



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: City of Weed Automated Meter Reading Project

A. ORGANIZATION INFORMATION

- 1. Organization Name: City of Weed (City)**
- 2. Contact Name/Title**
Name: Craig Sharp
Title: Public Works Director
Email: sharp@ci.weed.ca.us
Phone Number (include area code): (530) 938-5020
- 3. Organization Address (City, County, State, Zip Code):**
Weed, Siskiyou, CA, 96094
- 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: Ron Stock

Title: City Manager

Email: stock@ci.weed.ca.us

Phone Number (include area code): (530) 938-5020

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

Briefly describe these previous projects.

2016 Boles Fire Water System Rehabilitation/Water System Restoration

2004 Water Replacement Project

1995 South Weed Infrastructure Improvements

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

City of Weed Automated Meter Reading Project

8. Organization Information Notes:

N/A

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 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: City of Weed Automated Meter Reading 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 proposed project includes the installation of automated meter reading (AMR) water meters for all service connections in the City, along with AMR devices, software, and training to City staff. AMR meters will allow the City to rapidly gather more accurate water usage data, including leak detection indicators for customers.

4. Project Description

The proposed project will replace the current 1,206 manual read water meters in the City with AMR meters, which will decrease the amount of time and resources needed to obtain customers' water usage data. The current meters are at or near their useful service life, which results in more frequent maintenance and less accurate readings. Most studies performed by the water industry have concluded that water meters should be replaced every 15 to 20 years.

Upon completion of the project, the City AMR devices and software will allow for more frequent readings during drought conditions that are increasing in both frequency and severity due to climate change, which will provide customers up-to-date water usage data, increasing both water use awareness and promoting water conservation. Increasing awareness and promoting water conservation is known to reduce demand on water supplies. Increasing the accuracy of meter readings will also allow the City to better quantify unaccounted water losses. New AMR devices and software will allow the City to utilize accurate and reliable data to predict water supply availability and account for changes in service demand. Completion of the proposed project will 1) provide more reliable water service to its customers, 2) reduce energy use, GHG emissions, and water loss while enhancing water supply reliability, 3) reduce operation and maintenance costs and financial risks by improving leak detection, and 4) increase community resilience to climate change.

5. Specific Project Goals/Objectives

Goal 1: Beneficial Uses of Water

Goal 1 Objective: Ensure water supply reliability and quality while minimizing impacts to sensitive resources.

Goal 1 Objective: Improve drinking water infrastructure for the severely disadvantaged community (SDAC) of Weed.

Goal 1 Objective: Protect groundwater resources.

Goal 1 Objective: Promote water conservation.

Goal 2: Climate Adaptation and Energy Independence

Goal 2 Objective: Enhance community resilience to drought conditions.

Goal 2 Objective: Improve local water and energy use efficiency.

Goal 2 Objective: Reduce GHG emissions by conserving water requiring less pumping.

Goal 2 Objective:

Goal 3: Ecosystem Conservation and Enhancement

Goal 3 Objective: Conserve, enhance, and restore watersheds and aquatic ecosystems by reducing water use from spring water source.

Goal 3 Objective: Improve salmonid populations by conserving, enhancing, and restoring required habitats and watershed processes.

Goal 3 Objective: Conserve and protect special-status species and habitats in the Klamath-Siskiyou ecoregion.

Additional Goals & Objectives (List)

Goal 4: Economic Vitality

Goal 4 Objective: Support and enhance the economic vitality of the SDAC of Weed by improving existing infrastructure.

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

The proposed project benefits an SDAC in which the median household income (MHI) is approximately 49% of the State of California's. Replacing old meters with new AMR meters will help promote water conservation and relieve stresses on the City's spring and groundwater supply sources. The project increases the City's ability to inform customers of leaks that they can address. A decrease in water use will directly impact and reduce the amount of GHG emissions associated with pumping groundwater to customers. This also increases water supply availability, enhancing community resilience to some of the effects attributed to climate change, such as severe drought conditions. With AMR meters, customers can have access to more frequent data on their water use, which will promote water conservation. By conserving water at the source, benefits to downstream special-status species and habitats, ecosystems, and watersheds are expected.

