



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

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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](mailto:kgledhill@westcoastwatershed.com)

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

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

**Project Name:** Water System Improvements Project

### A. ORGANIZATION INFORMATION

- Organization Name:** Newell County Water District (NCWD)
- Contact Name/Title**  
Name: John Sanders  
Title: Board President  
Email: [john.sanders@fleetpride.com](mailto:john.sanders@fleetpride.com)  
Phone Number (include area code): 530-664-2267
- Organization Address (City, County, State, Zip Code):**  
405 5<sup>th</sup> Ave. Tulelake, CA 96134
- 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: Same as contact.

Title:

Email:

Phone Number (include area code):

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

Briefly describe these previous projects.

Unknown.

Please see organization information notes below.

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

Water System Improvements Project

**8. Organization Information Notes:**

The Newell County Water District has undergone turnover of staff and board members in the last several years. The current Board President is working hard to find records of past projects, but could not find the documents for the grant funded water distribution project in 2008. The 2008 water project may have been funded through IRWM or the State Revolving Fund.

## **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: Upper Klamath Lake Basin - Tulalake 1-2.01,

c) If Yes, please specify the name of the organization that is the designated monitoring entity: Tulalake Irrigation District.

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
- e) 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

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## C. GENERAL PROJECT INFORMATION

### 1. Project Name: Water System Improvements Project

## 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 water system is composed of two 100,000-gallon welded steel water storage tanks, 3 existing wells, and a distribution system with 310 active service connections. The most pressing issues for the water system are malfunctioning SCADA controls, groundwater supply, and storage. This project will include new SCADA controls, new well and pump house to replace the failing Well 2, and a structural evaluation of the older steel tank that has failing paint coatings and cracks in the steel floor.

## 4. Project Description

In 2008, the District replaced the original 1942 water system constructed for the Japanese internment camp. The project included replacement of all mains, valves, hydrants, and service connections.

The remaining issues that the proposed project will address include failing SCADA controls between the wells and the storage tank, insufficient source capacity when nearby irrigation wells are running, and failing paint systems and leaks in the older water storage tank.

### 1. SCADA Controls

The existing SCADA control system between the wells and the tank is failing, and the new storage tank has run dry or overflowed on multiple occasions. Running the tanks dry is a potential public safety hazard if pipes are depressurized. Overflowing the tanks is also a needless waste of energy and potable water. Additionally, excessive drawdown during pumping of nearby agricultural wells puts the existing well pumps at risk of damage due to running dry. It is believed that the Well 2 pump was damaged in 2017 by continuing to run when the water table had been drawn down below the level of the pump setting due to nearby irrigation wells drawing on the aquifer. Draw down sensors are proposed to be added to Wells 1 and 3 to shut down the wells if excessive drawdown was recorded and protect the pumps from damage. The project

will include new SCADA control panels and draw down sensors at existing Wells 1 and 3. A new pressure sensing station at the tank site will provide reliable control and protection of the existing system.

## 2. Replacement Well

The District has recorded a drop in static water level of nearly 60 feet in their existing wells when nearby irrigation wells are called to run. The project will include a new test well drilled adjacent to the existing Well 2 site. During drilling, the driller will conduct zone sampling and e-logs to determine the potential and quality for water at certain depths, identify the most advantageous zones for screening, and install well casing and screens. Depending on available funds, the new pump house could be phased for the next round of construction implementation funding or be included in Phase 1 as presented in Cost Table 1.

## 3. Structural Evaluation of the 1982 Steel Water Storage Tank

The older steel water storage tank has several issues including lead paint found in the interior coating of the tank, as shown in lab results in Attachment 2 cracking and peeling of the interior and exterior paint systems, and a potential crack identified in the welded steel plate floor by the Division of Drinking Water inspection report in 2017.

An evaluation is proposed to include 2 or more site visits by a Structural Engineer and testing to assess the condition of the exterior paint system and the steel structure and tank base. This assessment would be used to determine if the District should seek construction implementation funding in the next round to repair the existing tank, or if a new replacement tank should be constructed.

## 5. Specific Project Goals/Objectives

Goal 1: Beneficial Uses of Water.

Goal 1 Objective: Improve drinking water infrastructure to protect public health.

Goal 1 Objective: Ensure water supply reliability and quality to the severely disadvantaged community of Newell.

Goal 1 Objective: Reduce water service disruption.

Goal 1 Objective:

Goal 2: Water Conservation.

Goal 2 Objective: Reduction in unaccounted for loss of treated water.

Goal 2 Objective:

Goal 2 Objective:

Goal 2 Objective:

Goal 3: Climate Adaptation & Energy Independence.

Goal 3 Objective: GHG emission reduction by conserving water.

Goal 3 Objective: Improve water/energy use efficiency.

Goal 3 Objective: Community Resiliency to drought conditions.

