Bernalillo County Facility Well Meter Upgrade Project

APPLICATION FOR FUNDING

WATERSMART GRANTS: SMALL-SCALE WATER EFFICIENCY PROJECTS, BOR-DO-20-F006

Bernalillo County Water Conservation Program
2400 Broadway Blvd. SE
Albuquerque, NM 87102

Project Manager: Megan Marsee, Water Conservation and Resource Manager
(505) 224-2158
mmarsee@bernco.gov
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1. Technical Proposal

1.1. Executive Summary
Date: March 2, 2020
Applicant Name: Bernalillo County Water Conservation Program
County, State: Bernalillo County, New Mexico

Bernalillo County is submitting this application for WaterSMART grant funding to upgrade mechanical, manual-read water meters to ultrasonic, Advanced Meter Infrastructure (AMI) at all Bernalillo County facilities served by wells. Thirty-two (32) meters will be replaced at 25 public facilities. No project site is a federal facility. New ultrasonic meters will provide for more accurate meter readings, and the addition of AMI will allow for real-time monitoring of water use and early detection of leaks. In alignment with WaterSMART funding goals, the project will upgrade aging infrastructure to conserve, better manage, and make more efficient use of water supplies. This project is supported by multiple Bernalillo County plans, including the 2006 Bernalillo County Water Conservation Plan, and recent FY21-25 Water Conservation Plan Update, which will be considered for adoption by the Bernalillo County Commission in spring 2020. The WaterSMART grant will fund 50% of the cost to purchase and install the ultrasonic, AMI meters. This project requires no formal design or permits, and is anticipated to qualify for a categorical exclusion from formal environmental review. The non-Federal cost-share is secured. The project will be completed within 1 year of receipt of the award.

1.2. Background Data

1.2.1 Bernalillo County
Bernalillo County is located in central New Mexico. It is 1,161 square miles and has a total population of 674,855. The county includes the City of Albuquerque, the state’s largest city with a population of 556,718, and the smaller municipalities of Los Ranchos and Tijeras. The unincorporated area of the county is 540 square miles and has a population of 111,499. Located in the northernmost reach of the Chihuahuan Desert, Bernalillo County includes the escarpment in the west, the Rio Grande Valley in the center, the Sandia and Manzano Mountains in the east and southeast, and portions of the Estancia Basin in the east and northeast. The Rio Grande River transports Bureau of Reclamation Middle Rio Grande Project water to the Middle Rio Grande region, including Bernalillo County.

1.2.2 Bernalillo County Water Conservation Program
In 2006, Bernalillo County implemented a Water Conservation Program to promote the efficient and responsible use of the county’s water resources. The program principally serves all properties that are not connected to the Albuquerque Bernalillo County Water Utility Authority’s (ABCWUA) water system. ABCWUA is the largest water utility in Bernalillo County; it has a separate water conservation program for its customers. The service area of the Bernalillo County Water Conservation Program includes approximately 16,900 properties, which are supplied with water by private wells, small water systems, and surface water from the Middle Rio Grande Conservancy District or community acequias (Figure 1).

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1 All population estimates from the U.S. Census American Community Survey 5-Year Estimate.
The Bernalillo County Water Conservation Program has five components: water conservation education and outreach, water conservation incentive programs, a Water Conservation Ordinance, assisting water systems with water conservation, and monitoring and improving water efficiency at county facilities. This project falls under the fifth program component. During the development of the original 2006 Water Conservation Plan, the public made clear that Bernalillo County must take concrete steps to conserve water at its own facilities before asking county residents to conserve. County facilities provide an opportunity to lead by example by demonstrating best management practices in water conservation to the public.

1.2.3 Water Supply
Water for Bernalillo County facilities is provided by public water systems, wells, and surface water diversions from the Rio Grande River. Water is used for municipal purposes, including drinking and sanitary uses and landscape irrigation. There are a total of 90 county facilities served by public water systems (Albuquerque Bernalillo County Water Utility Authority: 72; Sandia Peak Utility: 11; Village of Tijeras: 4; Entranosa Water and Wastewater Association: 2; and Tranquillo Pines Water Co-op: 1).