7. Describe the need for the project.

The City currently utilizes manual read meters to acquire customers' water use information. This method is time consuming and results in long periods before the City or customers can notice a significant change in water usage, possibly due to leaks. The majority of these meters have reached or exceeded their useful lives. The City's water supply is already facing uncertainty, and the most viable backup water supply would require drilling new wells, which can be expensive and challenging given the variability of the volcanic-based subsurface geology. Any reduction in water losses or increase in water conservation would help reduce stresses on the City's current water sources. By installing AMR meters, the City can reduce operation and maintenance costs associated with older conventional meters and provide its customers with frequent data on their water use in an effort to conserve and ensure water security, improving community resilience to effects caused by climate change.

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

Shasta River
Klamath River

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?

N/A

10. Describe the population served by this project.

The City has a population of 2,967. Historically, the City was a lumber town, sustained by local lumber mills that provided the majority of jobs in the region. In the early 1980s, more restrictive regulations crippled the lumber industry, and many jobs were lost in the region. The City's current MHI is \$32,772, which is about 49% of the State's MHI. Refer to Attachment 2 - DAC/SDAC Map. Approximately 35% of the population is of ethnic minority descent.

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)

City of Weed. Refer to Attachment 2 - DAC/SDAC Map.

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)

City of Weed. Refer to Attachment 2 - DAC/SDAC Map.

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 City is designated as an SDAC according to both the NCRP's mapping data tool and DWR's DAC Mapping Tool. Refer to Attachment 2. The City is continuously looking for ways to reduce costs for their rate payers. The City's current method of manually collecting customers' water usage data is time

consuming and has a greater source of possible error. AMR meters will decrease the amount of time and resources needed to obtain customers' water usage data, as well as eliminate some sources of error from data collection. Furthermore, AMR meters will allow the City to quickly and efficiently gather water consumption and leak detection data, both of which will allow the City to minimize water loss and promote water conservation, ensuring water security and improving community resilience to the effects caused by climate change.

- 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 proposed AMR meters will allow the City to easily obtain accurate customers' water usage data. This allows flexibility to take more frequent readings when severe droughts occur, which can be used to supply customers with more frequent information on their water usage and help promote water conservation. By decreasing water consumption, the City will be able to cut back on energy usage and emissions associated with pumping groundwater to its customers and reduce reliance on Beaugan Springs.

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

By having more accurate water meters and by promoting water conservation measures, residents will be more aware of water usage and waste. Promoting water conservation has multiple benefits, not only saving money and energy, but also increasing water supply for local and downstream beneficial uses. More efficient water use will reduce demand on both groundwater and spring source water supplies, increasing water supply availability and reliability.

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

Water conservation will decrease the amount of water needed from Beaugan Springs, which in turn will increase the amount of water that will naturally flow into the Shasta and Klamath Rivers. This will enhance and help conserve these sensitive habitats for salmonids and other endangered and threatened species. Refer to Attachment 1.

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

This project is supported by local City officials. The water conservation benefits will extend beyond the City and provide more water to benefit the region.

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

City of Weed - Project Sponsor

- 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.

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?

Statewide Priority Action #1:

- project will build on current water conservation efforts and promote the innovation of new systems for increased water conservation.

- project will increase water sector energy efficiency and GHG reduction capacity.

Statewide Priority Action #2:

- project will ensure water security for the SDAC of Weed.

Statewide Priority Action #4:

- project will protect and restore important ecosystems by enhancing water flows in stream systems.

Statewide Priority Action #5:

- project will improve water supply reliability and improve drought preparedness.

23. Project Information Notes:

D. PROJECT LOCATION

1. Describe the location of the project

Geographical Information

The proposed project is located entirely within the City of Weed in Siskiyou County, California. The project location is, generally, centered around: 41° 25' 5" N, 122° 23' 0" W.

2. Site Address (if relevant):

City of Weed, 550 Main Street, Weed, CA 96094

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.

The proposed project would result in installation of water meters within the public right-of-way for all water connections within the City.