Additional Goals & Objectives (List)

Goal 5: Economic Vitality.

Goal 5 Objective: Enhance the economic vitality of the severely disadvantaged community of Newell by improving existing infrastructure with grant funding rather than requiring rate increases.

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

The Proposed Project will allow NCWD to safely and effectively supply water to its customers by improving failing infrastructure within the severely disadvantaged community of Newell via grant funding and therefore improving the economic vitality of the community. The water system improvements will reduce water loss within the system. This will prevent overdrafting of the groundwater source. The reduction in pumping and treatment should lead to GHG emission reduction and increase of water/energy efficiency. The system improvements will be comprised of materials to ensure long-term water supply reliability, quality, and increased fire suppression, with a service life greater than 15 years, and NSF certified components to protect public health.

**7. Describe the need for the project.**

The District water system has three prominent issues:

1. The existing water system SCADA controls between the wells and the storage tank are failing which cause the storage tank to either run dry and disrupt supply to the system, or overflow and waste potable water.
2. The system has insufficient source capacity when nearby irrigation wells are running.
3. The older steel water storage tank has failing paint systems and leaks in the tank floor and cannot be utilized.

Addressing these needs in the project is consistent with the NCRP goals and objectives as described herein.

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

N/A

**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.**

Newell is identified as a severely disadvantaged community with approximately 600 year round residents and an additional 125 summer residents in the migrant worker camp, see Attachment 1 - Newell SDAC Map.

**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)**

Newell, CA

**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)**

Newell, CA

**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 community is designated as an SDAC according to the DAC Mapping Tool provided by DWR included as Attachment 1. NCWD is continuously looking for ways to reduce costs. The most pressing issues for the District's water system are malfunctioning SCADA controls that cause the tank to either run dry and disrupt water service or overflow and waste groundwater resources, adequate groundwater supply, and storage. The project will replace the SCADA controls, provide adequate groundwater supply, and assess how to improve system storage.

**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.

A properly functioning SCADA control system will prevent overflows of the water storage tank which require excessive energy use and contribute to GHG. Nearby farmers receive surface water allocations dependent upon available rainfall and tribal needs. If adequate surface water allocations are not made, the farmers rely heavily on groundwater sources that have affected the source capacity of NCWD's existing wells. A new well will help to ensure Newell has a more secure groundwater source.

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

The failing components of the water system inhibits NCWD's ability to ensure safe and reliable drinking water; therefore, this project will provide NCWD the ability to be self-reliant and ensures compliance with NCRP Goal 2 Objective 4 and NCRP Goal 4 Objectives 8, 9, and 10. The proposed project will ensure that an economically SDAC is supported and will enhance the economic vitality of the SDAC by improving infrastructure to ensure water supply reliability and quality to protect public health while protecting groundwater sources from over-drafting.

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

N/A

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

The State Water Resources Control Board Division of Drinking Water has been consulted regarding the proposed project.

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



N/A

**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?**

Water infrastructure improvement projects are being applied for by other agencies; however, no known agencies are in the immediate vicinity of this project.

**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.**

None at this time. Implementation of this project will require compliance with the CEQA process including notification of local tribes. That will be completed prior to final design, and important changes from the process will be incorporated into the project.

**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?**

The proposed project meets Statewide Priority Action #1, in that the Proposed Project will result in water and energy conservation; Statewide Priority Action #2, in that the Proposed Project will ensure NCWD can be self reliant and provide safe drinking water to a SDAC; Statewide Priority Action #4, in that unaccounted for water loss will be reduced in the Proposed Project, thus being more prepared for the next drought that occurs by maximizing all available water sources; and, Statewide Priority Action #7, in that the Proposed Project will allow NCWD to provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes to its customers.

**23. Project Information Notes:**

None.

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## **D. PROJECT LOCATION**

**1. Describe the location of the project**

Geographical Information

Latitude: 41° 53' 04", Longitude: 121° 22' 4' (NAD83 UTM: 10 0635405E 4638181N)

**2. Site Address (if relevant):**

N/A

**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.

It is not clear at this time if the District has an existing easement or license to maintain and construct water utilities on the USBR land where the existing tanks and Wells 1 and 2 are located. Well 3 appears to be located within the County road ROW. John Sanders (Board President) is currently reviewing

existing documents to determine if easements of land use licenses exist, or if this system has been grandfathered in due to its complex history and federal ownership as an internment camp.