The county has 25 facility water supply wells. These wells are located across Bernalillo County in the Rio Grande, Sandia, and Estancia groundwater basins. Three facilities served by wells are classified as public water systems that provide water to at least 15 connections or 25 people at least 60 days of the year; these systems are regulated by the New Mexico Environment Department Drinking Water Bureau for compliance with the Safe Drinking Water Act and drinking water regulations. Ten (10) wells are permitted with the New Mexico Office of the State Engineer as domestic wells under New Mexico State Statute NMSA 1978 § 72-12-1. Fifteen (15) county wells have water rights, some of which are leased. The total allowed
diversions for county water supply wells is 238.85 acre-feet per annum (AFA). Total annual metered usage for county facility wells in 2019 was 136.94 AF. The county also has an extensive network of permitted monitoring wells that do not produce water and are used for monitoring water quality and water levels.

The county has 14 surface water right permits that provide water for landscaping and agricultural uses at 8 county facilities. These properties are largely located in the Middle Rio Grande Valley, and water is provided by the Middle Rio Grande Conservancy District. Total allowed surface water diversions are 364.45 AFA; total consumptive use is 219.41 AFA. The surface water diversions are not metered. Currently, the county has approximately 6 acres in cultivation in vegetable crops at the Gutierrez-Hubbell House Open Space as part of the Grow the Growers Farm Internship Program, and 1 acre in vegetable crops at the Sanchez Farms Open Space in partnership with a community organization that supports previously-incarcerated youth. The county continues to acquire and develop open spaces for the purpose of agricultural preservation.

1.2.4 Prior Working Relationships with Bureau of Reclamation
Bernalillo County has received grant funding for two projects from the Bureau of Reclamation Water Conservation Field Services Program in the past. The 2012 “Implementation of Water Conservation Efficiency Measures Identified in the Bernalillo County Water Conservation Plan” project (FOA R12SF40020) provided high-efficiency toilet retrofits and rain barrels for Bernalillo County home and business owners. The 2015 “Implementation of Water Conservation Outreach to Small Utilities: Bernalillo County Water Conservation Plan” project (FOA R15AS00025) provided assistance to Bernalillo County water systems with source meter testing, repair, and replacement. Bernalillo County is currently a non-Federal partner for the Bureau of Reclamation Rio Grande Basin Study from Lobatos Gauge to Elephant Butte.

1.3. Project Location
The project area includes 25 Bernalillo County facilities located primarily in the unincorporated area of Bernalillo County, New Mexico. Figure 1-2 presents a map of the facilities that will benefit from the project. They include community centers, an aquatic center, a 911 call center, fire stations, parks, and open spaces. Three facilities are classified under the Safe Drinking Water Act as public water systems.
1.4. Technical Project Description and Milestones

This project complements and extends existing efforts to regularly monitor water use at county facilities, which has been a core component of the Bernalillo County Water Conservation Program since its inception. Since 2016, Bernalillo County has purchased monthly Water Management Tools, which allow Water Conservation Program staff to monitor water use at the county facilities served by the Albuquerque Bernalillo County Water Utility Authority. The tool assesses trends in water use over time, overall performance in water conservation, and issues with select accounts. In 2018, a Facility Water Conservation Working Group comprised of staff from multiple departments with responsibility for water management (Water Conservation Program, Fleet and Facilities Management, and Land Management) was constituted to review data in the Water Management Tool and identify water conservation issues for resolution. In 2018, identifying and resolving at least 10 water conservation issues at county facilities became a performance metric for the Water Conservation Program. Water Conservation Program staff quantify the project cost, cost savings, and water savings for all water conservation projects completed at county facilities.

The Water Conservation Program currently reads meters and reports water use for county wells on a quarterly basis, as required by the New Mexico Office of the State Engineer. This project will allow the county to incorporate facility wells into the regular monitoring and water efficiency upgrades it has already implemented at county facilities served by the Albuquerque Bernalillo County Water Utility Authority.

