



**NORTH COAST RESOURCE PARTNERSHIP
2018/19 IRWM Project Application**

The North Coast Resource Partnership (NCRP) 2018/19 Project Application Instructions and additional information can be found at the NCRP 2018/19 Project Solicitation webpage (<https://northcoastresourcepartnership.org/proposition-1-irwm-round-1-implementation-funding-solicitation/>). Please fill out grey text boxes and select all the check boxes that apply to the project. Application responses should be clear, brief and succinct.

Project Applications will be accepted until 5:00 pm, ~~March 8, 2019~~ March 15, 2019. It is important to save the application file with a distinct file name that references the project name. When the application is complete, please email to kgledhill@westcoastwatershed.com

If you have questions, need additional information or proposal development assistance please contact:

- Katherine Gledhill at kgledhill@westcoastwatershed.com or 707.795.1235
- Tribal Projects: Sherri Norris, NCRP Tribal Coordinator at sherri@cieaweb.org or 510.848.2043

Project Name: Briceland Community Services District Water Supply Enhancement

A. ORGANIZATION INFORMATION

1. Organization Name: Briceland Community Services District

2. Contact Name/Title

Name: Chestine Anderson
 Title: Briceland CSD Board President
 Email: bandon48@gmail.com
 Phone Number (include area code): (707) 923-1385

3. Organization Address (City, County, State, Zip Code):

PO Box 2013, Redway, Humboldt, CA, 95560

4. Organization Type

Public agency

- 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:

5. Authorized Representative (if different from the contact name)

Name:

Title:

Email:

Phone Number (include area code):

6. Has the organization implemented similar projects in the past? yes no

Briefly describe these previous projects.

Briceland CSD is a very small rural water system. The District has taken on small repair projects on a continuous basis. The District has been self-reliant in addressing system issues, but is at the point where outside assistance is needed to address larger system problems.

7. List all projects the organization is submitting to the North Coast Resource Partnership for the 2018/19 Project Solicitation in order of priority.

Only the project included in this application.

8. Organization Information Notes:

The Briceland Community Services District was formed as an independent special District on September 20, 1989 under Community Services District law. The District was formed for the purposes of improving the water system that was supplying water to houses in the Briceland area. The water system that was in place at the time was an antiquated system put in by the original settlers in the 1880's.

B. ELIGIBILITY

1. North Coast Resource Partnership and North Coast IRWM 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 NCIRWMP 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, and 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 and reduce flood risk in support of public safety

2. Does the project have a minimum 15-year useful life?

yes no

If no, explain how it is consistent with Government Code 16727.

3. Other Eligibility Requirements and Documentation

CALIFORNIA GROUNDWATER MANAGEMENT SUSTAINABILITY COMPLIANCE

a) Does the project that directly affect groundwater levels or quality?

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

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 there is no monitoring entity, please indicate whether the project is wholly located in an economically disadvantaged community.

yes no

URBAN WATER MANAGEMENT PLAN

- a) Is the organization required to file an Urban Water Management Plan (UWMP)?
 yes no
- b) If Yes, list the date the UWMP was approved by DWR:
- c) Is the UWMP in compliance with AB 1420 requirements?
 yes no
- d) Does the urban water supplier meet the water meter requirements of CWC 525?
 yes no
- c) 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, list date the AWMP was approved by DWR:
- c) Does the agricultural water supplier(s) meet the requirements in CWC Part 2.55 Division 6?
 yes no

SURFACE WATER DIVERSION REPORTS

- a) Is the organization required to file surface water diversion reports per the requirements in CWC Part 5.1 Division 2?
 yes no
- d) If Yes, will the organization be able to provide SWRCB verification 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
- e) 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 North Coast IRWM Plan, should the project be selected as a Priority Project?
 yes no

