

Butte-Silver Bow County Water Metering and Public Awareness Project

Project Summary

Butte-Silver Bow Local Government (B-SB) proposes to initiate the first year of a ten year incremental, voluntary water metering and public awareness program to enhance water conservation efforts in Butte. Currently, only 43% of B-SB's water service connections are metered. The water metering has been projected to save between 10% and 40% in water use per user, thereby conserving water and reducing water treatment and pumping costs. B-SB is requesting \$273,600 in Restoration Funds, to be used with \$32,743 cash matching funds and \$18,818 in-kind matching funds, for a project total of \$325,161.

Butte's bedrock aquifer is contaminated throughout a six square mile area of the City and these distribution lines overlay that aquifer. This aquifer is so severely injured that natural recovery will not occur for thousands of years, as concluded by the State's 1995 Restoration Determination Plan and by EPA's 1994 Record of Decision. Restoration of the bedrock aquifer is infeasible, thus the aquifer's drinking water, storage capacity, and transport services have been lost for thousands of years. This proposal constitutes replacement of lost services to some of the thousands of property owners and other members of the public in Butte that could use the aquifer if it was not injured by initiating water conservation activities.

The State's 1995 Restoration Determination Plan considered upgrading Butte's antiquated water system as a viable restoration alternative for the bedrock injuries in Butte. This proposal will reduce water use from an unaffected source, thus compensating the public for some of the lost groundwater use suffered by Butte, due to the inability to tap clean groundwater.

Summary of RPPC Criteria Evaluation for Water Metering and Public Awareness Project Applicant: Butte-Silver Bow City County Government (B-SB)	
Project Summary	Butte-Silver Bow Local Government (B-SB) proposes to initiate the first year of a ten year incremental, voluntary water metering and public awareness program to enhance water conservation efforts in Butte. Total project costs are \$325,161, with \$273,600 requested in Restoration Funds, to be used with \$32,743 cash matching funds and \$18,818 in-kind matching funds. Overall Application Quality: Good
Pre-Draft Funding Recommendation and Funding Conditions	The NRDP recommends funding at the requested amount of \$273,600, with the funding condition that Restoration Funds will reimburse B-SB for installed meters.
Criteria Evaluation	
1. Technical Feasibility	<u>Reasonably Feasible:</u> B-SB's installation of meters will be conducted primarily in conjunction with future waterline replacement projects. Even if these replacement projects were not funded, meters will be installed upon request and as a part of new service connections. B-SB has conducted this type of activity in the past and is fully capable of continuing to do so. There are also no uncertainties with the technical feasibility of the public outreach portion of the proposal, which involves a consultant conducting public awareness activities.
2. Costs:Benefits	<u>Potential Net Benefits:</u> B-SB proposes to install up to 500 additional water meters in Butte, resulting in a water savings of 10% to 40% per user compared to the water use without meters. This request for 500 meters would supply 7% of the 7,669 water meters needed for Butte to have a fully metered water system. Since Restoration Funds will be on a reimbursement basis, as per the NRDP's funding condition, the cost will be incurred only when the meters are installed, which assures that the Funds will go towards water conservation. However, installation is voluntary and the amount of benefit in water savings will depend upon the amount of participation and the actual amount of water savings. The public awareness portion (\$25,000) of the project also has some uncertainty in the amount of benefit because of the volunteer approach to project implementation. The amount of water savings could be significant if this public awareness program is successful and all 500 meters are installed.
3. Cost-Effectiveness	<u>Likely Cost-Effective:</u> B-SB's first year of meter installation, as well as their ten year plan to complete the metering of the entire system, are both reasonable. Since metering is voluntary, however, completion of either plan within these timeframes is uncertain. There could be other alternatives that would attain the goal of increased water savings in a timely manner, such as mandatory incremental water metering, which was not fully evaluated. Combining metering with other water system improvements is a positive improvement over the approach of past projects that did not have this component. Though a limited alternative analysis was provided, the selected alternative is likely to be cost-effective.
4. Adverse Environmental Impacts	<u>No Adverse Impacts:</u> This project will have no adverse impact to the environment and it will potentially benefit water conservation.

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5. Human Health and Safety	<u>No Adverse Impacts:</u> This proposal does not present any adverse impacts to the human environment. Installation of meters will involve only a small amount of construction activity.
6. Results of Response Actions	<u>Consistent:</u> The project will not interfere or duplicate the results of any known EPA Superfund actions.
7. Natural Recovery Potential	<u>No Effect on the Recovery Period:</u> This replacement project will not affect the groundwater recovery period.
8. Applicable Policies and Laws	<u>Consistent/Sufficient Information Provided:</u> There are no permits or other regulatory approvals needed for this project.
9. Resources of Special Interest	<u>No Impact:</u> The project involves installation of meters and will not adversely impact resources of special interest to the Tribes or DOI. The Tribes have commented in support of project funding. The DOI does not object to funding this project.
10. Project Location	<u>Within Basin and Proximate:</u> The project study area is within Butte and within injured groundwater resource areas.
11. Actual Restoration of Injured Resources	<u>No Restoration:</u> This project replaces lost services because it conserves drinking water in the area where contamination cleanup is infeasible. It thus constitutes compensatory restoration.
12. Service Loss/Restored & Service Restoration	<u>Same:</u> This project replaces drinking water services lost due to injured groundwater resources that limit B-SB's potential sources for water development, thus making conservation of existing sources an effective means of enhancing its water resources.
13. Public Support	<u>8 Support Comments:</u> from the B-SB Public Works, B-SB Manager of the Water Treatment Plant, B-SB Public Health Department, MERDI, and three area businesses
14. Matching Funds	<u>10% Cash Match, 6% In-kind Match:</u> B-SB proposes a cash match of \$32,743 for installation of the meters and in-kind match of \$18,818 for administration and coordination of the project.
15. Public Access	Not Applicable
16. Ecosystem Considerations	<u>Positive:</u> The proposed metering program and public outreach should lead to water conservation and reduced power requirements for pumping and treating water, which are broad ecosystem concepts that improve natural resources.
17. Coordination & Integration	<u>Coordinates/Integrates:</u> The proposal coordinates and potentially integrates well with B-SB's other water saving actions such as waterline and transmission line replacement.
18. Normal Government Functions	<u>Augments Normal Government Functions:</u> Water system improvements such as metering are B-SB's responsibility since the county owns the water system. The NRDP considers this proposal as one that augments, not replaces, normal government function because communities typically rely on grant funds to assist in funding such work and also because the proposal is an effective way to compensate the community for pervasive and extensive injuries to the groundwater resources underlying Butte that were covered under <u>Montana v. ARCO</u> .