**4. Project Location Notes:**

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**E. PROJECT TASKS, BUDGET AND SCHEDULE**

**1. Projected Project Start Date: 3/1/20**

**Anticipated Project End Date: 12/31/22**

**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	12/31/20
Notice & invitation to consult sent to Tribes per AB52	N	12/31/20
Notice of Preparation	N	2/15/21
Draft EIR/MND/ND	N	2/28/21
Public Review	N	2/28/21
Final EIR/MND/ND	N	4/30/21
Adoption of Final EIR/MND/ND	N	4/30/21
Notice of Determination	N	4/30/21
N/A - not a CEQA Project	N	

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

**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
Encroachment Permit	Modoc County	5/30/21

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

N/A

### 6. Describe the financial need for the project.

NCWD is designated as an SDAC according to the DAC Mapping Tool provided by DWR, included as Attachment 1. All phases of the proposed project are estimated to cost approximately \$1.8 million. If grant funding is not obtained, a 100% loan at 2.5% interest over 40 years would result in a yearly increase in rate per customer of about \$260.

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

**Describe how a scaled budget would impact the overall project.**

The scaled project would include only SCADA improvements to the existing system and drilling of a test well. Construction of the well house would have to be completed in the next phase of the project.

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

Derived budget costs for the Proposed Project are based on planning, design, and construction costs from similar prevailing wage rate public works projects that have been recently bid and constructed in the north state incremented up by the Engineering News Record Construction Cost Index to reflect present industry costs. Costs included are for SCADA controls, well drilling, and pump house construction based on average market value and equal those required by prevailing wage.

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

The project alternatives consider breaking construction of the new well into two phases with the first phase including all planning and environmental costs, design and construction of new SCADA controls and a test well located adjacent to Well 2.

### 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. NCWD is an SDAC as defined by DWR shown in the Mapping Tool in Attachment 1. 100% of the proposed project will serve this area. Refer to Section C, item 14 for a description of the water-related needs that the project directly addresses.

**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:**

None

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**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 main issues with the water system include failing SCADA controls between the wells and the storage tank, insufficient source capacity when nearby irrigation wells are running, and failing paint systems and leaks in the older steel water storage tank. The new SCADA controls will help to ensure the system operates more reliably and the tank does not run dry or overflow, and the new well will help to ensure reliable source capacity for the community. Improvements to the existing tank will be assessed for future construction funding.

**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.

Wells 1 and 2 have tested positive for arsenic concentrations. A new well may provide water free of arsenic 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.

Replacement of the SCADA control system will ensure the system does not depressurize which can be a hazard for public health if contaminated groundwater is near the depressurized distribution system. Tank overflows use excessive energy and chemicals to treat water that is then wasted. The tank

overflows increase the overall operating cost of the system. System control improvements and a new well will help ensure safe, clean, affordable, and accessible water for the community.

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
<b>Water Supply</b>				
Increased Water Supply Reliability	310	Connections	\$186,000	\$600/connection
Avoided Electrical Costs	17,500	kWh/year	\$2,625	\$0.15/kW
Avoided Costs Associated with Emergency Repairs	100	Control failures/yr	\$10,000	\$100/failure
<b>Water Quality</b>				
Avoided Water Treatment Costs	60	gal/year	\$300	\$5/gallon chemical
Bacteria/Contamination Reduction	100	Control failures/yr	See item 7 below	
<b>Other Ecosystem Service Benefits</b>				

Potential Benefits Description	Physical Amt of Benefit	Physical Units	Est. Economic Value per year	Economic Units
<b>Other Benefits</b>				
Social Health and Safety	725	people	See item 7 below	
Carbon Emissions Reductions from Reduced Electricity Use	17,500	kWh/year	4375	0.25 KgCO2e/kWh

**7. Project Justification & Technical Basis Notes:**

Losses in pressure in the system increase the likelihood of bacterial contaminants entering the distribution system due to reduced pressures. Reducing bacterial contaminants/contamination and ensuring the social health and safety of the public is the number one priority and cannot be monetized.

