTRATIVE OFFICE
Economic Development
COUNTY OF HUMBOLDT
520 E Street, Eureka, CA 95501
Telephone (707) 445-7745 Fax (707) 445-7219
https://humboldtgov.org/

John Friedenbach
General Manager
Humboldt Bay Municipal Water District
PO BOX 95
Eureka, CA 95502-0095

March, 11th 2019

Subject: HBMWD Lateral Rehabilitation Project

This office is aware that the Humboldt Bay Municipal Water District (HBMWD) has applied for grant assistance to renovate an existing collector, and that this project will entail replacement and refurbishment of old and deteriorated infrastructure including, but not limited to, the replacement of laterals, pumps and motors.

The County of Humboldt Economic Development department strongly supports initiatives and endeavors which strengthen local infrastructure, especially those that are aligned with the County of Humboldt's Comprehensive Economic Development Strategy (CEDS).

The HBMWD's proposed project, in particular, will enhance the feasibility of certain development projects that are already under consideration for the Samoa Peninsula,

Should you have any questions feel free to reach out to me.

Regards,

Scott Adair
Director of Economic Development
County of Humboldt
sadair@co.humboldt.ca.us
707-475-4800 (Direct line)

CALIFORNIA
Water Boards

GAVIN NEWSOM
GOVERNOR

JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board
Division of Drinking Water

February 28, 2019

John Friedenbach
General Manager
Humboldt Bay Municipal Water District
P.O. Box 95
Eureka, CA 95502-0095

Subject: Ranney Collector #2 Lateral Rehabilitation Project

This office has been informed that the Humboldt Bay Municipal Water District (HBMWD) is pursuing financial assistance from North Coast Resource Partnership (Prop 1) to renovate one of its Ranney Collectors. This project will replace the old and deteriorated laterals, pumps and motors, and electrical equipment for Ranney Collector #2.

We strongly support this endeavor, concur with the necessity of the project, and encourage pursuing any level of grant funding available to complete this project.

HBMWD is the primary supplier of drinking water to the cities, small towns, and unincorporated communities that comprise a Humboldt Bay area total population of approximately 88,000 people. The Ranney collectors are a critical component of HBMWD's water system in that they collect water far below the river bottom, which is of much better quality than a direct diversion from the river. This water supply has proven to be very reliable during California's recent drought and the proposed improvements will help ensure the reliability and high quality of HBMWD's water supply from Ranney Collector #2 for the foreseeable future.

If you have any questions, please contact Scott Gilbreath at (530) 224-4876, or me at (530) 224-4875.

Barry S. Sutter, P. E., Klamath District Engineer
Division of Drinking Water
STATE WATER RESOURCES CONTROL BOARD

HUMBOLDT BAYKEEPER®

March 13, 2019

North Coast Resource Partnership
c/o Humboldt Bay Municipal Water District
PO Box 95
Eureka, CA 95502-0095

Dear North Coast Resource Partnership,

On behalf of Humboldt Baykeeper, I am writing in support of the Humboldt Bay Municipal Water District (HBMWD) application for Prop. 1 financial assistance to renovate one of its Ranney collectors. Humboldt Baykeeper works to safeguard our coastal resources for the health, enjoyment, and economic strength of the Humboldt Bay community, and is a member of the California Coastkeeper Alliance and the international Waterkeeper Alliance.

The proposed project will replace old and deteriorated laterals, pumps and motors, and electrical equipment for Ranney Collector 2. We fully support this project since it will help ensure the reliability and high quality of drinking water supplies for approximately 88,000 people in the Humboldt Bay area. It will also lower energy costs related to pumping and will benefit aquatic species and their habitat. Upgrading or replacing aging infrastructure before it becomes a problem is good public policy, and the proposed project achieves this. We urge the NCRP to prioritize funding for this project.

Sincerely,

Jennifer Kalt

Jennifer Kalt, Director
jkalt@humboldtbaykeeper.org

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

WATERKEEPER® ALLIANCE MEMBER

March 12, 2019

North Coast Resource Partnership
c/o Humboldt Bay Municipal Water District
PO Box 95
Eureka, CA 95502-0095

RE: Support for HBMWD Grant Proposal for Collector 2 Project

Dear NCRP grant review team,

The Mad River Alliance (MRA) supports the NCRP grant proposal from the Humboldt Bay Municipal Water District (HBMWD) to rehabilitate one of its Ranney Collectors. These Collectors are the component of the HBMWD system that withdraw water from below the Mad River. This project will replace the old and deteriorated laterals, screens, pumps, motors, and electrical equipment for the Ranney Collector 2. MRA fully supports this project and any level of grant funding that NCRP can provide. This will help ensure the reliability and high quality of HBMWD's water supply for the foreseeable future and is beneficial to aquatic life in the Mad River.

