



**Proposition 84 Round 3 Implementation Proposition 84, Round 3 Implementation:  
Bishop Paiute Tribe Project Priority 1 of 2: Submitted May 1, 2015**

**Bishop Paiute Tribe 2015 IRWMP Project Submission 1:  
Meter Installation and Operations for Domestic Water/ Water Meter Supervisory Control and  
Data Acquisition (SCADA) System Upgrades**

**Work Plan (Pages 1-2)**

Overview of Need and Purpose of the Project: The Bishop Paiute Tribe seeks to manage its water resources with a goal of water conservation of the Reservation's water supply from groundwater/wells. The Tribe proposes to install 200 smart meters to ensure that all Tribal buildings, including all homes, will have the capacity to be metered. An updated Supervisory Control and Data Acquisition (SCADA) System will read the new meters. The meters that are installed currently will be read (they are installed but not being read) with a reading wand. The Tribe proposes to connect all meters on the Reservation for reading in order for all buildings' water use to be monitored. New meter pits and training in the SCADA system will be necessary. A rate study will also be needed.

Currently, the Reservation sustains 585 residential hook-ups, which include five mobile home parks with one meter each (approximately 60 units), and a number of commercial customers, which include two apartment buildings (38 units), Tribal offices/departments, the gas station, and the casino, plus leaseholders such as the Owens Valley Career Development Center (six buildings with one meter), Toiyabe Indian Health Project, Inc. Clinic and offices, the California Department of Motor Vehicles, and the US Forest Service/Bureau of Land Management. Domestic water is provided via groundwater wells and wastewater service is provided through Eastern Sierra Community Services District.

The Tribe has been charging lump sums for domestic water and wastewater services. Moving water also uses electricity, and our pump houses use a great deal of it. Metering each building that uses water and charging customers by gallons of water used will conserve water and electricity, while increasing revenues for our Public Works Department. Current charges for Water/Sewer are: \$35 Tribal Members, \$70 Non-Tribal Members, \$25 Tribal Elders, \$50 Non-Tribal Elders, \$14 Water only-Tribal Members, and \$28 Water only-Non-Tribal Members. Large commercial customers pay \$800 and \$2,000 totals, depending on overall usage. The United States Department of Agriculture has stated that it will only fund or loan to water systems that charge at least an annual rate of 1.5% of the state median income to guarantee system sustainability. The Reservation's rates are currently below that marker and cannot sustain our Public Works Department.

The Project effectively addresses long-term drought preparedness because the usage of millions of gallons of domestic water over the years could be reduced through domestic conservation efforts that will result from metering. Water use by wastewater treatment by the Eastern Sierra Community Services District will be less because less wastewater will flow out of the Reservation. Electricity use will be reduced because of the reduction in pumping water by the Tribe and the reduction in wastewater treatment by the Eastern Sierra Community Services District. The Project will also retain our Tribe's

and the human right to water by allowing continued “safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes” (AB 685). Rates will not be raised greatly, only enough to support the Public Works Department and to qualify for USDA funding, but will discourage excessive water use.

Reservation buildings currently have a total of 556 meters in place, but these are not hooked up for service. In order for every building to have a water meter, 200 more meters must be installed, meter pits replaced, and connector lines placed. New meters would be “smart meters” that would be readable from the Reservations communications tower. The already-installed meters will be readable with a meter-reading wand.

Tasks that will be necessary to complete the project:

1. **Grant Writing**
2. **Training for Supervisory Control and Data Acquisition (SCADA) System:** The SCADA System will allow new meters to be read by a control system on the tower on Diaz, between Barlow and Tu Su lanes.
3. **Project Oversight** by Public Works Director
4. **Fiscal Oversight and Billing** by Fiscal Specialist
5. **Purchase of materials** (see budget sheet below: includes reader wand for current meters, 200 smart meters and meter readers, SCADA-reading system)
6. **Installation** of 200 SCADA-ready Meters and 150 Meter Pits
7. **Installation** of 200 Smart Meter Readers (attach to meters)
8. **Connecting** 200 Meters to SCADA system
9. **Enabling 756 (556 previous, 200 new)** to meter gallons per day
10. **Defining/Administering Meter Rates** to comply with USDA standards and to offset Public Works costs. The below are results of very preliminary investigations:

| Option 1: Water Only   | Option 2 Water and Wastewater  | Option 3   | Option 4   |
|--|--|--|--|
| <u>Monthly Base Rate for Water and Sewer Service:</u><br>Elders \$15<br>Tribal Members \$25<br>Non-Tribal Elders \$20<br>Non-Tribal Members \$40                   | <u>Monthly Base Rate for Water and Sewer Service:</u><br>Elders \$35<br>Tribal Members \$40<br>Non-Tribal Members \$45 | <u>Monthly Base Rate Water/Swr</u><br>Tribal Members \$35<br>Non-Tribal Members \$70<br>Tribal Elders \$25<br>Non-Tribal Elders \$50<br>Water -Tribal Members \$14<br>Water -Non-Tribal Memb \$28. | <u>Daily Rate by Size</u><br>5/8 or 3/4 inch = \$0.452<br>1 inch = \$0.681<br>1-1/2 inch = \$1.271<br>2 inch = \$1.884<br>3 inch = \$3.902<br>4 inch = \$6.173     |
| Plus Water Usage Rate: \$1.30 per 748 gallons of water (=100 cubic feet). OR   | Plus Water Usage Rate: \$0.50 per 1,000 gallons  | Plus Water Usage Rate: \$0.50 per 1,000 gallons  | Plus Water Usage Rate: \$1.30 per 748 gallons of water (=100 cubic feet). OR   |
| Tier IA \$1.319 per 748 gallons of water 50% of Tier II<br><br>Tier IB \$2.374 90% of TII<br><br>Tier II \$2.638 Base Rate<br><br>Tier III \$3.957 150% of Tier II |  |  | Tier IA \$1.319 per 748 gallons of water 50% of Tier II<br><br>Tier IB \$2.374 90% of TII<br><br>Tier II \$2.638 Base Rate<br><br>Tier III \$3.957 150% of Tier II |