C. GENERAL PROJECT INFORMATION

1. Project Name: Briceland Community Services District Water Supply Enhancement

2. Eligible Project Type under 2018/19 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:

3. Project Abstract

The BCSD is a rural CSD that serves the drinking and fire suppression water needs of a vulnerable SDAC comprised of a day care, school, community center, and 25 households. The proposed water supply enhancement project, including improvements to the water intake, treatment, and fire suppression systems, will enhance the resiliency and autonomy of Briceland by increasing water conservation, increasing fire-fighting capabilities, and reducing the District's annual O&M costs in a sustainable manner

4. Project Description

The BCSD is a rural CSD that provides its customers drinking water via an antiquated treatment and distribution system that utilizes some of its original components that date back to the 1880's. Many components of the system are outdated, undersized, leaking, or have failed since they were installed.

The intended purpose of the proposed project is to enhance the resiliency and autonomy of the BCSD water system by: increasing water conservation; increasing drinking water storage capacity; increasing fire suppression storage capacity, and fire fighting capabilities; providing water in an environmentally sustainable manner; enhancing the stream channel environment; and, providing drinking water security.

Water is supplied to the BCSD by an ephemeral spring on private property. There are several leaks in the transmission line between the spring and the treatment system. After treatment, drinking water is stored in a 42,000 gallon tank. Fire suppression water is unfiltered and stored in 3 tanks with 18,000 gallons of capacity. Both systems are plumbed into town via separate 2-inch water lines.

The major components of the proposed project include: a 100,000 gallon raw water tank plumbed to supply water to both the water treatment system and the fire suppression storage tanks; 2,200 feet of 6-inch diameter fire suppression water line connecting the fire suppression water storage tanks to the town fire hydrant network; water transmission line components including mechanical float valves, gate valves, pressure and air relief valves, pressure gauges, and flow meters; site fencing for the slow sand filtration and

water storage facilities; a low water level and high flow alarm system; a 140 square foot structure for housing the new alarm system/equipment; and a flow controlled chlorine injector.

The project will be implemented as a typical design bid build project.

The project will address the critical water needs of the region by enhancing conservation, providing assistance to disadvantaged communities, restoring important ecosystems, preparing for dry periods, and expanding water storage capacity.

5. Specific Project Goals/Objectives

Goal 1: Increase Water Conservation

Goal 1 Objective: Fix/Remove/Update failing water transmission line components to reduce water losses

Goal 1 Objective: Install float valves to automate water treatment system, to avoid overfilling of tanks

Goal 1 Objective: Install water level and water usage alarms to alert system operators to issues with water loss in the system

Goal 1 Objective:

Goal 2: Enhance Fire Suppression Capabilities

Goal 2 Objective: Install new raw water storage tank to provide additional water for fire fighting

Goal 2 Objective: Install new larger diameter fire suppression water line to town fire hydrant to increase flow rates to the hydrants for fire suppression

Goal 2 Objective:

Goal 2 Objective:

Goal 3: Enhance Drinking Water System Safety & Resiliency

Goal 3 Objective: Install new raw water storage tank to improve the operation of the slow sand filter treatment system

Goal 3 Objective: Install treatment system site fencing to secure the site against vandalism and other security threats

Goal 3 Objective: Install new building to house treatment system equipment to enhance monitoring of finished water and improve ease of monitoring for District staff

Additional Goals & Objectives (List)

6. Describe how the project addresses the North Coast Resource Partnership and North Coast IRWM Plan Goals and Objectives selected.

Goal 1/Objective 1 are addressed because the project has been developed locally by the BCSD and keeps community autonomous by enhancing BCSD's ability to provide adequate drinking and fire suppression water. Goal 2/Objective 4 are addressed because it serves to improve the infrastructure system for Briceland, which is a SDAC. Goal 3/Objective 6 is addressed by the removal of trash from BCSD's source stream; and reducing the amount of water withdrawn from the stream, allowing for more water to feed the Eel River. Goal 4/Objective 8 is addressed by providing additional water supply reliability for domestic uses and reducing consumption of water. Goal 6/Objective 11 is addressed because additional water storage will reduce Briceland's vulnerability to droughts/fires caused by climate change, and supply water via gravity and solar power.