Mad River Alliance is a community driven group working to protect clean local water and the ecological integrity of the Mad River watershed for the benefit of its human and natural communities. MRA believes this project will help maintain the critical water infrastructure operated by HBMWD and will reduce the potential impacts of these withdrawals on aquatic species.

HBMWD supplies drinking water to approximately 88,000 people in the Humboldt Bay area via seven municipal agencies. Any shortcomings with HBMWD's water supply or water quality would affect the entire service area. MRA believes it is prudent planning for water systems to upgrade or replace their aging infrastructure before it becomes a problem and the proposed project achieves this goal.

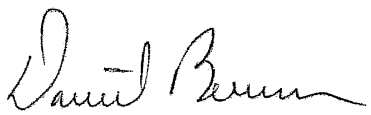
The Ranney Collectors are a critical component of HBMWD's water system in that they collect water far below the river bottom, which is of superior quality than direct diversion from the river. This indirect withdrawal is much more protective of aquatic life in the Mad River than a surface diversion, but it requires ongoing investment and maintenance. The rehabilitation of the Ranney Collector laterals will also reduce potential impacts to aquatic species by reducing the localized 'velocity pull' created by the water withdrawal. New intake screens and repaired lateral lines will increase the effective surface area for water intake and therefore reduce the force of the current created by the water withdrawals.

Working in and below the river bed will require careful minimization and mitigation efforts to protect environmental resources from short term construction impacts. MRA is confident that the many parties involved in the public permitting process, and HBMWD's well demonstrated interest and commitment to protecting the resources of the Mad River, will result in a project that minimizes these impacts and

has net benefits to the community, the Mad River, and all its inhabitants. A timely and well-planned project as proposed by HBMWD will certainly have less impacts than an emergency crisis response to problems with this critical component of Humboldt County's drinking water infrastructure.

MRA urges your support and funding of this HBMWD grant application. If you have any questions, please feel free to contact me at 707-498-4937 or dan@madriveralliance.org.

Sincerely,



Daniel Berman
Executive Director
Mad River Alliance
www.madriveralliance.org

Construction Budget Support Documentation

Memorandum

February 01, 2022

To	John Friedenbach, HBMWD		
Copy to	HBMWD Board Members; Dale Davidsen, HBMWD; Chris Harris, HBMWD; Malia Gonzales, GHD		
From	Nathan Stevens	**Tel**	(707) 267-2204
Subject	HBMWD Collector 2 Rehabilitation Project – Bid Results and Recommendations	**Project no.**	11218863

The District received one bid for the Collector 2 Rehabilitation Project on January 21, 2022 with the following result:

Contractor	Base Bid Amount	Additive Bid Amount	Total Bid Amount
Mercer-Fraser Company	$3,808,000.00	$783,400.00	$4,591,400.00

As the sole bidder, Mercer-Fraser Company is the apparent low bidder. Mercer-Fraser is intending to subcontract a portion of the work on this project to Full Bore, Inc. Full Bore would be responsible for furnishing and installing the 10-foot stainless steel blanks and furnishing, installing, and developing the lateral screens. We have checked the State and Federal Contract databases, and the prime's and subcontractor's licenses are in good standing. They have not been debarred from performing construction work, nor do they have any current complaints or claims against them noted on the State Contractor's Licensing database.

In addition to licensing requirements, the bid documents had experience requirements. The construction methods and equipment required for this project are highly specialized. The bid documents are explicit regarding required contractor qualifications. The requirements include that the bidder must have completed five projects to install new lateral well screens in an existing radial collector well in the past ten years. Provisions in the bid documents allow for the District to disqualify and reject any bid from an unqualified bidder. Mercer-Fraser is known locally as an experienced, competent contractor within their areas of experience. However, based on a review of the qualifications statement provided in the bid, the contractor team does not meet the required experience for this project. The contractor's bid lists experience in the following trenchless pipe installation methods: horizontal directional drilling, pipe jacking and boring, tunneling, micro-tunneling, and pipe reaming. However, the contractor team did not provide any radial collector well experience. While the lateral installation method required for this project is in some ways similar to jacking and boring, performing work approximately 70 feet below the ground surface at the bottom of a confined radial collector is work that is unique and requires specialized knowledge, experience, and equipment.