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

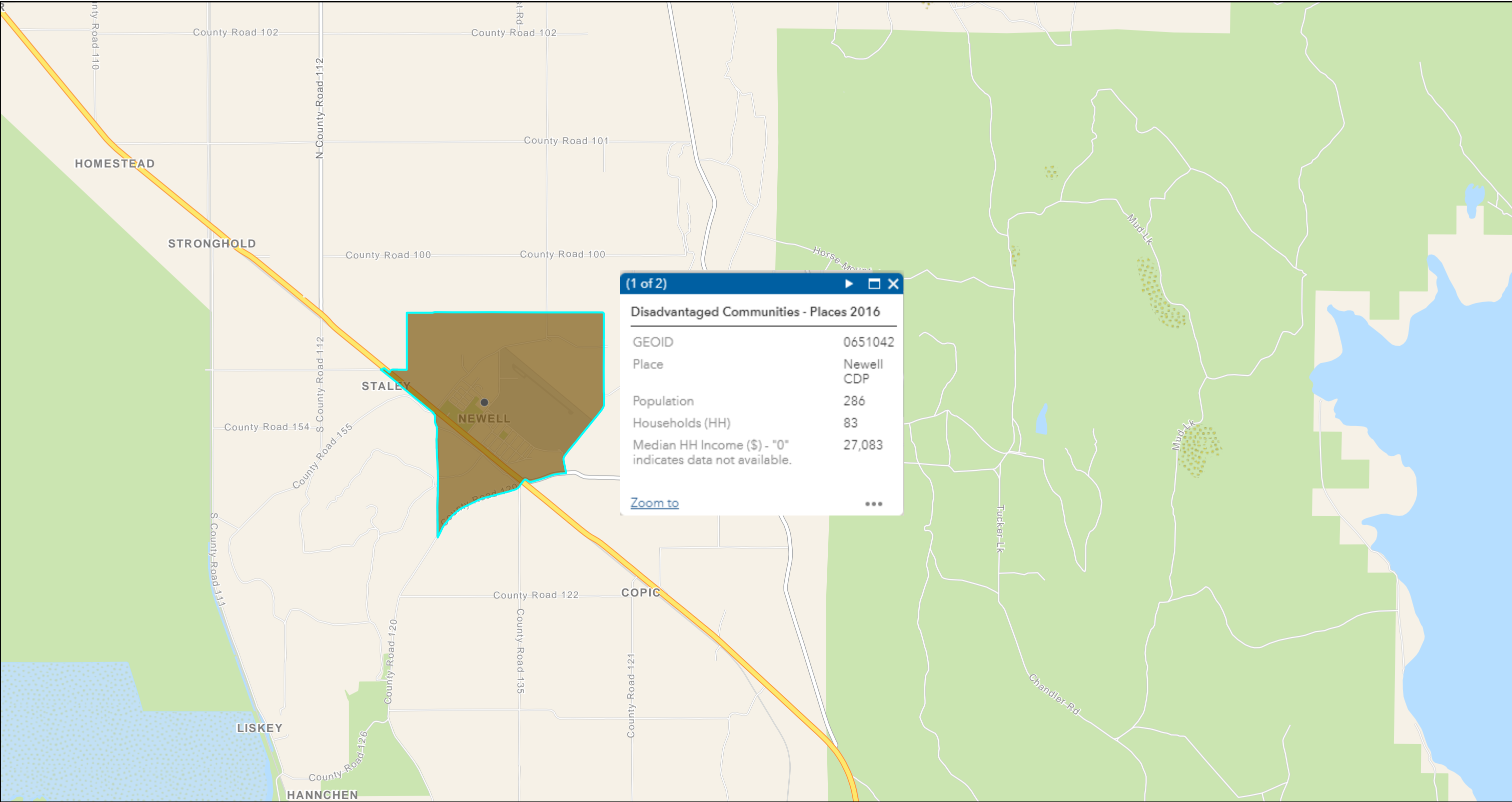
Project Name: NCWD Water System Improvement Project - Overall Project Budget  
 Organization Name: Newell County Water District (NCWD)  
 This budget corresponds to the detailed cost estimate provided in Attachment 3, Table 1.