Answers to Work Plan Questions:

- 1) The project directly benefits the Bishop Paiute Reservation, a DAC, in the Tribe’s efforts to conserve water while continuing its economic development efforts that benefit low-income residents.
- 2) Project status: Permitting does not apply. This project and is ready to begin after RFP for Civil Engineer is advertised and materials are purchased. Tribal Council has approved the pursuit of this plan. CEQA and NEPA will be conducted, but the project is likely to be a NEPA categorical exclusion and CEQA categorical exemption because it will not cause any adverse impacts or adverse effects. Changes to buildings will be minimal, and the digging for meter pits will be in areas where digging has already occurred for present meter pits—in disturbed soil.
- 3) The following are not applicable to the Bishop Paiute Reservation: Urban Water Management Plan, Agricultural Water Management Plan, Surface Water Diverter Groundwater Management Plan, or CASGEM.
- 4) This project ranks first out of the two projects that the Tribe is submitting.
- 5) The Tribe does not predict that the project could be phased but is open to phasing it is required and if there is a way to do so.
- 6) The Tribe has not received Proposition 84 planning or implementation funding in previous rounds.

**Budget**

| Task/Desc                         | Labor                               | Hours       | Rate        | Total               |
|-----------------------------------|-------------------------------------|-------------|-------------|---------------------|
| Grant Writing                     | Grant Writer                        | 60          | \$35.64     | \$2,138.40          |
| Project Oversight                 | Administrative Assistant            | 40          | \$22.00     | \$880.00            |
| Project Oversight, Defining Rates | Project Oversight: PW Director      | 100         | \$32.70     | \$3,270.00          |
| Fiscal Oversight and Billing      | Fiscal                              | 50          | \$28.00     | \$1,400.00          |
| Installation, Connecting          | Skilled Labor                       | 1300        | \$22.00     | \$28,600.00         |
| Installation, Connecting          | Apprentice Labor                    | 1300        | \$20.00     | \$26,000.00         |
|                                   | Fringe: Writer and Admin            |             | 33%         | \$1,458.00          |
|                                   | Fringe: Field and Project Oversight |             | 38%         | \$21,990.60         |
|                                   | <b>Labor Total</b>                  |             |             | <b>\$85,737.00</b>  |
| Description                       | Q                                   | Price       | Cost        |                     |
| Handheld device AR4094            | 1                                   | \$7,383.74  | \$7,383.74  |                     |
| Meter Pits                        | 150                                 | \$430.88    | \$64,632.00 |                     |
| Smartpoint for each new meter     | 200                                 | \$157.00    | \$31,400.00 |                     |
| Smart Meters                      | 200                                 | \$156.60    | \$31,320.00 |                     |
| Command Link                      | 2                                   | \$597.79    | \$1,195.58  |                     |
| GPS Receiver                      | 2                                   | \$5,649.84  | \$11,299.68 |                     |
| Standard Integration Package      | 1                                   | \$15,000.00 | \$15,000.00 |                     |
| <b>Training</b>                   | 3                                   | \$2,500.00  | \$7,500.00  |                     |
|                                   | <b>Material Total</b>               |             |             | <b>\$169,730.63</b> |
| <b>Civil Engineer</b>             |                                     |             |             | <b>\$2,500.00</b>   |
| <b>NEPA/CEQA</b>                  |                                     |             |             | <b>\$10,000.00</b>  |
| <b>Proposal Support Costs</b>     |                                     |             |             | <b>\$2,680.00</b>   |
|                                   | <b>TOTAL</b>                        |             |             | <b>\$270,648.00</b> |

| Category   | Requested Grant Amount | Cost Share: Non-State Fund Source | Cost Share: Other State Fund Source | Total Cost |
|--|------------------------|-----------------------------------|-------------------------------------|------------|
| <b>(a) Direct Project Administration</b>                           | 7,545                  | 0                                 | 0                                   | 7,545      |
| → Proposal preparation   | 5,524                  | 0                                 | 0                                   | 5,524      |
| <b>(b) Land Purchase/Easement</b>                                  | 0                      | 0                                 | 0                                   | 0          |
| <b>(c) Planning/Design/Engineering/Environmental Documentation</b> | 12,500                 | 0                                 | 0                                   | 12,500     |
| <b>(d) Construction/Implementation</b>                             | 245,079                | 0                                 | 0                                   | 24,5079    |
| <b>(e) Grand Total</b>   | 270,648                | 0                                 | 0                                   | 270,648    |

**Schedule:**

**Proposed start date:** March 1, 2016 (RFP for Civil Engineer, Training in January). **Proposed end date:** June 30, 2017

**Estimated useful life of project:** 20 years.

| Year →                            | 2016 |   |   |   |   |   |   |   |   |   |   |   | 2017 |   |   |   |   |   |
|-----------------------------------|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|
| Month →                           | J    | F | M | A | M | J | J | A | S | O | N | D | J    | F | M | A | M | J |
| <b>Task ↓</b>                     |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |
| RFP                               |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |
| Training                          |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |
| Project Oversight, Defining Rates |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |
| Fiscal Oversight                  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |
| Purchase Materials                |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |
| Installation/Meter Pits           |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |
| Test Operations                   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |
| Closeout                          |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |