2019 Bureau of Reclamation WaterSMART Water and Energy Efficiency

Group II

City of Durant, OK

SF 424 No. 14: Areas Affected by Project

The City of Durant, Oklahoma 2019 Bureau of Reclamation WaterSMART Water and Energy Efficiency Group II Project will affect the following:

Durant - city limits

Bryan County - Rural Water Districts # 2 and # 5

Oklahoma

Durant Oklahoma
City-Wide AMR Smart Meter Conversion and Advanced Metering Infrastructure Project

Water SMART Grants: Water and Energy
Efficiency Grants for Fiscal Year 2019
Funding Group 2
BOR-DO-19-F004

Prepared for: Bureau of Reclamation
Financial Assistance Support Section
Attn: Mr. Darren Olson
P.O. Box 25007, MS 84-27814
Denver, CO 80225

Applicant: City of Durant
300 W Evergreen
Durant, OK 74701

Project Manager: Marty Cook
Public Works Director
1201 NE 2nd Ave
Durant, OK 74701
(580) 924-8358
mcook@durant.org

March 19, 2019

Table of Contents

TECHNICAL PROPOSAL 3
Executive Summary 3
Background Data 4
Project Location 5
Technical Project Description 6
Evaluation Criteria 7
Evaluation Criterion A – Quantifiable Water Savings (30 points) 7
Evaluation Criterion B – Water Supply Reliability (18 points) 10
Evaluation Criterion C – Implementing Hydropower (18 points) 16
Evaluation Criterion D – Complementing On-Farm Irrigation Improvements (10 points) 16
Evaluation Criterion E – Department of the Interior Priorities (10 points) 17
Evaluation Criterion F – Implementation and Results (6 points) 17
Evaluation Criterion G – Nexus to Reclamation Project Activities (4 points) 20
Evaluation Criterion H – Additional Non-Federal Funding (4 points) 21
PROJECT BUDGET 22
Funding Plan and Letters of Commitment 22
Budget Proposal 23
Budget Narrative 25
Environmental and Cultural Resources Compliance 27
Required Permits or Approvals 28
ATTACHMENTS 28

TECHNICAL PROPOSAL

Executive Summary

Date: March 19, 2019

Applicant Name: City of Durant

City, County and State: City of Durant, Bryan County, Oklahoma

Project Summary:

The City of Durant is pleased to submit this application for funding to install Automatic Meter Reading (AMR) (i.e. smart meters) and Automatic Metering Infrastructure (AMI) throughout the entire City of Durant's water system. The requested funding will allow the City to purchase and install 5,999 smart meters and Automatic Metering Infrastructure. Installation of these smart meters and corresponding network infrastructure will be city-wide and assist in reducing water system losses, enhance management of current water supplies, and increase water conservation by making the most efficient use of limited water supplies from the Blue River, the City's sole source of water.

The proposed project is one element of a larger planning effort by the City to improve aging water infrastructure and increase water reliability. The overall effort, including this proposed project, is supported by existing local and regional water resource planning efforts, including support from the Choctaw Nation, the Blue River Foundation, US Senator James Inhofe and US Congressman Markwayne Mullin, among others.

The meter installation project will be completed within 18 months of notice to proceed. The proposed project is not located on a Federal facility.

Background Data

The City of Durant is the largest city and the county seat of Bryan County in Southeast Oklahoma (see Figure 1). The City had a reported population of 15,856 at the 2010 US Census and has grown an estimated 12% since 2010. The City is projecting to serve a population of 24,516 by 2060 (Oklahoma Comprehensive Water Plan). Water demands were estimated at 4,391 acre-feet per year (AFY) in 2010 and are projected to reach over 6,700 AFY by 2060. In 2018 the City pumped 5,017 acre-feet of water from the water treatment plant to the distribution system. The City of Durant also supplies treated water to nearby Bryan County Rural Water Districts No. 2 and 5, and to numerous Choctaw Nation properties located just south of the City.

The City of Durant draws all of its raw water from the Blue River and in 2011 – a year that was both the hottest and driest on record – the Blue River almost ran dry. The City is permitted to withdraw 12,342 AFY from the Blue River, but the water rights do not address the potential lack of physical water witnessed during periods of drought or because of future demands. The Blue River is a spring fed river originating from the Arbuckle-Simpson Aquifer springs in its upper reaches. In 2017 the City and Reclamation participated in developing a Drought Contingency Plan for the Arbuckle-Simpson Aquifer to address short term to long term strategies to preserve water reliability across the region. The Blue River does not have any on-channel reservoirs, decreasing the potential for providing storage supplies during periods of drought. There is one existing off-channel reservoir owned by the City of Durant, which has a capacity of 4,309 AF, which can be filled from the Blue River, and to which the City made an emergency connection to in 2011.