Task #	Major Tasks	Task Description	Major Deliverables	Current Stage of Completion	IRWM Task Budget	Non-State Match	Total Task Budget	Start Date	Completion Date
<b>A</b>	<b>Category (a): Direct Project Administration</b>								
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. Provide funding coordination throughout all aspects of the project.	Invoices, audited financial statements and other deliverables as required	0%	\$5,000.00	\$0.00	\$5,000.00	3/1/20	12/31/22
2	Monitoring Plan	Develop Monitoring Plan to include goals and measurable objectives	Final Monitoring Plan	0%	\$5,000.00	\$0.00	\$5,000.00	4/1/20	5/1/20
3	Labor Compliance Program	Execute service agreement with Labor Compliance Program company	Submission of Labor Compliance Program	0%	\$30,000.00	\$0.00	\$30,000.00	3/1/22	9/30/22
4	Reporting	Develop monthly reports describing work completed, challenges, and strategies for reaching remaining project objectives. Develop Final Report	Quarterly and Final Reports	0%	\$10,000.00	\$0.00	\$10,000.00	3/1/20	10/31/22
<b>B</b>	<b>Category (b): Land Purchase/Easement</b>								
1	Land Purchase/Easement	Research/acquire record maps, prepare legal descriptions, obtain preliminary title reports, get property appraisal, and acquire land and/or easements	Final easements and/or deeds of land acquired	0%	\$50,000.00	\$0.00	\$50,000.00	7/1/20	7/30/21
<b>C</b>	<b>Category (c): Planning/Design/Engineering/Environmental Documentation</b>								
1	Final Planning	Finalize preliminary plans and recommended improvements, including location of proposed water storage tank	Final Design /Plans & Specifications	0%	\$30,000.00	\$0.00	\$30,000.00	3/1/20	4/30/20
2	Final Design /Plans & Specifications	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 the District and regulatory agencies to ensure a high quality product.	Final Design /Plans & Specifications	0%	\$101,000.00	\$0.00	\$101,000.00	12/1/20	7/30/21
3	Environmental Documentation: CEQA *	Notify tribes about the project and solicit input per AB-52; Conduct preliminary project review; Prepare Initial Study and all relevant CEQA documents as per CEQA Guidelines. File Notice of Determination	Filed Notice of Determination & Adopted Initial Study Negative Declaration	0%	\$80,000.00	\$0.00	\$80,000.00	5/1/20	4/30/21
4	Permit Development *: Modoc County Encroachment and Grading Permit - Costs are included in construction costs as the contractor will be responsible for them.	Encroachment and Grading Permit: a standard encroachment and grading permit for improvements within a street right-of-way and for earthwork shall be secured to accommodate all construction activities for the project. - Costs are included in construction costs as the contractor will be responsible for them.	Final Modoc County Encroachment and Grading Permit - Costs are included in construction costs as the contractor will be responsible for them.	0%	\$0.00	\$0.00	\$0.00	2/1/22	3/1/22
<b>D</b>	<b>Category (d): Construction/Implementation</b>								
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%	\$20,000.00	\$0.00	\$20,000.00	8/1/21	11/26/21
2	Mobilization and Site Preparation	Prepare Site and mobilize project:1. Initiate project site preparation; 2. Order project equipment and supplies; 3. Assure project permits are in place; 4. Conduct pre-project site photo-monitoring	Summary of site preparation activities in monthly reports; pre-project site photos	0%	\$100,000.00	\$0.00	\$100,000.00	3/1/22	4/29/22
3	Project Construction/Implementation	Installation of 4,200 feet of 6-inch PVC water main, isolation valves, service connections, and fire hydrants. Installation of water storage tank, 2,500 feet of pipeline and booster pump station as needed depending on tank location.	Summary of construction activities in monthly progress report; Photo documentation; Construction completed	0%	\$1,021,426.00	\$0.00	\$1,021,426.00	3/1/22	9/30/22
4	Project Construction/Implementation: 10% Contingency	10% Construction Contingency	Summary of construction activities in monthly progress report; Photo documentation; Construction completed	0%	\$136,000.00	\$0.00	\$136,000.00	3/1/22	9/30/22
5	Project Signage	Install construction project sign	Project sign	0%	\$1,000.00	\$0.00	\$1,000.00	3/1/22	9/30/22
6	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%	\$20,000.00	\$0.00	\$20,000.00	9/1/22	12/31/22

**Project Name:** NCWD Water System Improvement Project - Overall Project Budget  
**Organization Name:** Newell County Water District (NCWD)  
**This budget corresponds to the detailed cost estimate provided in Attachment 3, Table 1.**

Task #	Major Tasks	Task Description	Major Deliverables	Current Stage of Completion	IRWM Task Budget	Non-State Match	Total Task Budget	Start Date	Completion Date
7	Project Performance Monitoring	The performance of the project will be monitored in accordance to the Monitoring Plan using the following measurement tools and methods: Comparing pumping and chemical costs before project to after project.	Comparison of pumping and chemical costs pre-project to post-project	0%	\$5,000.00	\$0.00	\$5,000.00	4/1/20	12/31/25
8	Construction Administration	Complete tasks necessary to administer construction contract. Keep daily records of construction activities, inspection, and progress. Conduct project construction photo-monitoring.	Construction Management Logs; Completed construction administration tasks documented in monthly progress reports	0%	\$232,000.00	\$0.00	\$232,000.00	3/1/22	12/31/22
<b>Total North Coast Resource Partnership 2018/19 IRWM Grant Request</b>					<b>\$1,846,426.00</b>	<b>\$0.00</b>	<b>\$1,846,426.00</b>		
Is Requested Budget scalable by 25%? If yes, indicate scaled totals; if no delete budget amount provided.					<b>\$1,384,819.50</b>	<b>\$0.00</b>	<b>\$1,384,819.50</b>		
Is Requested Budget scalable by 50%? If yes, indicate scaled totals; if no delete budget amount provided.					<b>\$923,213.00</b>	<b>\$0.00</b>	<b>\$923,213.00</b>		





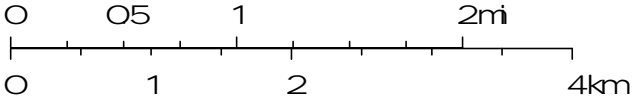
3/14/2019, 2:29:36 PM

California Counties

Disadvantaged Communities - Places 2016

- Data Not Available
- Severely Disadvantaged Communities (MHI < \$33,270)
- Disadvantaged Communities (\$33,270 > MHI < \$51,026)

1:72,224



US Census Bureau, U.S. Bureau of Reclamation, California Department of Conservation, California Department of Fish and Game, California Department of Forestry and Fire Protection, National Oceanic and Atmospheric Administration



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Chico, California 95928

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fax 530.894.5143

## ATTACHMENT 2

March 13, 2019

**Lab ID: 19C0226**

LAURIE McCOLLUM  
PACE ENGINEERING  
1730 SOUTH STREET  
REDDING, CA 96001  
RE: GENERAL TESTING

Dear LAURIE McCOLLUM,

Enclosed are the analysis results for Work Order number 19C0226. All analyses were performed under strict adherence to our established Quality Assurance Plan. Any abnormalities are listed in the qualifier section of this report.