In December 2019, the county replaced the source meter at the Los Padillas Aquatic Center with a Rainbird Internet-Connected Water Meter (ICWM), after the existing meter failed. The new meter allowed county staff to monitor real-time facility water use through web interface. It
immediately became clear that the well was cycling on and pumping at a rate of approximately 1.5 gallons per minute at 20-minute intervals, resulting in discharge of 500 gallons of water a day. Further investigation indicated the variable frequency drive (VFD) pool pump was switching on automatically and discharging water to the municipal sewer system. County aquatics staff turned off the VFD and now manually fill the pool on an as-needed basis. This recent example indicates how access to more granular water usage data allowed county staff to identify water waste that went unnoticed when staff were monitoring usage on a quarterly basis. Bernalillo County has the staff resources and established processes in place to make use of AMI data to better manage its water supply and conserve water.

This project will upgrade 24 source meters and 8 sub-meters from manual read, mechanical meters to ultrasonic AMI meters at 25 county facilities. The AMI system will include the hardware, software, and communications to allow for real-time, remote monitoring of water usage. A propagation study conducted for this grant application indicated that AMI coverage is available at all project well locations. Existing meters are aged turbine or positive displacement meters. In upgrading the meters, Bernalillo County has selected ultrasonic meters because of their accuracy and reliability. Ultrasonic meters measure average velocity along the path of an emitted beam of ultrasound. They are more accurate, particularly at low flows, than any other meter on the market. They use solid-state technology with no moving parts, which means they are not adversely affected by poor water quality. No maintenance or calibration of the meters is required. Ultrasonic meters have the longest life span of any meter (10-20 years); their life span is determined by age and not the throughput of water. They are easy to install in existing cans, do not require straight pipe runs, and can be mounted in any position. Ultrasonic AMI meters will provide for greater accuracy in water usage data, real-time monitoring of water use, early detection of leaks, and reduced staff time dedicated to meter reading at county facilities served by wells. Project implementation is addressed in detail in Section 1.5.3.

1.5. Evaluation Criteria

1.5.1 Evaluation Criterion A - Project Benefits
This project will directly benefit Bernalillo County by providing for more frequent and more accurate monitoring of water use at county facilities served by wells, as described above in Section 1.4. Measuring water consumption is a foundational water conservation best practice. Upgrading mechanical, manual-read meters to ultrasonic AMI meters directly aligns with the WaterSMART funding priority of modernizing existing infrastructure in order to improve water management.

Conservation at county wells contributes to the long-term sustainability of groundwater and surface water supplies in the region. In Bernalillo County, the source of the water supply differs on the east and west sides of the Sandia Mountains. On the east side of the Sandia Mountains, groundwater is accessed by wells of varying depths and in various aquifers, depending on the local geology. Aquifers consist of thin to moderately thick sedimentary and fractured bedrock aquifers. Bernalillo County has a Domestic Well Program, which has been recording water levels in approximately 300 wells in Bernalillo County and parts of Sandoval County for ten years. Water level trend analysis indicates that water levels in the East

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2 The Los Padillas Aquatic Center source meter was replaced with an AMI meter in December 2019 and thus is not in need of upgrade.
Mountain area are declining at a rate of almost 2 feet per year on average. Some wells are declining at a rate of 6 to 10 feet per year.

To the west of the Sandia Mountains, groundwater is sourced from the Santa Fe Group Aquifer or upper Quaternary alluvial sediments. Recharge to this alluvial aquifer system includes precipitation and infiltration from flow in the arroyos and intermittent streams flowing across the alluvial aquifer recharge area. The aquifer systems within the Middle Rio Grande basin are connected to the Rio Grande River. Groundwater levels are rising due largely to the Albuquerque Bernalillo County Water Utility Authority’s increased use of surface water for its water supply and the success of water conservation in the region. However, Bernalillo County is the most populous county in New Mexico, and its water supply must be shared among domestic, commercial, agricultural, and ecosystem uses. In addition, climate change is increasing temperatures, decreasing water availability, and increasing crop and landscape water need in the region.

Water conservation is a key strategy for extending our water supply in the face of declining aquifer levels impacting wells in the East Mountains; competing water demands in the Middle Rio Grande basin; and the impacts of climate change. Because of the interconnectedness of surface and groundwater in the Middle Rio Grande basin, conservation of groundwater resources allows more groundwater to reach the Rio Grande River, augmenting surface water supplies. In contributing to conservation of ground and surface water supplies, this project addresses water reliability concerns, making water available for multiple beneficial uses and mitigating water-related conflict in the region.