The City's water distribution system consists of approximately 130 miles of distribution pipelines, seven storage tanks totaling 4.8 million gallons in capacity, four pump stations with 10 pumps rated at 24,600 gallons per minute (gpm), and one raw water pump station with four pumps rated at over 13,200 gpm. The City has approximately 6,500 water meters installed and in use. Of those water meters, approximately 200 are Automatic Meter Reading (AMR) with 300 AMR meters currently being installed. The remaining 5,999 are traditional water meters without automation capabilities. A large number of these traditional meters are outdated, well past their life expectancy, or un-documented. Additionally, an estimated 668 traditional meters are non-functioning.

The City's population growth and increasing unreliability of water from the Blue River is causing a severe strain on the City of Durant's infrastructure and utility services. In addition, the City's water loss rate is estimated at 48%. To address these issues the City is pursuing the replacement of traditional meters with Automatic Meter Reading (AMR) meters (i.e. smart meters) and Automatic Metering Infrastructure (AMI) to address water loss, improve water metering accuracy, promote water conservation, and to support future water planning efforts both locally and regionally.

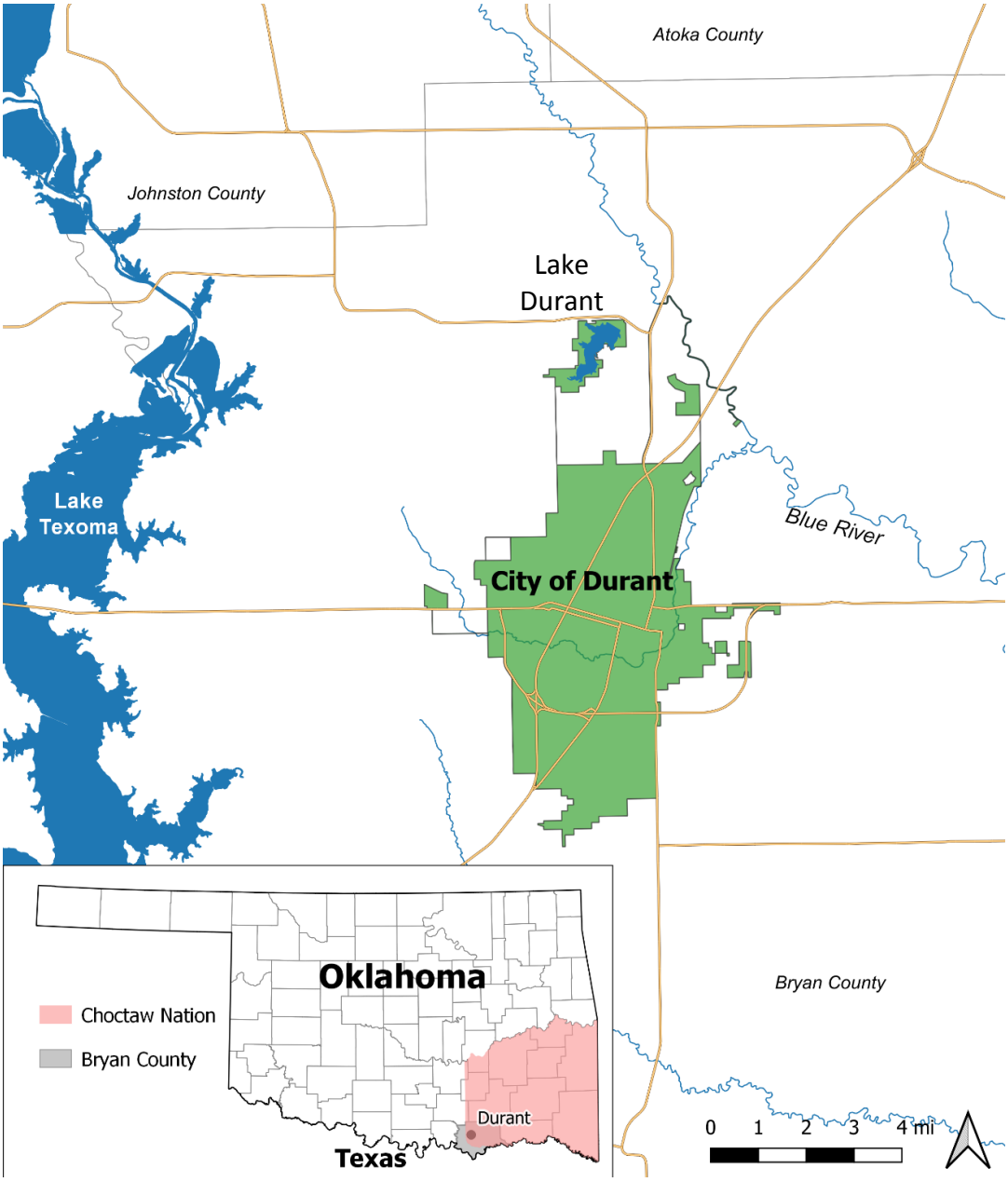

FIGURE 1. MAP OF CITY OF DURANT

Project Location

The proposed project is located in the City of Durant in Bryan County, Oklahoma which is approximately 100 miles north of Dallas, Texas. A Shapefile of the City of Durant water service area has been submitted with this proposal.

Technical Project Description

A 2015 study estimated unaccounted for water to be approximately 44% in the water system. In 2018 a similar study was conducted that found unaccounted for water to be approximately 48% in the water system. These large losses are partially attributed to the large number of outdated, non-functioning, and un-documented traditional meters, which don't have any automation capabilities. This extremely high loss rate is an ongoing detriment to the City in the form of lost revenues, poor water conservation, and avoidable pumping and water treatment costs. As part of a 30-year water infrastructure summary plan the City has been actively targeting these water losses.

In 2018 the City applied for and has been verbally awarded a WaterSMART Small-Scale Water Efficiency Project Grant through Reclamation (No. BOR-DO-18-F009). This project will replace 300 traditional meters with Automatic Meter Reading (AMR) meters. The area for replacement was selected for a number of reasons: it is a relatively small area that will allow efficient observation of the AMR system, the area would allow the installation process to be more streamlined and efficient, and the area covers a range of socio-economic statuses. Although this project has not yet started it shows that the City has been actively working towards addressing its high water loss rate and continuing to build upon this momentum in expanding the replacement of traditional meters with AMR meters.