If you have any questions regarding these results, please feel free to contact us at any time. We appreciate the opportunity to service your environmental testing needs.

Sincerely,

A handwritten signature in black ink, appearing to read "Ricky D. Jensen".

For

A handwritten signature in black ink, appearing to read "Ricky D. Jensen".

Ricky D. Jensen

Laboratory Director

California ELAP Certification Number 1677



www.basiclab.com

2218 Railroad Avenue  
Redding, California 96001

voice 530.243.7234  
fax 530.243.7494

3860 Morrow Lane, Suite F  
Chico, California 95928

voice 530.894.8966  
fax 530.894.5143

**Report To:** PACE ENGINEERING  
1730 SOUTH STREET  
REDDING, CA 96001

**Attention:** LAURIE MCCOLLUM

**Project:** GENERAL TESTING NEWELL COUNTY WATER DISTRICT 2738.01

**Description:** 100,000 GALLON WATER TANK

**Matrix:** Paint Chips

**Lab ID:** 19C0226-01

**Lab No:** 19C0226

**Reported:** 03/13/19

**Phone:** 244-0202

**Sampled:** 03/01/19 13:00

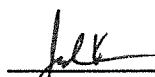
**Received:** 03/06/19 09:18

## Metals - Solid

Analyte	Units	Results	Qualifier	MDL	RL	Method	Analyzed	Prepared	Batch
Lead	mg/kg	6.7		1.0	5.0	EPA 6010B	03/12/19	03/08/19	B9C1123

## Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
<	Less than reporting limit
≤	Less than or equal to reporting limit
>	Greater than reporting limit
≥	Greater than or equal to reporting limit
MDL	Method Detection Limit
RL/ML	Minimum Level of Quantitation
MCL/AL	Maximum Contaminant Level/Action Level
mg/kg	Results reported as wet weight
TTL	Total Threshold Limit Concentration
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leachate Procedure
Note 1	Received Temperature - according to EPA guidelines, samples for most chemistry methods should be held at ≤6 degrees C after collection, including during transportation, unless the time from sampling to delivery is <2 hours. Regulating agencies may invalidate results if temperature requirements are not met.
Note 2	According to 40 CFR Part 136 Table II, the following tests should be analyzed in the field within 15 minutes of sampling: pH, chlorine, dissolved oxygen, and sulfite.