7. Describe the need for the project.

The BCSD provides a vulnerable SDAC (including a school, day care, community center, and 25 homes) drinking/fire suppression water. The annual budget of BCSD is \$6,000 so minimal annual repairs on the system are conducted. The existing treatment/distribution system is extremely antiquated, not fenced/secured, & still utilizes some of its original components dating back to the 1880's. Many components of the system are outdated, undersized, leaking, or have failed since they were installed. The existing fire suppression infrastructure for the BCSD is only 18,000 gallons of water storage distributed by 2-inch diameter piping, which is inadequate for meeting fire suppression standards. The leaks in the transmission system waste thousands of gallons of raw and treated water each year, contributing to the reduction of flows in the Eel River. The leaks/periodic pipe failures also contribute to semi frequent summer water shortages and mandated water use restrictions for BCSD customers.

8. List the impaired water bodies (303d listing) that the project benefits:

The project will benefit the Eel River, which is 303d listed for elevated temperatures. The project will reduce/eliminate a majority of the leaks in the existing raw water transmission line, which benefits the Eel River by supplying it additional water previously wasted by the system.

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

If so, please describe?

10. Describe the population served by this project.

The BCSD is a vulnerable SDAC which operates on an annual budget of \$6,000. The severe lack of annual funding makes system upgrades virtually non-existent. The BCSD provides drinking and fire suppression water for a community that includes a day care, school, community center, and 25 households. Based on the NCRP's mapping data tool, the proposed project provides direct water-related benefits to a Severely Economically Disadvantaged Community (SDAC).

11. Does the project provide direct water-related benefits to a project area comprised of Disadvantaged Communities or Economically Distressed Communities?

- Entirely
- Partially
- No

List the Disadvantaged Community(s) (DAC)

The project provides direct water-related benefits to the residents located in and adjacent to the town of Briceland, California. The NCRP data map (located at <https://northcoastresourcepartnership.org/data/>) demonstrates that this area is an "economically distressed area" and a "severely economically disadvantage community."

12. Does the project provide direct water-related benefits to a project area comprised of Severely Disadvantaged Communities (SDAC)?

- Entirely
- Partially
- No

List the Severely Disadvantaged Community(s)

The project provides direct water-related benefits to the residents located in and adjacent to the town of Briceland, California. The NCRP data map (located at <https://northcoastresourcepartnership.org/data/>) demonstrates that this area is an "economically distressed area" and a "severely economically disadvantage community."

13. Does the project provide direct water-related benefits to a Tribe or Tribes?

- Entirely
- Partially
- No

List the Tribal Community(s)

If yes, please provide evidence of support from each Tribe listed as receiving these benefits.

14. 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.

The water-related needs of Briceland include: 1) fire suppression capacity and distribution, 2) water supply reliability, and 3) water treatment system security. (1) The fire suppression system for the BCSD is plumbed separately from the drinking water system; and includes 18,000 gallons of raw water storage, and a 2-inch diameter transmission line feeding the town’s fire hydrants. BCSD’s fire suppression infrastructure is inadequate for meeting current fire suppression standards. (2) The dilapidated nature of BCSD’s water treatment system leads to many leaks and periodic water supply issues, which cause semi-frequent summer water shortages and mandated water use restrictions for BCSD customers. (3) The water treatment system is not currently secured by fencing or other means of security. This lack of security leaves the treatment plant vulnerable to vandalism and/or other acts of terrorism which could be inflicted upon the CSD’s system.

15. Does the project address and/or adapt to the effects of climate change? Does the project address the climate change vulnerabilities in the North Coast region? yes no

If yes, please explain.

The project will enhance the resiliency & autonomy of the BCSD water treatment & distribution system by providing additional fire suppression infrastructure and water storage for the community of Briceland. This will enhance the ability of community to fight its own fires and provide drinking water during the extreme weather conditions associated with climate change. The project will also deliver water in an energy independent manner (using no electricity) by relying on gravity and solar power.