The City of Durant has identified 5,999 locations, the remaining customer locations in the City that currently utilize traditional meters. Installing AMR meters, or smart meters, at these locations would provide valuable data to quickly identify and mitigate water losses within the distribution system and for individual customers. Automatic Metering Infrastructure (AMI) will also be installed to connect the proposed smart meters to a centralized system, which will provide real-time monitoring with the ability to identify and address leaks quickly and effectively.

Requested 2019 Reclamation funds would be utilized to purchase and install 5,999 smart meters and corresponding AMI network infrastructure. The City will effectively be replacing all remaining tradition meters with smart meters for individual customers. The AMI network infrastructure will consist of 12 gateways, also known as Meter Interface Unit (MIU) and AMI software. The locations of these gateways have been tentatively selected to cover over 99% of the existing and proposed smart meters across the City allowing the city real-time monitoring capabilities.

There are six general tasks for this project, which are outlined below. An estimated timeline for these tasks is 18 months. A breakdown of the timeline is provided in Evaluation Subcriterion F.3.

Task 1: Grant and Compliance Administration. Grant and compliance administration will be conducted to adhere to proper rules and procedures throughout the project.

Task 2: Procurement of contractors and engineering services. Contractors will be used for project installation as well as for general engineering services. Proper procurement methods will adhere to federal and city procurement procedures for contractors and engineering services.

Task 3: Project Engineering. Engineering services will involve construction bidding support, construction plans and specifications development and construction oversight and inspection.

Task 4: Selection and procurement of materials and supplies. With the support of the engineering contractor materials will be formally selected and procurement of these materials will occur in accordance with federal and city procurement processes.

Task 5: Installation and oversight of 5,999 smart meters and AMI network infrastructure. With the support of the engineering contractor and construction contractor, the 5,999 smart meters and corresponding AMI network infrastructure will be installed. The engineering contractor will also provide construction oversight and inspection services

Task 6: Final Performance Report and Interim Performance Report. A final report will be prepared and submitted by the City. This report will outline the project's progress, whether project objectives and goals were met, collaboration that occurred, photos documenting the project, performance measures and actual project benefits.