  
Approved By

Basic Laboratory Inc  
California ELAP Cert #1677 and #2718



ATTACHMENT 3


Table 1 NEWELL COUNTY DISTRICT WATER SYSTEM IMPROVEMENTS PROJECT PROJECT COST ESTIMATE - Total Project Costs					
					
1	WELL DRILLING COSTS	Amount	Units	Unit Price	Price
2	Mobilize, Bonds, Insurance/Demobilize & Well Permit	1	LS	\$40,000	\$40,000
3	Install temporary conductor casing	1	LS	\$10,000	\$10,000
4	Drill pilot hole to 600 Ft BGS	600	LF	\$100	\$60,000
5	Perform E-log and sieve analysis	1	LS	\$6,500	\$6,500
6	Perform water quality zone sampling and recommend screen size & locations	1	LS	\$20,000	\$20,000
7	Ream pilot hole to minimum 24-inch to 100 Ft BGS for sanitary seal	100	LF	\$180	\$18,000
8	Ream pilot hole to minimum 20-inch from 100 Ft to 600 Ft BGS for production casing	500	LF	\$160	\$80,000
9	Install 14-inch HSLA blank casing from 0 Ft to 500Ft BGS	500	LF	\$160	\$80,000
10	Install 14x12-inch X 5 Ft x 3/8-inch HSLA reducer	5	LF	\$200	\$1,000
11	Install 12-inch SS louvered screen	50	LF	\$240	\$12,000
12	Install 12-inch SS blank casing	50	LF	\$220	\$11,000
13	Install #8 gravel pack from 50 Ft to 600 Ft	550	LF	\$80	\$44,000
14	Install 3-inch gravel pipe from 0 Ft to 55 Ft	55	LF	\$10	\$550
15	Install 2-inch sounder pipe	1	LS	\$300	\$300
16	Install production casing sanitary seal from 0 Ft to 50 Ft BGS	50	LF	\$90	\$4,500
17	Perform plumbness and alignment test	1	LS	\$5,000	\$5,000
18	Surge block & swab well development	12	Hrs	\$300	\$3,600
19	Install/remove test pump & discharge pipe	1	LS	\$2,000	\$2,000
20	Pump development	12	Hrs	\$350	\$4,200
21	Perform well capacity test	72	Hrs	\$350	\$25,200
22	Disinfect well & cap	1	LS	\$1,500	\$1,500
23	Remove drilling mud	1	LS	\$5,000	\$5,000
24					
25	Subtotal				\$434,350
26	Construction contingency @ 12%				\$53,000
27	TOTAL WELL DRILLING COSTS				\$487,350
28	WELL PUMP HOUSE STRUCTURAL, MECHANICAL, ELECTRICAL COSTS				
29	Mobilize, Bonds, Insurance & Demobilize	1	LS	\$60,000	\$60,000
30	Site excavation	1	LS	\$15,000	\$15,000
31	Concrete footing & slab (12 Ft x 14 Ft)	6.2	CY	\$700	\$4,356
32	Masonry	520	SF	\$60	\$31,200
33	Roof	288	SF	\$40	\$11,520
34	Well pump, motor & miscellaneous	1	LS	\$150,000	\$150,000
35	Piping, valves & miscellaneous mechanical	1	LS	\$30,000	\$30,000
36	Fence	400	LF	\$20	\$8,000
37	Electrical	1	LS	\$125,000	\$125,000
38	Emergency power generator & MTS connection	1	LS	\$125,000	\$125,000
39	SCADA for Tank, Well 1 & Well 3 & Well 4	1	LS	\$120,000	\$120,000
40	Operational Readiness Test	1	LS	\$4,000	\$4,000
41	Functional Acceptance Test	1	LS	\$2,000	\$2,000
42	Submittals	1	LS	\$2,000	\$2,000
43	Subtotal				\$688,076
44	Construction contingency and inflation @ 12%				\$83,000
45	TOTAL WELL PUMP HOUSE STRUCTURAL, MECHANICAL, ELECTRICAL COSTS				\$771,076
46	TOTAL CONSTRUCTION COST				\$1,258,426
47	Indirect Costs				
48	Engineering Services				
49	Finalize Planning				\$20,000
50	Bidding/Contract Award Services				\$20,000
51	Engineering design @ 8% of construction costs				\$101,000
52	Engineering construction administration @ 6% of construction costs				\$76,000
53	Construction Observation				\$116,000
54	Startup Services and Record Drawings				\$20,000
55	SCADA Programing				\$40,000
56	1982 Steel Water Storage Tank Structural Assessment				\$10,000
57	Total Engineering Services				\$403,000
58	Other Indirect Services				
59	Prevailing Wage Monitoring				\$30,000
60	Easement Acquisition				\$50,000
61	Environmental				\$80,000
62	Funding Administration				\$20,000
63	Newell County Water District Administration and Legal				\$5,000
64	Total Other Indirect Services				\$185,000
65	TOTAL INDIRECT COSTS				\$588,000
	TOTAL PROJECT COST				\$1,846,426