16. Describe how the project contributes to regional water self-reliance.

The proposed BCSD improvements will enhance regional water self-reliance by creating a reduction in the amount of water used through the use of cost effective, technologically feasible, simple materials. The proposed new equipment and fixing of leaks within the system will result in a decrease of approximately 8 to 24 acre-ft of previously wasted water per year.

17. Describe how the project benefits salmonids, other endangered/threatened species and sensitive habitats.

This project will reduce the amount of water consumed/wasted by the existing water treatment system, which will then provide greater stream flows to Redwood Creek and ultimately the Eel River. Both of these water bodies are listed as critical chinook and steelhead habitat, and the Eel River is also a 303d listed water body for elevated temperatures.

18. Describe local and/or political support for this project.

This project unanimously supported by all of the populations served by the BCSD; it is supported by the BCSD Board of Directors, the school and daycare, community center, and the metered households.

19. List all collaborating partners and agencies and nature of collaboration.

There are no additional collaborating partners or agencies for this project.

20. 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 so, please describe?

21. Describe the kind of notification, outreach and collaboration that has been done with the County(ies) and/or Tribes within the proposed project impact area, including the source and receiving watersheds, if applicable.

This project has been discussed with local households during informal polling of its constituents, and during the BCSD's board meetings.

22. Describe how the project provides a benefit that meets at least one of the Statewide Priorities as defined in the 2018 IRWM Grant Program Guidelines and Tribal priorities as defined by the NCRP?

BCSD's project will meet several of the Statewide Priorities listed in the 2018 IRWM Grant Program Guidelines. Action 1 is met by dramatically increasing the water conservation/efficiency of the water treatment and distribution system. Action 2 is met by providing assistance to a SDAC. Action 4 is adhered to by enhancing stream flows and resiliency of Redwood Creek and the Eel River. Action 5 is met by reducing the impacts of water shortages, providing more reliable water supply to the BCSD, and improving drought preparedness of the town of Briceland. Action 6 is achieved by expanding water storage capacity of Briceland for widespread public benefit, especially during dry years. Action 7 is met by providing assistance and safe water for vulnerable communities.

23. Project Information Notes:

D. PROJECT LOCATION

1. Describe the location of the project

Geographical Information

Located near the town of Briceland in the rural, unincorporated area of Humboldt County. Latitude 40.064746, Longitude -123.541003.

2. Site Address (if relevant):

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

- No If No, please provide a clear and concise narrative with a schedule, to obtain necessary access.
- NA If NA, please describe why physical access to a property is not needed.

BCSD has legal access rights for the water treatment portion of their system. However, they don't currently have legal access to the raw water transmission line and the proposed location of the new raw water storage tank. A portion of the requested funding for this project is for obtaining legal access rights to the entirety of their drinking water system. Please see the EXCEL spreadsheet provided to answer question D-13 for a proposed schedule for obtaining the necessary access rights.

4. Project Location Notes:

E. PROJECT TASKS, BUDGET AND SCHEDULE

- 1. Projected Project Start Date: 7/1/20**
Anticipated Project End Date: 12/31/21

2. Will CEQA be completed within 6 months of Final Award?

- Yes State Clearinghouse Number:
- NA, Project is exempt from CEQA
- NA, Not a Project under CEQA
- NA, Project benefits entirely to DAC, EDA or Tribe, or is a Tribal local sponsor. [Projects providing a water-related benefit entirely to DACs, EDAs, or Tribes, or projects implemented by Tribes are exempt from this requirement].
- No

3. Please complete the CEQA Information Table below

Indicate which CEQA steps are currently complete and for those that are not complete, provide the estimated date for completion.