Additionally, Interim Performance Reports will also be delivered on a semi-annual basis. These reports will include progress and accomplishments according to the projected timeline, if the project is on schedule and any other related information.

This project provides an accurate and modern method to best quantify and address real-time water distribution and customer connection system losses, allowing the City to regain revenue due to water losses. Additionally, water conserved through targeted leak reduction efforts will result in beneficial conservation effects outside of the City, with less water being taken from the scenic Blue River. The river is one of the few rivers in Oklahoma that does not have a reservoir on the main stem and is identified as having High Quality Waters by the Oklahoma Water Resources Board (OWRB).

Evaluation Criteria

Evaluation Criterion A – Quantifiable Water Savings (30 points)

Describe the amount of estimated water savings.

With a city-wide implementation of smart meters and network infrastructure the City estimates an annual water savings of 1,003 acre-feet per year, or a 20% reduction in water system losses. This would reduce their yearly loss rate from 48% to 28%. With an expected smart meter

lifetime of at least 20 years, this project has the ability to reduce water usage by 20,060 acre-feet over 20 years.

Describe current losses.

The City of Durant's water system experiences significant water loss, which was estimated at 44% in a 2015 study and in 2018 was found to be approximately 48%. This results in unnecessary revenue loss for the City, unnecessary demands on their water treatment plant and pumps, and unnecessary withdrawal of water from the Blue River, their sole water source. These large losses are partially attributed to the large number of outdated, non-functioning, and un-documented traditional meters across the water system.

Describe the support/documentation of estimated water savings.

Water savings is estimated to mainly come from customer leak reductions. City staff currently check for customer connection leaks manually across the system, often while collecting meter readings. Leaks may not always be easily identifiable or show visible signs for staff or customers. Smart meters, combined with AMI software, will automate leak detection and provide this data to the City in real-time. This will allow City staff to more quickly respond to leaks by notifying customers more quickly and suggestions for fixing leaks. Additionally, smart meters will produce much more accurate water usage information for customers, which allows customers to better track their water consumption and see more tangible differences in any efforts to reduce their water usage.

With a city-wide implementation of smart meters for customers the AMI software can also aid City staff in addressing distribution system leaks through increased data, more accurate billing and water use data from customers, and software providing smart leak detection capabilities. This information can aid the City in prioritizing maintenance that targets the largest water savings.

Although not included in these estimates, once this project is implemented, the City will have the ability to implement a customer portal for customers to view and better track their water usage, receive direct alerts about potential leaks and more easily understand their water bills. These customer portals have been shown to increase water reductions by an estimated 6% or more compared to standard billing (Every drop counts: How water utilities are putting water efficiency first, 2013). This project would set the foundation for future implementation of water savings techniques such as this one.

Please address the following questions according to the type of infrastructure improvement you are proposing for funding. (2) Municipal Metering:

a) *How has the estimated average annual water savings that will result from the project been determined? Please provide all relevant calculations, assumptions, and supporting data.*

Previous projects similar to this one were reviewed and used as a guide to estimate a reasonable water savings for the City. Due to the City of Durant's recent and ongoing implementation of smart meters it doesn't currently have the ability, software or data to estimate water savings directly from their smart meters. Due to the high water loss rates the City currently experiences and the similarity of other projects from cities and water utilities across the US, the assumption of an annual water savings of 1,003 acre-feet, or a 20% reduction in water system losses, was found reasonable.

b) *How have current distribution system losses and/or the potential for reductions in water use by individual users been determined?*

Current water system losses in 2018 were estimated through a water balance method of the difference between production water from the water treatment plant and the billed consumption amount. This water loss calculation is defined by the International Water Association (IWA).

c) *For installing individual water user meters, refer to studies in the region or in the applicant's service area that are relevant to water use patterns and the potential for reducing such use. In the absence of such studies, please explain in detail how expected water use reductions have been estimated and the basis for the estimations.*

Please see the response to question a above.

d) *If installing distribution main meters will result in conserved water, please provide support for this determination (including, but not limited to leakage studies, previous leakage reduction projects, etc.). Please provide details underlying any assumptions being made in support of water savings estimates (e.g., how leakage will be reduced once identified with improved meter data).*

No distribution main smart meters will be installed in this project, yet water loss savings targeting the distribution system is still expected to occur from project implementation. This will be due to the AMI software's leak detection abilities. Additionally, with more accurate customer water use readings the City can use this data to run water balances on their distribution system, and along with software capabilities can identify distribution system regions with high water loss. These regions can be prioritized and targeted through routine pipeline replacement or maintenance.

e) *What types (manufacturer and model) of devices will be installed and what quantity of each?*

The City is planning on installing 5,999 smart meters and has provisionally selected the Neptune Mach 10 ultrasonic meter. The City has previously installed and is currently using these specific meters so all future meters will need to be compatible.