Aside from the experience concerns with the bid results, there are also funding concerns. The funding for the Collector 2 Rehabilitation Project includes grant funding from the North Coast Resource Partnership (NCRP) Proposition 1 Integrated Regional Water Management (IRWM) grant program and a District match. The budget for construction for this project (IRWM grant budget plus District match) is $2,097,750, which is $1,710,250 below the base bid from Mercer-Fraser and $2,493,650 below their total bid. A similar project for Collectors 1/1A was bid in November 2015. That project included two collectors and was bid slightly differently than the Collector 2 project, so bid results between the two projects are not directly compared. However, when analyzing the base bid prices on a cost per linear foot of lateral screen installed basis, the price from Mercer-

Fraser for the Collector 2 project was over double the price for the Collectors 1/1A project. While prices of labor and materials have increased since the Collectors 1/1A project was bid, it appears that the bid for Collector 2 is higher than would be expected if multiple bidders had participated, and it is possible that the District could get a lower price for this work if the project is re-bid in the future.

From an engineering perspective, based on the lack of qualifications from the sole bidder, GHD recommends that the Board of Directors reject the bid from Mercer-Fraser for the construction of the Collector 2 Rehabilitation Project and consider re-issuing the project for bid in the winter of 2022/23. This approach could result in more competitive bids and potentially reduce project costs for the District. District staff has consulted legal counsel to confirm that the District has the right, as stated in the bid documents and in Public Contract Code Sections 20640-20645, to reject any and all bids.

I have attached a copy of the complete tabulated bid results to this memo. Please do not hesitate to call me if you have any questions.

Regards

Nathan Stevens, PE
District Engineer

Encl.: Tabulated Bid Results

Bid Tabulation Results

Owner:	Humboldt Bay Municipal Water District
Project Name:	Collector 2 Rehabilitation Project
Project Location:	HBMWD West End Rd, Humboldt County, CA
Date of Bid:	January 21, 2022
Prepared by:	Malia Gonzales