CEQA STEP	COMPLETE? (y/n)	ESTIMATED DATE TO COMPLETE
Initial Study	N	10/1/20
Notice & invitation to consult sent to Tribes per AB52	N	9/1/20
Notice of Preparation	N	11/1/20
Draft EIR/MND/ND	N	12/1/20
Public Review	N	1/1/21
Final EIR/MND/ND	N	2/1/21
Adoption of Final EIR/MND/ND	N	3/1/21
Notice of Determination	N	4/1/21
N/A - not a CEQA Project		

If additional explanation or justification of the timeline is needed or why the project does not require CEQA, please describe.

The project provides a water related benefit entirely to a DAC/EDA.

4. Will all permits necessary to begin construction be acquired within 6 months of Final Award?

- Yes
- NA, Project benefits entirely to DAC, EDA, Tribe, or is a Tribal local sponsor
- No

5. PERMIT ACQUISITION PLAN

Type of Permit	Permitting Agency	Date Acquired or Anticipated
1602 Permit	CDFW	3/1/21
Building Permit	Humboldt County	3/1/21
Grading Permit	Humboldt County	2/1/21

For permits not acquired: describe actions taken to date and issues that may delay acquisition of permit.

No issues that may delay acquisition of CEQA permitting are anticipated for this project.

6. Describe the financial need for the project.

The BCSD operates on an annual budget of \$6,000 dollars, with reserves of approximately \$20,000. Additionally, the BCSD has no paid staff and all O&M is completed by volunteer staff. Therefore, the BCSD does not have sufficient resources to complete the proposed capital improvement project.

7. Is the project budget scalable? yes no

Describe how a scaled budget would impact the overall project.

This project is scalable by 25% and 50%. A project scaled back by 25% would include a 25,000 gallon fire suppression storage tank, and all of the other project elements. A 50% scaled project would further remove either the 25,000 gallon storage tank or the new 6-inch diameter fire suppression water line, while preserving all of the other project elements. Overall, a scaled project would still provide all of the previously stated benefits, just at a reduced level.

8. Describe the basis for the costs used to derive the project budget according to each budget category.

The proposed project and this NRCP application have been developed with the assistance of GHD, Inc. a local engineering consulting company. GHD has completed an evaluation of BCSD's water treatment and distribution systems, and provided the estimated costs based on their experience completing several similar projects in the area.

9. Provide a narrative on cost considerations including alternative project costs.

The proposed project is the alternative which provides the most potential benefit with a budget that is feasible within the NRCP grant funding budget. The 25% and 75% scaled projects were evaluated as potential alternatives which still provide most of the original project benefits at a slightly reduced level. The scaled project alternatives would still provide great project benefits for the BCSD, and provide infrastructure which the BCSD could continue to build upon with future funding.

10. List the sources of non-state matching funds, amounts and indicate their status.

None

11. List the sources and amount of state matching funds.

None

12. Cost Share Waiver Requested (DAC or EDA)? yes no

Cost Share Waiver Justification: 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 provide benefits that address a water-related need of a DAC/EDA.

100% of the BCSD project area encompasses a SDAC, therefore they are requesting that the NRCF grant fund 100 percent of the project costs. The BCSD operates on an annual budget of \$6,000 dollars, which has lead to minimal repairs/updates of the system that was originally installed in the late 1800's.

13. Major Tasks, Schedule and Budget for NCRP 2018 IRWM Project Solicitation

Please complete MS Excel table available at <https://northcoastresourcepartnership.org/proposition-1-irwm-round-1-implementation-funding-solicitation/>; see instructions for submitting the required excel document with the application materials.

14. Project Tasks, Budget and Schedule Notes:

F. PROJECT BENEFITS & JUSTIFICATION

1. Does the proposed project provide physical benefits to multiple IRWM regions or funding area(s)?

yes no

If Yes, provide a description of the impacts to the various regions.

2. Provide a narrative for project justification. Include any other information that supports the justification for this project, including how the project can achieve the claimed level of benefits. List any studies, plans, designs or engineering reports completed for the project. Please see the instructions for more information about submitting these documents with the final application.