4. Project Location Notes:

E. PROJECT TASKS, BUDGET AND SCHEDULE

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

Anticipated Project End Date: 12/31/20

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/A	
Notice & invitation to consult sent to Tribes per AB52	N/A	
Notice of Preparation	N/A	
Draft EIR/MND/ND	N/A	
Public Review	N/A	
Final EIR/MND/ND	N/A	
Adoption of Final EIR/MND/ND	N/A	
Notice of Determination	N/A	
N/A - not a CEQA Project	N/A	

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

The project consists of categorically exempt improvements for replacement of existing infrastructure. The City will be the lead agency and file a categorical exemption with the state clearinghouse. This will be completed within three months of award of funding.

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	Caltrans	3/1/20

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

No issues are foreseen that may delay acquisition of permits.

6. Describe the financial need for the project.

The City is an SDAC. After the Boles Fire in September 2014, many who lost their homes did not return. As such, the City's revenue for its water enterprise fund has decreased accordingly. The City is currently in a 5-year phased water rate increase to meet existing expenses and maintain an operating reserve with no revenue for a capital project reserve. Therefore, the City must obtain outside grant funding to implement the subject project.

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

Describe how a scaled budget would impact the overall project.

The proposed project is easily scalable. A scaled budget would simply reduce the number of AMR meters the City would be able to install. The City would prioritize meter installation on high water users first, and then focus on installing meters in as many whole areas of the City as funds allow.

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

The basis of construction costs are based on similar public works projects recently bid and/or constructed in Siskiyou County and northern California. Project indirect and engineering costs are based on actual incurred costs to perform similar services for recent publicly bid projects.

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

The proposed project is the only viable alternative to obtain the desired benefits. A second alternative would be to install an advanced metering infrastructure (AMI) system at a significantly higher capital cost and is thus not economically feasible.

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

No non-state matching funds have been identified to date.

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

Drinking Water State Revolving Grant - Approximately \$20,000 utilized for 50% surveying effort

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. The City is designated as an SDAC according to both the NCRP's mapping data tool and DWR's DAC Mapping Tool. 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 will address.

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:

N/A

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 existing water meters have met or exceeded their useful service life and have decreased accuracy. This decreased accuracy due to aging meters was identified in the City's 2003 Master Water Plan (MWP) as a possible factor for the 33.5% unaccounted water loss in 2002. That water loss equated to 227 million gallons per year, or about 700 acre-feet per year.

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.

By having more accurate water meters and promoting water conservation measures, residents are more aware of water usage and waste. Promoting water conservation and decreasing water use will reduce demand on both groundwater and spring source water supplies, leading to increased water supply availability and reliability that can provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary use throughout the City.

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.

The modern AMR meter technology will allow the City to better account for water usage in the City, reduce water loss due to leaks, better promote water conservation, and assist in safeguarding the availability and reliability of the City's existing water supply.

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 for Environmental Purposes	65	Ac-ft/yr	\$45,500	\$700/ Ac-ft/yr
Increased Water Supply Reliability	1,206	Connections	See Item 7 below	
Avoided Electrical Costs	30,000	kW-hr/yr	\$3,600	\$0.12/ kW-hr
Water Quality				
Other Ecosystem Service Benefits				
Other Benefits				
Decreased Operation & Maintenance Cost	816	man-hrs/yr	\$32,640	\$40.00/hr
Technology Benefit	11,350,000	gallons/yr	\$18,200	\$0.0016/gal
Social Health & Safety	2,967	people	See Item 7 below	
Carbon Emission Reduction from Reduced Electricity Use	10	tons	\$400	\$40/ton

7. Project Justification & Technical Basis Notes:

By having more accurate water meters and promoting water conservation measures, residents are more aware of water usage and waste. Promoting water conservation and decreasing water use will reduce demand on both groundwater and spring source water supplies, leading to increased water supply availability and reliability that can provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes throughout the City.

According to the City's 2003 MWP, the City experienced a 33.5% unaccounted water loss in 2002. That water loss equated to 227 million gallons per year, or about 700 acre-feet per year. The 2003 MWP identified the typical inaccuracies associated with aging meters. This project will address that factor. If it is assumed that the new meters can increase accuracy and account for 5% of unaccounted water loss, the City could account for 11,350,000 gallons and could increase revenue by a corresponding amount of \$18,200.