1.5.2 Evaluation Criterion B - Planning Efforts Supporting the Project
This project has been prioritized through multiple planning efforts led by Bernalillo County:
- The 2003 Bernalillo County 40-Year Water Plan set forth a comprehensive analysis of water needs at all county-owned and/or managed facilities. The plan projected that county facilities would need to expand to meet level-of-service benchmarks with projected population increases. It estimated that new facilities would increase water demand by 43% over 40 years. The plan recognized the need for water conservation at county facilities, estimating that conservation could achieve a 15-30% reduction in water use. This project is generally supported by the goals of this plan.
- The 2004 Water Conservation Plan for Bernalillo County Facilities supported the 40-Year Water Plan and served as an implementation plan for county facility water conservation. It evaluated water use, plumbing devices, landscaping, and irrigation at all county facilities. Water conservation measures and projected savings were identified for each site. Recommendations focused on retrofit of high-flow plumbing fixtures, outdoor savings through changes in watering schedules and repair of irrigation systems,

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3 A recent report from the USGS New Mexico Water Science Center indicated groundwater levels in the Santa Fe Group aquifer system in the Middle Rio Grande Basin have risen as much as 30 to 40 feet from 2008 to 2016 (see Estimated 2016 Groundwater Level and Drawdown from Predevelopment to 2016 in the Santa Fe Group Aquifer System in the Albuquerque Area, Central New Mexico, Galanter and Curry, 2019). Groundwater withdrawals have been reduced by 67% over the same time frame, due largely to the ABCWUA’s 2008 San-Juan Chama diversion project which allows the utility to provide on average 70% of its annual supply from surface water, and the success of the ABCWUA Water Conservation Program, which has reduced per capita water use from over 250 gallons per day in the 1990’s to 121 gallons per day.
and employee training programs. This project is generally supported by the goals of this plan.

- The 2006 Bernalillo County Water Conservation Plan provided recommendations for the development and implementation of a Water Conservation Program in Bernalillo County. These included implementation of the Water Conservation Plan for Bernalillo County Facilities, and led to the incorporation of facility water conservation as a core component of the Water Conservation Program. The plan explicitly called for establishing a baseline of water use for county facilities to be used in assessing savings from future water conservation projects. This project is specifically supported by the goals of this plan.

- The FY21-25 Water Conservation Plan Update provides an update to the original 2006 Bernalillo County Water Conservation Plan, taking into consideration current data on water use; an evaluation of the existing Water Conservation Program; current best practices in water efficiency; and stakeholder input. In FY21-25, the Water Conservation Program will maintain the same five core program components, including county facility water conservation. The plan update explicitly calls out this project for implementation. It was identified as a priority because the county does not currently have the means to regularly monitor water use at county wells and wishes to comprehensively track its water at all facilities. Water usage data will be used as the basis for identifying facility water efficiency projects. This plan update will be considered for adoption by the Bernalillo County Commission in spring 2020.

### 1.5.3 Evaluation Criterion C - Project Implementation

Because the project entails replacement of existing infrastructure, implementation will be streamlined. Detailed engineering and design work is not required. Permits are not required. Based on consultation with David Park, Hydrologist and Project Coordinator in the Water Management Division of the Bureau of Reclamation Albuquerque Area Office, this project should qualify for a categorical exclusion from formal environmental review; $1,000 has been included in the project budget for Bureau of Reclamation review of the categorical exclusion checklist. If funding is awarded, Bernalillo County intends to solicit proposals for a turnkey system under the auspices of a prime contractor, in accordance with its Procurement Code. Funds for the non-federal cost share are available from the Water Conservation Program’s existing budget. Figure 1-3 identifies project tasks and milestones, demonstrating that the project will be completed within 1 year of award.