BASE BID SCHEDULE

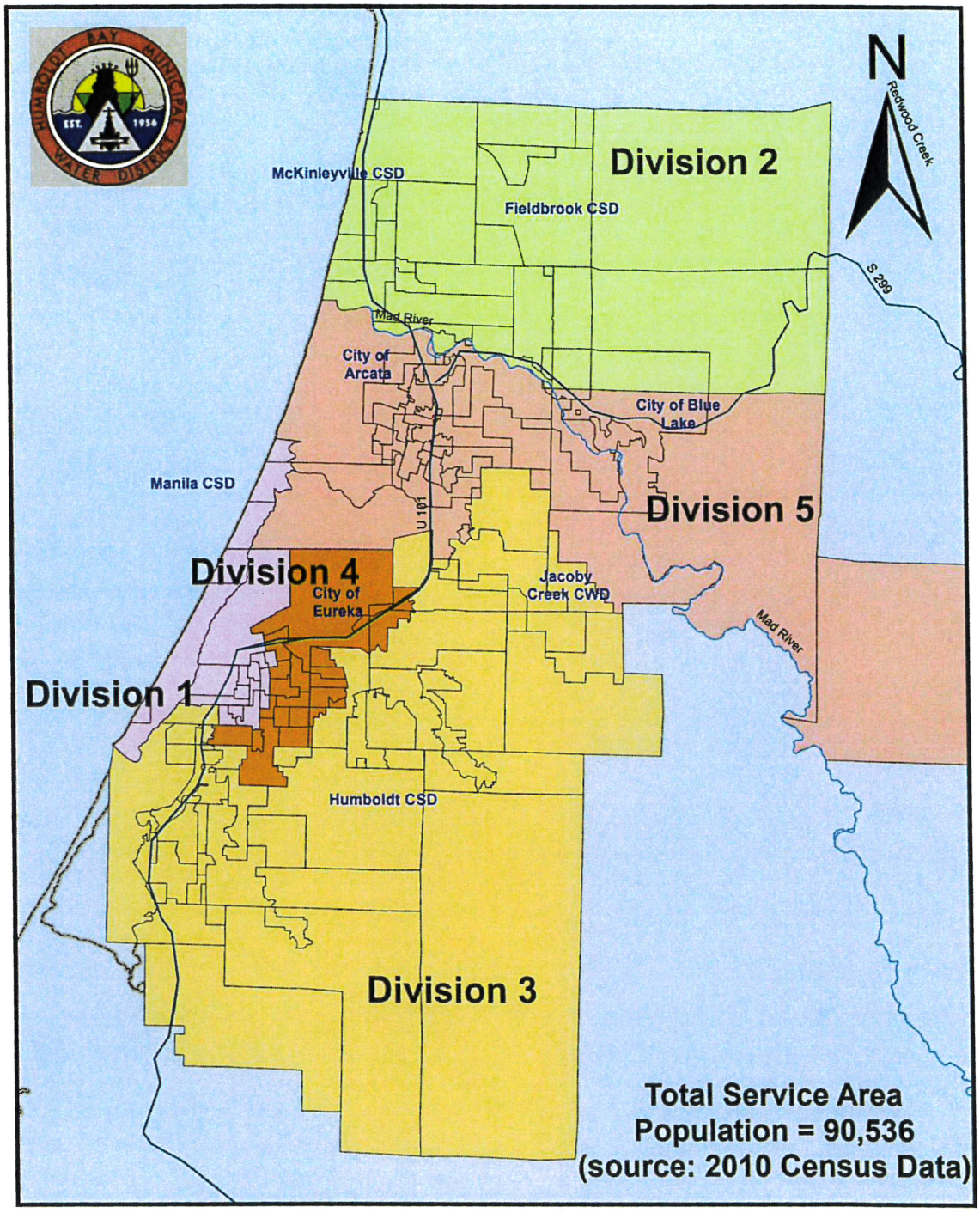
				Mercer-Fraser	
Item No.	**Description**	**Units**	**Quantity**	**Unit Cost**	**Total Cost**
1	Mobilization/Demobilization	LS	1	$450,000.00	$450,000.00
2	Percolation Pond	LS	1	$150,000.00	$150,000.00
3	Dewatering Pumps and Piping with Caisson	LS	1	$300,000.00	$300,000.00
4	Installation of Ports and 10-foot Blanks	EA	4	$50,000.00	$200,000.00
5	Setup for Lateral Jacking	LS	1	$160,000.00	$160,000.00
6	Furnish, Install & Develop 12" Diameter, Type 304 Stainless Steel lateral screen. Four 150-foot laterals with 140 feet of screen	LF	560	$4,300.00	$2,408,000.00
7	Furnish and Install (2) 12" Stainless Steel Gate Valves with Tags and Install (2) Additional Valves to be Provided by Owner	LS	1	$75,000.00	$75,000.00
8	Initial & Final Performance Tests	LS	1	$65,000.00	$65,000.00
TOTAL BASE BID AMOUNT				**$3,808,000.00**	
TOTAL OF BASE + ADDITIVE BID AMOUNT				**$4,591,400.00**	

Humboldt Bay Municipal Water District
Collector 2 Rehabilitation Project
Bid Opening

3:00 p.m.
January 21, 2022

HBMWD District Office
828 7th Street
Eureka, CA 95501

Contractor	Total Bid Amount
Mercer-Fraser Company	$4,591,400



HBMWD Divisions Map

0 9,000 18,000 36,000 54,000 Feet

1 inch = 15,113 feet

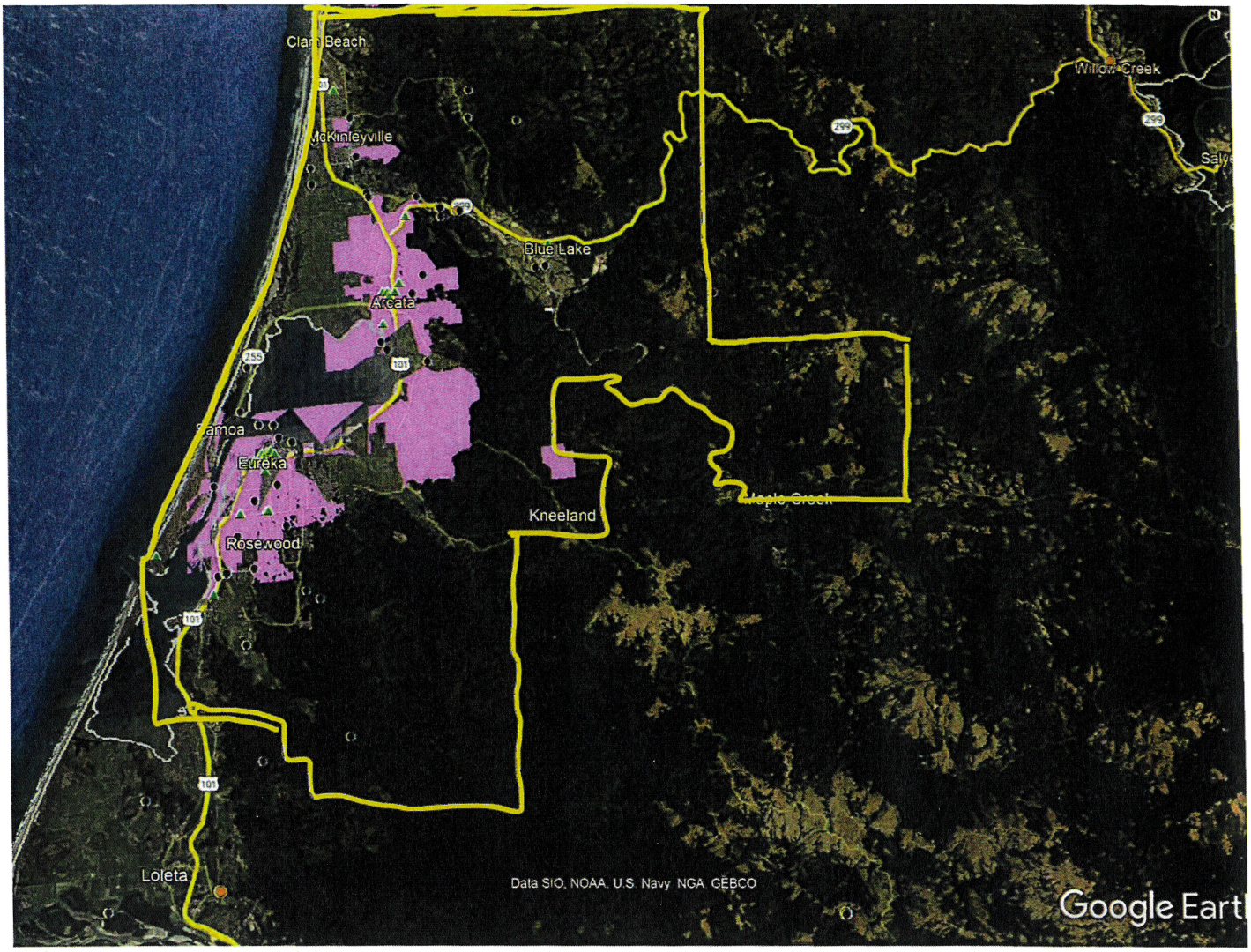
Legend

Divisions

- Division 1- Neal Latt
- Division 2- Sheri Woo
- Division 3- David Lindberg
- Division 4- J. Bruce Rupp
- Division 5- Michelle Fuller