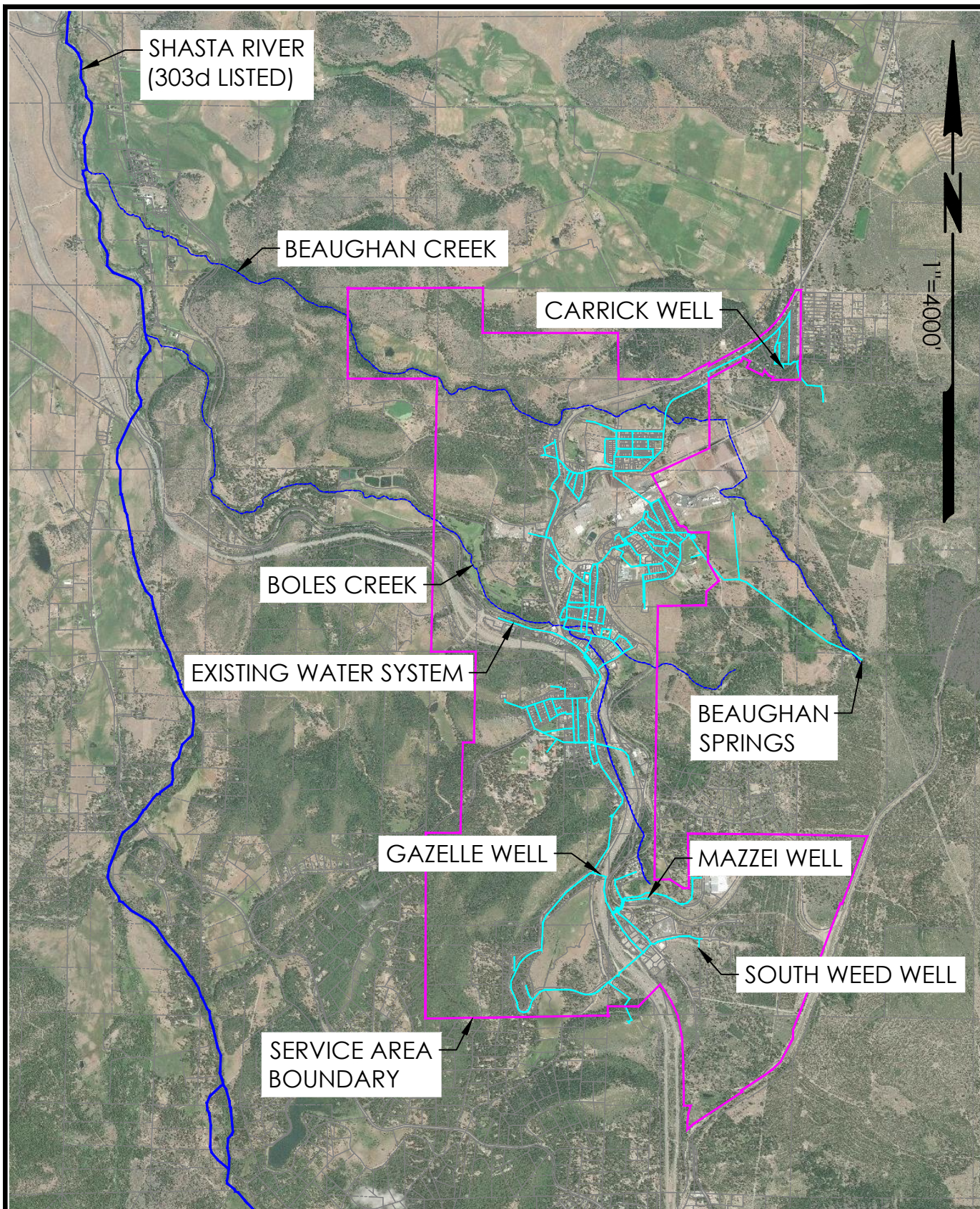
Major Tasks, Schedule, and Budget for North Coast Resource Partnership 2018/19 IRWM Project Solicitation