<table>
<thead>
<tr>
<th>Project Tasks and Milestones</th>
<th>Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notice of award</td>
<td>Q1</td>
</tr>
<tr>
<td>Contract with vendor for purchase and installation of meters</td>
<td></td>
</tr>
<tr>
<td>Develop schedule for installation of new meters with facility managers</td>
<td></td>
</tr>
<tr>
<td>Vendor installs meters in accordance with schedule</td>
<td></td>
</tr>
<tr>
<td>Vendor provides training on AMI web portal</td>
<td></td>
</tr>
<tr>
<td>Final performance report</td>
<td>Q4</td>
</tr>
</tbody>
</table>

*Figure 1-3: Project Tasks and Milestones*
1.5.4 **Evaluation Criterion D - Nexus to Reclamation**
The Bureau of Reclamation delivers Middle Rio Grande Project water to the Middle Rio Grande region including Bernalillo County. This project is located in the same basin as a Reclamation activity. Within the basin, the aquifer consisting of Santa Fe Group and younger alluvial deposits are known to be hydrologically connected to the Rio Grande surface water system, including tributaries, irrigation canals, and other waterways. The New Mexico State Engineer conjunctively manages the surface and groundwater resources within the Rio Grande Basin to ensure New Mexico’s compliance with the Rio Grande Compact. Conservation of groundwater supplies within Bernalillo County, including the water savings achieved by this project, will augment flows to the Rio Grande River and contribute water to the Middle Rio Grande basin.

1.5.5 **Evaluation Criterion E - Department of the Interior and Bureau of Reclamation Priorities**
This project addresses the following agency priorities:

- Department of Interior: Modernizing Our Infrastructure
- Bureau of Reclamation: Leverage Science and Technology to Improve Water Supply Reliability to Communities
- Bureau of Reclamation: Address Ongoing Drought

This project replaces aged, manual-read meters with state-of-the-art ultrasonic AMI meters at Bernalillo County facilities served by wells. Ultrasonic meters provide more accurate measurements of water flow than mechanical meters, especially at low velocities. Automatic Meter Reading (AMR) technology evolved to allow utilities to read meters remotely. AMI extends current AMR technology by providing two-way meter communications, allowing information and commands to be sent to end users for multiple purposes including real-time usage information, leak and abnormal usage detection, measuring changes in water use, and remote service disconnects. AMI provides a quantum increase in data useful for managing water use and improving water efficiency.

The technology upgrades accomplished through this project will allow Bernalillo County to more efficiently manage its water supply. Water usage data will be used as the basis for identifying water conservation issues such as leaks and water efficiency upgrades. County facilities are distributed throughout the Rio Grande, Estancia, and Sandia groundwater basins. As demonstrated in Section 1.5.1, conservation of water a county facilities contributes to the long-term sustainability of ground and surface water supplies in an arid region subject to ongoing drought.

2. Project Budget

2.1. **Funding Plan and Letters of Commitment**
This project requests $28,155.87 in WaterSMART grant funding. Bernalillo County will provide a cost-share match in the amount of $28,155.86. The Bernalillo County cost-share will consist of $10,616.48 in in-kind services for project administration (Project Manager labor plus indirect costs), and $17,539.38 in Environmental Gross Receipts Tax (ESGRT) funds for purchase and installation of meters. ESGRT is a restricted fund that can only be used for acquisition, construction, operations and maintenance of solid waste facilities, water facilities, wastewater facilities, sewer systems, and related facilities. Funding for this project is available
from the ESGRT budget for the Bernalillo County Water Conservation Program under the “Facility and Parks Water Conservation and Efficiency Projects” line item, and will be allocated to the project in Fiscal Year 2021 (July 1, 2020 – June 30, 2021) and, if needed given the timing of receipt of the award, Fiscal Year 2022 (July 1, 2021 – June 30, 2022). The county’s ESGRT Oversight Committee provides direction and approval for use of ESGRT funds. Use of funds for Facility and Parks Water Conservation and Efficiency Projects has been provisionally approved by the ESGRT Oversight Committee for Fiscal Year 2021. No project costs will be incurred prior to award.

2.2. Budget Proposal

Total costs necessary to complete the project are provided in Table 1.

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs to be reimbursed with the requested Federal funding</td>
<td>$28,155.87</td>
</tr>
<tr>
<td>Costs to be paid by the applicant</td>
<td>$28,155.86</td>
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<tr>
<td>Value of third-party contributions</td>
<td>$0</td>
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</table>

The budget proposal is provided in Table 2.