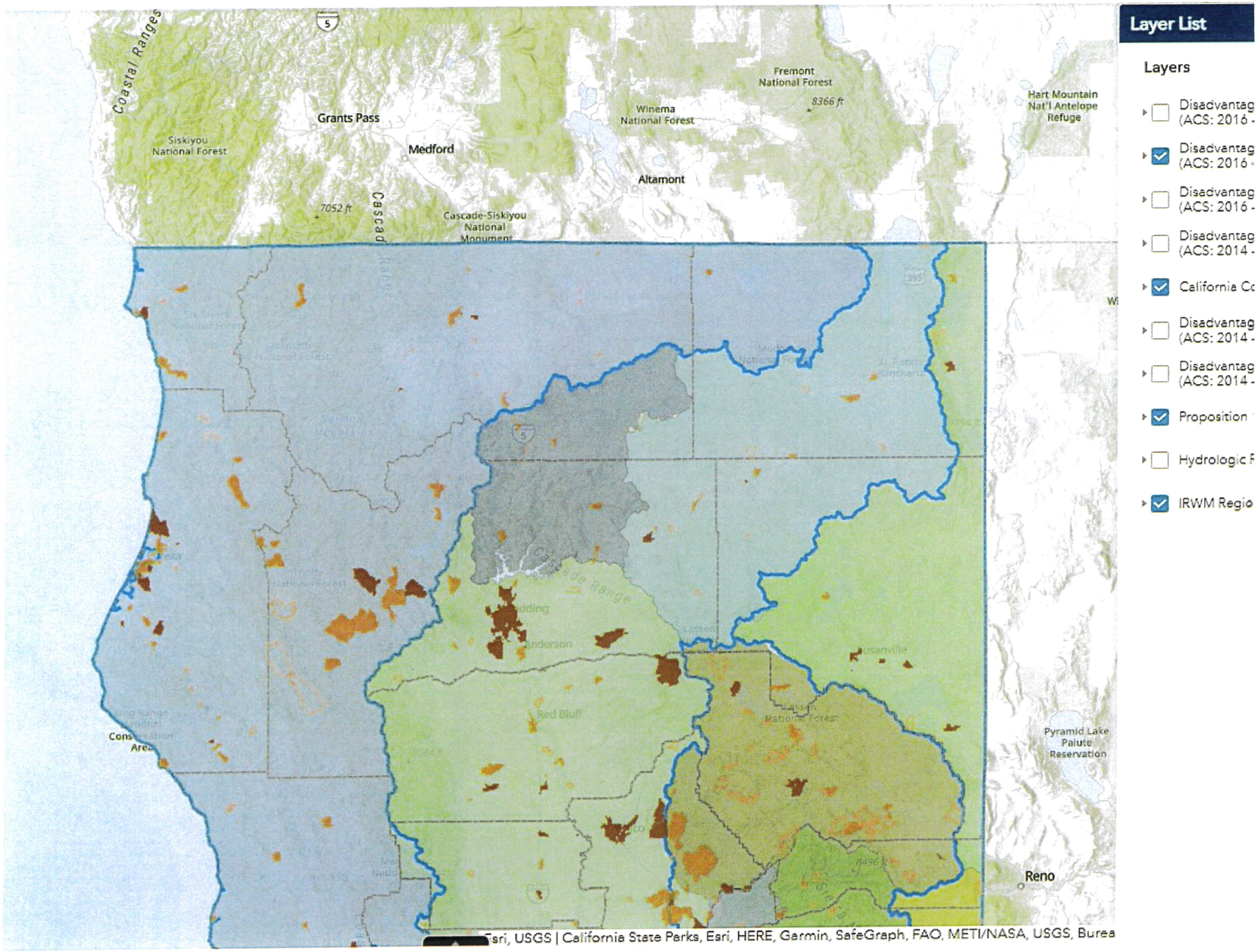
Division areas are made up from continguous election precints. Any questions about specific residential locations within / without a Division Boundary should be directed to the Humboldt County Elections Department: 3033 H Street, Room 20, Eureka, 707-445-7481.

Date Approved: May 1, 2013



Severely Disadvantaged 2022.
Outline of service area is approximate.
Please refer to include HBMWD District Map.

Legend:
Yellow = approximate District area
Purple = Severly Disadvantaged population


Layer List
Layers
Disadvantag (ACS: 2016 -
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Disadvantag (ACS: 2016 -
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California Co
Disadvantag (ACS: 2014 -
Disadvantag (ACS: 2014 -
Proposition
Hydrologic F
IRWM Regio
Coastal Ranges
Grants Pass
Siskiyou National Forest
Medford
Cascade-Siskiyou National Monument
Winema National Forest
Fremont National Forest
8366 ft
Hart Mountain Nat'l Antelope Refuge
Altamont
7052 ft
Red Bluff
Pyramid Lake Paiute Reservation
Reno
Esri, USGS | California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Burea

Economically Distressed 2022

Outline of service area is approximate. Please refer to included HBMWD Divisions Map

Maroon area is Economically Distressed population

Economically Disadvantaged 2022

Outline is approximate. Please refer to Divisions Map

Yellow area is Economically Disadvantaged population