Project Name: Automated Meter Reading Project
 Organization Name: City of Weed

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%	\$30,000.00	\$0.00	\$30,000.00	1/1/20	12/31/20
2	Monitoring Plan	Develop Monitoring Plan to include goals and measurable objectives	Final Monitoring Plan	0%	\$5,000.00	\$0.00	\$5,000.00	1/1/20	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	5/1/20	11/15/20
4	Reporting	Develop monthly reports describing work completed, challenges, and strategies for reaching remaining project objectives. Develop Final Report.	Quarterly and Final Reports	0%	\$20,000.00	\$0.00	\$20,000.00	1/1/20	12/31/20
B Category (b): Land Purchase/Easement									
1				0%	\$0.00	\$0.00	\$0.00		
C Category (c): Planning/Design/Engineering/Environmental Documentation									
1	Survey	Complete land/topographic survey work needed for project design.	N/A	50%	\$20,000.00	\$20,000.00	\$40,000.00	1/1/20	1/31/20
2	Final Design/Plans	Develop a set of final design drawings and specifications ready to put out to bid. The drawings and specifications will conform to all necessary requirements stipulated by the District and regulatory agencies to ensure a high quality product.	Final Project Design and Construction Specifications	0%	\$120,000.00	\$0.00	\$120,000.00	2/1/20	3/31/20
3	Environmental Documentation: CEQA	This project is exempt from CEQA as the project's water-related benefits are entirely to a DAC; however, the City will still complete a Notice of Exemption to cover the project.	CEQA Notice of Exemption	0%	\$10,000.00	\$0.00	\$10,000.00	1/1/20	2/31/20
4	Permit Development *: Caltrans Encroachment Permit	Encroachment Permit: A standard encroachment permit for improvements within State Highway 97 right-of-way shall be secured to accommodate all construction activities for the project.	Caltrans Encroachment Permit	0%	\$5,000.00	\$0.00	\$5,000.00	1/1/20	3/1/20
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 Notice of Award	0%	\$25,000.00	\$0.00	\$25,000.00	3/1/20	5/1/20
2	Project Construction/Implementation: Automated Meter Installation	Replace approximately 1,206 manual read meters with automated read meters, including new meter box lid, and any associated plumbing.	Summary of construction activities in monthly progress report; Photo documentation; Construction completed	0%	\$1,271,000.00	\$0.00	\$1,271,000.00	6/1/20	10/15/20
3	Project Construction/Implementation: Automated Meter Reading Devices & Software	Provide City staff with essential equipment, software, and training to implement automated meter reading and integrate with the City's billing software.	Summary of construction activities in monthly progress report; Photo documentation; Construction completed	0%	\$87,000.00	\$0.00	\$87,000.00	6/1/20	10/15/20
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	6/1/20	10/15/20
5	Project Signage	Install Project Sign.	Photo documentation of Project Signage	0%	\$2,000.00	\$0.00	\$2,000.00	6/1/20	6/1/20
6	Project Closeout, 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%	\$10,000.00	\$0.00	\$10,000.00	9/15/20	10/15/20

Project Name: Automated Meter Reading Project
 Organization Name: City of Weed

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 production data versus consumption data to verify reduction in unaccounted for water.	Production vs Consumption Report	0%	\$4,000.00	\$0.00	\$4,000.00	1/21/21	12/31/23
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%	\$150,000.00	\$0.00	\$150,000.00	5/1/20	11/15/20
Total North Coast Resource Partnership 2018/19 IRWM Grant Request					\$1,925,000.00	\$20,000.00	\$1,945,000.00		
Is Requested Budget scalable by 25%? If yes, indicate scaled totals; if no delete budget amount provided.					\$1,443,750.00	\$15,000.00	\$1,458,750.00		
Is Requested Budget scalable by 50%? If yes, indicate scaled totals; if no delete budget amount provided.					\$962,500.00	\$10,000.00	\$972,500.00		