<table>
<thead>
<tr>
<th>Budget Item Description</th>
<th>Computation</th>
<th>Quantity</th>
<th>Total Cost</th>
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<tbody>
<tr>
<td>Salaries and Wages</td>
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<tr>
<td>Water Conservation and Resource Manager</td>
<td>$30.9529</td>
<td>120</td>
<td>$3,714.35</td>
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<tr>
<td>Fringe Benefits</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Water Conservation and Resource Manager</td>
<td>Staff salary x 48%</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Contractual/Construction</td>
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<tr>
<td>Ultrasonic Smart Water Meter (1&quot; x 10.75&quot;, 55 GPM)</td>
<td>$249.50</td>
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<td>$2,495.00</td>
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<td>Ultrasonic Smart Water Meter (1.5&quot; x 13&quot; Flanged, 120 GPM)</td>
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<td>$1,517.25</td>
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<td>Ultrasonic Smart Water Meter (2&quot; x 17&quot; Flanged, 160 GPM)</td>
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<td>$7,641.00</td>
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<td>$4,695.00</td>
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<td>Cellular Antenna</td>
<td>$314.75</td>
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<td>Installation 1&quot; water meter</td>
<td>$175.00</td>
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<td>Installation 1.5&quot; water meter</td>
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<td>$675.00</td>
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<tr>
<td>Installation 2&quot; water meter</td>
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<td>$3,500.00</td>
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<td>Installation 3&quot; water meter</td>
<td>$475.00</td>
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<td>Installation contingency reserve</td>
<td>$2,030.00</td>
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### Environmental and Regulatory Compliance Costs

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<thead>
<tr>
<th>Description</th>
<th>Cost</th>
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<tbody>
<tr>
<td>BOR review of Categorical Exclusion Checklist</td>
<td>$1,000.00</td>
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<tr>
<td>Total Direct Costs</td>
<td>$51,192.49</td>
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<tr>
<td>Indirect Costs</td>
<td>$5,119.25</td>
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<tr>
<td>Total Estimated Project Costs</td>
<td>$56,311.73</td>
</tr>
</tbody>
</table>

#### 2.3. Budget Narrative

The budget narrative provides an explanation of items included in the budget proposal.

##### 2.3.1 Salaries and Wages

The salaries and wages budget line item includes the salary for the Bernalillo County staff member who will serve as project manager for the grant (Megan Marsee, Bernalillo County Water Conservation and Resource Manager). The project manager will dedicate 10 hours to procurement and contracting for a vendor that will provide and install the meters; 80 hours to project implementation and management; and 30 hours to grant oversight and reporting, totaling 120 hours at a salary of $30.9529 per hour. The labor rates included in the budget proposal represent the actual labor rates of the identified personnel and are consistently applied to Federal and non-Federal activities.

##### 2.3.2 Fringe Benefits

Fringe benefits include multipliers for salary-based benefits as well as per employee benefits that have been adjusted to a per work hour basis. The fringe multiplier for all county employees combined is currently 48%. Fringe benefits are included as an in-kind contribution and are apportioned to the tasks outlined under the Salaries and Wages section above.

##### 2.3.3 Contractual

Contractual services will be procured from one vendor who will provide ultrasonic AMI meters inclusive of installation. The contractual budget includes the cost to purchase and install 32 ultrasonic meters ranging in size from 1” – 3”, as outlined in the budget proposal. Meter costs include an internal data logger and replaceable 3-wire, 5-foot cable. The budget includes 32 cellular antennae with 10 years of cellular data, 20 years of life, and a 5-year 100% replacement warranty. Meter installation costs include gasket-to-gasket area, and do not include any other service fittings. The budget also includes an installation contingency reserve for unforeseen repairs such as seized pipe threads, rusted pipes, and lay length re-pipe. Costs were estimated based on a vendor quote. Contractual services will be procured in accordance with the Bernalillo County Procurement Code, which require selection of a vendor based on the best-obtainable quote among three written quotes for goods, non-professional services, and construction with a cost greater than $20,000 and up to $100,000.