The technical basis for this project is based on a water treatment system evaluation, and forthcoming technical memorandum by GHD, Inc., a local engineering consulting firm.

The potential benefits for the project include: increased stream flow for environmental purposes, habitat restoration, increased water supply reliability, avoided capital replacement/O&M costs, and enhanced firefighting capabilities.

Increased stream flows will be accomplished by the reduction in water leaks that are anticipated to occur as part of this project. The project will reduce the water leakage from the system by approximately 8-24 acre-ft per year.

Increased habitat restoration will be accomplished by the removal of several hundred feet of old water line and other trash that is located in the source stream for this project.

Increased water supply reliability will be accomplished by the reduction in frequency of water shortages for BCSD's customers. The project will supply additional raw water storage, which will reduce the likelihood and frequency of water use restrictions that currently occur semi-frequently for Briceland residents. The proposed project was assumed to reduce the frequency of water shortages by approximately 20%.

The proposed project includes installing several new components such as: new piping, valves, pressure gauges, float-valves, flow meters, a flow based chlorine injector, and a solar powered water level alarm system. These components will reduce system leakage and add an increased level of automation to the system, which will reduce the number of labor hours required to operate and maintain the District's water system. The District's proposed project will reduce the labor demand of the system by approximately 5 hours per week, or 260 hours per year.

The enhanced firefighting capabilities benefit from this project will occur because of the increase water volume, and available flow rate from the increased diameter of the distribution system piping. The current fire suppression water storage is 18,000 gallons, which is delivered by a 2-inch diameter pipe. The proposed project would increase the total fire suppression volume to 118,000 gallons of storage, which will be delivered by a 6-inch diameter pipe. This will result in a 650% increase in water volume, and greater than 1700% increase in potential maximum water delivery flow rate for the fire suppression system.

3. **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.

4. **Does the project provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes consistent with AB 685?** yes no

If Yes, please describe.

The proposed project will help the BCSD continue to provide its customers with water that is provided in a manner consistent with California bill AB 685, which states that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.

5. **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.

6. **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.** [See the NCRP Project Application Instructions, Potential Project Benefits Worksheet and background information to help complete the table. The NCRP Project Application, Attachment B includes additional guidance, source materials and examples from North Coast projects.]

PROJECT BENEFITS TABLE

Potential Benefits Description	Physical Amt of Benefit	Physical Units	Est. Economic Value per year	Economic Units
Water Supply				
Increased Instream Flow - Environmental Purpose	8-24	arce-ft/yr	\$800-\$2400	\$100/acre-ft
Increased Water Supply Reliability	26	households	\$5,928	\$19/household-mo
Water Quality				
Other Ecosystem Service Benefits				
Habitat Restoration	4000	sqft of riparian	\$11	\$120/ac/yr
Other Benefits				
Decreased O&M Costs - Market Rate	260	labor hrs/yr	\$18,200	\$70/hr
Enhance Fire-Fighting Capabilities	1	houses saved per yr	200,000	cost per house

7. Project Justification & Technical Basis Notes:

Major Tasks, Schedule and Budget for North Coast Resource Partnership 2018/19 IRWM Project Solicitation

Project Name: Briceland Community Services District Water Supply Enhancement
Organization Name: Briceland Community Services District