DATE
3/19

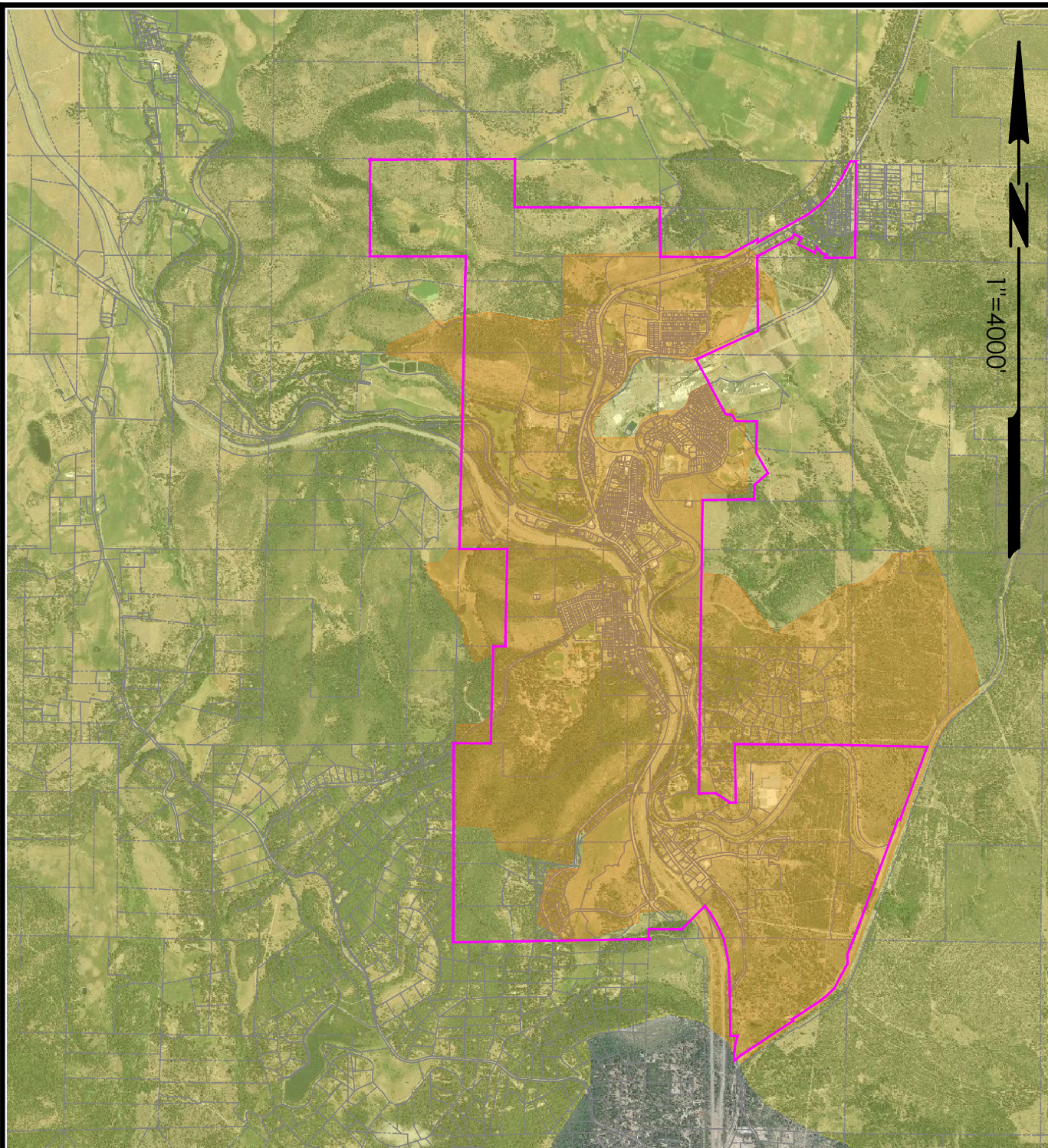


CITY OF WEED
AREA MAP

ATTACHMENT 1

JOB #161.78

Plot Date: March 15, 2019 - 10:46 am Login Name: cpaget
File Name: M:\Land Projects\0161.78 City Engineer Services\DWG\2019 IRWM Grant\Service Area.dwg, Layout: A1



- DISADVANTAGED COMMUNITY
- SEVERELY DISADVANTAGED COMMUNITY
- SERVICE AREA BOUNDARY

DATE
3/19



CITY OF WEED
DAC/SDAC MAP

ATTACHMENT 2

JOB #161.78