Table 2 NEWELL COUNTY DISTRICT WATER SYSTEM IMPROVEMENTS PROJECT PROJECT COST ESTIMATE - Phase 1 Costs					
1	WELL DRILLING COSTS	Amount	Units	Unit Price	Price
2	Mobilize, Bonds, Insurance/Demobilize & Well Permit	1	LS	\$40,000	\$40,000
3	Install temporary conductor casing	1	LS	\$10,000	\$10,000
4	Drill pilot hole to 600 Ft BGS	600	LF	\$120	\$72,000
5	Perform E-log and sieve analysis	1	LS	\$6,500	\$6,500
6	Perform water quality zone sampling and recommend screen size & locations	1	LS	\$20,000	\$20,000
7	Ream pilot hole to minimum 24-inch to 100 Ft BGS for sanitary seal	100	LF	\$200	\$20,000
8	Ream pilot hole to minimum 20-inch from 100 Ft to 600 Ft BGS for production casing	500	LF	\$180	\$90,000
9	Install 14-inch HSLA blank casing from 0 Ft to 500Ft BGS	500	LF	\$160	\$80,000
10	Install 14x12-inch X 5 Ft x 3/8-inch HSLA reducer	5	LF	\$200	\$1,000
11	Install 12-inch SS louvered screen	50	LF	\$240	\$12,000
12	Install 12-inch SS blank casing	50	LF	\$220	\$11,000
13	Install #8 gravel pack from 50 Ft to 600 Ft	550	LF	\$80	\$44,000
14	Install 3-inch gravel pipe from 0 Ft to 55 Ft	55	LF	\$10	\$550
15	Install 2-inch sounder pipe	1	LS	\$300	\$300
16	Install production casing sanitary seal from 0 Ft to 50 Ft BGS	50	LF	\$90	\$4,500
17	Perform plumbness and alignment test	1	LS	\$5,000	\$5,000
18	Surge block & swab well development	12	Hrs	\$300	\$3,600
19	Install/remove test pump & discharge pipe	1	LS	\$2,000	\$2,000
20	Pump development	12	Hrs	\$350	\$4,200
21	Perform well capacity test	72	Hrs	\$350	\$25,200
22	Disinfect well & cap	1	LS	\$1,500	\$1,500
23	Remove drilling mud	1	LS	\$5,000	\$5,000
24	Subtotal				\$458,350
25	Construction contingency @ 12%				\$55,002
26	TOTAL WELL DRILLING COSTS				\$513,352
27	SCADA CONTROL AND ELECTRICAL COSTS				
28	Electrical	1	LS	\$50,000	\$50,000
29	SCADA for Tank, Well 1 & Well 3	1	LS	\$100,000	\$100,000
30	Operational Readiness Test	1	LS	\$4,000	\$4,000
31	Functional Acceptance Test	1	LS	\$2,000	\$2,000
32	Subtotal				\$156,000
33	Construction contingency and inflation @ 12%				\$18,720
34	TOTAL WELL PUMP HOUSE STRUCTURAL, MECHANICAL, ELECTRICAL COSTS				\$174,720
35	TOTAL CONSTRUCTION COST				\$688,072
36	Indirect Costs				
37	Engineering Services				
38	Finalize Planning				\$20,000
39	Bidding/Contract Award Services				\$20,000
40	Engineering design @ 8% of construction costs				\$56,000
41	Engineering construction administration @ 6% of construction costs				\$42,000
42	Construction Observation				\$87,000
43	Startup Services and Record Drawings				\$20,000
44	SCADA Programing				\$40,000
45	1982 Steel Water Storage Tank Structural Assessment				\$10,000
46	Total Engineering Services				\$295,000
47	Other Indirect Services				
48	Prevailing Wage Monitoring				\$25,000
49	Easement Acquisition				\$50,000
50	Environmental				\$80,000
51	Funding Administration				\$20,000
52	Newell County Water District Administration and Legal				\$5,000
53	Total Other Indirect Services				\$180,000
54	TOTAL INDIRECT COSTS				\$475,000
TOTAL PROJECT COST					\$1,164,000

Table 3 NEWELL COUNTY DISTRICT WATER SYSTEM IMPROVEMENTS PROJECT PROJECT COST ESTIMATE - PHASE 2					
1	PHASE 2 PROJECT COSTS	Amount	Units	Unit Price	Price
2	WELL PUMP HOUSE STRUCTURAL, MECHANICAL, ELECTRICAL COSTS				
3	Mobilize, Bonds, Insurance & Demobilize	\$1	LS	\$60,000	\$60,000
4	Site excavation	\$1	LS	\$15,000	\$15,000
5	Concrete footing & slab (12 Ft x 14 Ft)	\$6	CY	\$700	\$4,356
6	Masonry	\$520	SF	\$60	\$31,200
7	Roof	\$288	SF	\$40	\$11,520
8	Well pump, motor & miscellaneous	\$1	LS	\$150,000	\$150,000
9	Piping, valves & miscellaneous mechanical	\$1	LS	\$30,000	\$30,000
10	Fence	\$400	LF	\$20	\$8,000
11	Electrical	\$1	LS	\$125,000	\$125,000
12	Emergency power generator & MTS connection	\$1	LS	\$125,000	\$125,000
13	SCADA for Tank, Well 1 & Well 3 & Well 4	\$1	LS	\$120,000	\$120,000
14	Operational Readiness Test	\$1	LS	\$4,000	\$4,000
15	Functional Acceptance Test	\$1	LS	\$2,000	\$2,000
16	Submittals	\$1	LS	\$2,000	\$2,000
17	Subtotal				\$688,076
18	Construction contingency and inflation @ 12%				\$82,569
19	TOTAL CONSTRUCTION COST				\$770,645
20	Indirect Costs				
21	Engineering Services				
22	Finalize Planning				\$20,000
23	Bidding/Contract Award Services				\$20,000
24	Engineering design @ 8% of construction costs				\$62,000
25	Engineering construction administration @ 6% of construction costs				\$47,000
26	Construction Observation				\$87,000
27	Startup Services and Record Drawings				\$20,000
28	SCADA Programing				\$20,000
29	1982 Steel Water Storage Tank Structural Assessment				\$10,000
30	Total Engineering Services				\$286,000
31	Other Indirect Services				
32	Prevailing Wage Monitoring				\$30,000
33	Funding Administration				\$20,000
34	Newell County Water District Administration and Legal				\$5,000
35	Total Other Indirect Services				\$55,000
36	TOTAL INDIRECT COSTS				\$341,000
TOTAL PROJECT COST					\$1,112,000