Task #	Major Tasks	Task Description	Major Deliverables	Current Stage of Completion (%)	IRWM Task Budget	Non-State Match	Total Task Budget	Start Date	Completion Date
A Category (a): Direct Project Administration									
1	Administration	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%	\$7,500	\$0	\$7,500	7/1/20	3/1/22
2	Monitoring Plan	Develop Monitoring Plan to include goals and measurable objectives	Final Monitoring Plan	0%	\$5,000	\$0	\$5,000	7/1/20	9/1/20
3	Labor Compliance Program	Execute service agreement with labor compliance program company	Submission of Labor Compliance Program	0%	\$12,500	\$0	\$12,500	7/1/20	8/1/20
4	Reporting	Develop monthly reports describing work completed, challenges, and strategies for reaching remaining project objectives. Develop Final Report	Quarterly and Final Reports	0%	\$7,500	\$0	\$7,500	8/1/20	1/1/22
B Category (b): Land Purchase/Easement									
1	Obtain a portion of adjacent property	Create legal documentation. Execute lot-line adjustment and file with Humboldt County office of records.	Proof of title transfer; Record of Survey; legal description of property	0%	\$52,000	\$0	\$52,000	9/1/20	4/1/21
C Category (c): Planning/Design/Engineering/Environmental Documentation									
1	Milestone: 90% Design/Plans	Develop a set of plans and specifications to the 90% complete level. 90% plans and specifications will be supplied to all interested parties for review and comment	90% plans and specifications	0%	\$40,000	\$0	\$40,000	7/1/20	1/1/21
2	Milestone: Final Design /Plans	Develop a set of final design plans and specifications ready to put out to bid. The plans and specifications will conform to all necessary requirements stipulated by Humboldt County and other regulatory agencies to ensure a high quality product.	Final project design and construction specifications	0%	\$8,000	\$0	\$8,000	1/1/21	2/1/21
3	Survey	Complete land/topographic survey work needed for project design	Final survey stamped by a licensed land surveyor	0%	\$7,500	\$0	\$7,500	9/1/20	11/1/20
4	Geotechnical Investigation	Complete geotechnical work needed for project design	Final geotechnical investigation stamped by a licensed geotechnical engineer	0%	\$25,000	\$0	\$25,000	9/1/20	12/1/20
5	Milestone: CEQA	Prepare Initial Study and all relevant CEQA documents as per CEQA guidelines; prepare a biological resources survey/technical memo; complete a cultural resources study; prepare a draft initial study - MND; Circulate MND; respond to comments; Finalize MND. File Notice of Determination.	Notice of Determination; letter from lead agency stating there were no legal challenges during public review; approved and adopted CEQA documentation	0%	\$67,000	\$0	\$67,000	9/1/20	4/1/21
6	Development Permits	All appropriate permits shall be secured for the project from the local and regional agencies having jurisdiction over the project.	Humboldt County building & grading permits; CDFW 1602 permit	0%	\$17,000	\$0	\$17,000	10/1/20	3/1/21
D Category (d): Construction/Implementation									
1	Construction/Implementation Contracting	Develop advertisement for bids and contract documents; conduct pre-bid contractors meeting; perform evaluation of bids; award contract	Summary of bids and contract award	0%	\$14,000	\$0	\$14,000	3/1/21	6/1/21
2	Mobilization and Site Preparation	Prepare site and mobilize project: initiate project site preparation; order project equipment and supplies; assure project permits are in place; conduct pre-project site photo-monitoring	Summary of site preparation activities in monthly reports; pre-project site photos	0%	\$78,000	\$0	\$78,000	6/1/21	7/1/21
3	Construction Management and Observation	Provide project oversight and documentation for all construction related activities	Construction management logs; completed construction administration tasks documented in monthly progress reports	0%	\$100,000	\$0	\$100,000	7/1/21	10/1/21
4	Project Construction	Construction of all project components	Summary of construction activities in monthly progress report; photo documentation; construction completed	0%	\$980,000	\$0	\$980,000	7/1/21	10/1/21
5	Milestone: Construction 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%	\$14,500	\$0	\$14,500	10/1/21	11/1/21
Total North Coast Resource Partnership 2018/19 IRWM Grant Request					\$1,435,500	\$0.00	\$1,435,500		
Is Requested Budget scalable by 25%? If yes, indicate scaled totals; if no delete budget amount provided.					\$1,076,625	\$0.00	\$1,076,625		
Is Requested Budget scalable by 50%? If yes, indicate scaled totals; if no delete budget amount provided.					\$717,750	\$0.00	\$717,750		