##### 2.3.4 Environmental and Regulatory Compliance Costs

Based on consultation with David Park, Hydrologist and Project Coordinator in the Water Management Division of the Bureau of Reclamation Albuquerque Area Office, $1,000 has been included in the project budget for Bureau of Reclamation review of the Categorical Exclusion Checklist for the project.
2.3.5 Indirect Costs

Indirect costs are assumed at the de minimis rate of up to 10 percent of modified total direct costs.

3. Environmental and Cultural Resources Compliance

The following are responses to the environmental and cultural resources compliance questions in the Funding Opportunity Announcement for this grant:

- This project will not have negative impacts on the surrounding environment. It will not require earth-disturbing work or any work that will affect the air, water, or animal habitat in the project area. This project will entail replacement of meters in existing meter vaults.
- Endangered species in the Rio Grande Basin are the Southwestern Willow Flycatcher (*Empidonax traillii extimus* /flycatcher), Rio Grande silvery minnow (*Hybognathus amarus*, silvery minnow), New Mexico meadow jumping mouse (*Zapus hudsonius luteus*, jumping mouse). Threatened species include the Western Yellow-Billed Cuckoo (*Coccyzus americanus occidentalis*). The activities associated with the proposed projects will not adversely affect any threatened or endangered species, or related critical habitat.
- There are no wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as “Waters of the United States.”
- County facility wells and water systems included in this grant proposal were constructed at various times from approximately the 1990’s through 2012.
- The project will not result in any modification of or effects to individual features of an irrigation system.
- Among the county facilities served by this project, the Gutierrez-Hubbell House is on the National Register of Historic Places.
- There are no known archeological sites in the proposed project area.
- The proposed project will not have a disproportionately high and adverse effect on low income or minority populations.
- The proposed project will not limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands.
- The proposed project will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.

4. Required Permits or Approvals

No permits or approvals are required for implementation of this project.

5. Official Resolutions

A memorandum from the Bernalillo County Manager approving submittal of the grant application is attached. The County Manager has authority under Bernalillo County Administrative Instruction No. SG01 to approve grant applications. As required by the Funding Opportunity Announcement, the memorandum indicates Bernalillo County is capable of providing the amount of funding and in-kind contributions specified in the funding plan. Bernalillo County will work with Reclamation to meet established deadlines for entering into a grant or cooperative agreement, and will meet financial and legal obligations associated with receipt of financial assistance.
6. Unique Entity Identifier and System for Award Management

Bernalillo County maintains a current registration in the System for Award Management (SAM). It received confirmation of active registration in January 2020. Its unique identifier is COUNTY OF BERNALILLO / 069424356 / 3WCZ8.
MEMORANDUM

TO: Julie Morgas Baca, County Manager
THRU: Elias Archuleta, Technical Services Director, Public Works
FROM: Megan Marsee, Water Conservation and Resource Manager
DATE: February 21, 2020
SUBJECT: Bureau of Reclamation WaterSMART grant application

I am routing the attached grant proposal to be submitted to the Bureau of Reclamation in the amount of $28,155.87. The Bernalillo County Facility Well Meter Upgrade Project will upgrade mechanical, manual-read water meters to ultrasonic, Advanced Meter Infrastructure (AMI) at all Bernalillo County facilities served by wells. New ultrasonic meters will provide for more accurate meter readings; the addition of AMI will allow for real-time monitoring of water use, early detection of leaks, and reduced staff time dedicated to meter reading.

Check One:

_X_ MATCH IS REQUIRED. If Awarded,

_X_ The County agrees to provide a match in the amount of $17,539.38. This match will be funded from Cost Center 550107, G/L Account 541106; and,

_X_ The County agrees to provide a match via In-Kind Services valued at $10,616.48. In-Kind Services include staff labor and indirect costs for procurement and contracting, project management, and grant oversight and reporting.

MATCH IS NOT REQUIRED.

Please note the application is due to the Bureau of Reclamation on March 4, 2020. Therefore, your prompt review is appreciated.

Budget Approval: Date: 2/20/20
Deputy County Manager Approval: Date: 3/1/20
County Manager Approval: Date: 3/5/20