For the AMI network infrastructure, the City is planning on installing and has provisionally selected 12 Neptune R900 Meter Interface Units (MIU) with antennas.

These MIUs are estimated to provide 99% coverage of the proposed and existing smart meters across the City. Neptune AMI software has also been provisionally selected.

f) How will actual water savings be verified upon completion of the project?

Upon completion of the project the City will be able to use water balance methods and previously water use data, combined with advanced meter infrastructure software to identify and document the actual water savings.

Evaluation Criterion B – Water Supply Reliability (18 points)

- *Will the project address a specific water reliability concern? Please address the following:*
    - *Explain and provide detail of the specific issue(s) in the area that is impacting water reliability, such as shortages due to drought, increased demand, or reduced deliveries. Will the project directly address a heightened competition for finite water supplies and over-allocation (e.g., population growth)?*

      The City of Durant draws all of its raw water from the Blue River and in 2011 – a year that was both the hottest and driest on record – the Blue River almost ran dry. This required the City to make an emergency connection to an off-channel reservoir to provide water to their customers. Although the City is permitted to withdraw 12,342 AFY from the Blue River, the water right does not address the potential lack of physical water, as witnessed during periods of drought or because of projected significant increases in future demands.

      The City is projecting to serve a population of 24,516 by 2060 (Oklahoma Comprehensive Water Plan) and increase of nearly 55% and water demands are projected to reach over 6,700 AFY by 2060, an increase of over 50%. Since 2010 the population has grown by an estimated 12%.

      The City also supplies treated water to nearby Bryan County Rural Water Districts No. 2 and 5. Additionally, numerous Choctaw Nation properties are located just south of the City and purchase treated water from the City. Choctaw Nation properties served by the City include Choctaw Headquarters, medical facilities, children development center, senior citizen center and housing, wellness center, food distribution facility, travel plazas, as well as the Choctaw Resort, which annually attracts over 300,000 people.

      The City of Durant's projected growth, water sales to Rural Water Districts and the Choctaw Nation, and decreased reliability of their sole source of water is decreasing their water reliability during times of drought. This project will allow the City to aggressively target their water losses, decreasing their water consumption from the Blue River.

- *Describe how the project will address the water reliability concern? In your response, please address where the conserved water will go and how it will be used, including whether the conserved water will be used to offset groundwater pumping, used to reduce diversions, used to address shortages that impact diversions or reduce deliveries, made available for transfer, left in the river system, or used to meet another intended use.*

  This project will decrease water losses within the distribution system and for individual customers. Additionally, with real-time data, the City can more effectively target distribution system pipeline replacements, to not only replace aging infrastructure but also replace pipeline portions that have high water losses. These efforts will result in increased water use reduction, conservation and the City diverting less water from the Blue River. This will directly increase flows in the Blue River for downstream users or for use in the Blue River ecosystem and natural habitats.

- *Provide a description of the mechanism that will be used, if necessary, to put the conserved water to the intended use.*

  No mechanism will be used as any conserved water will simply not be diverted (pumped) from the Blue River.

- *Indicate the quantity of conserved water that will be used for the intended purpose.*

  The quantity of conserved water is equal to the estimated average annual water savings amount of 1,003 acre-feet.

- *Will the project make water available to achieve multiple benefits or to benefit multiple water users? Consider the following:*
  - *Will the project benefit multiple sectors and/or users (e.g., agriculture, municipal and industrial, environmental, recreation, or others)?*

    The project will directly benefit municipal and environmental sectors. The City provides water throughout its municipal service area to its customers. The project's smart meters will benefit these customers with more accurate billing data and the ability to quickly notify customers of potential water leaks. Additionally, with the reduction of water system leaks, overall operating costs will also decrease, potentially being passed onto customers in the form of reduced or more constant water rates.

    The environmental sector will also benefit as the Blue River is considered having High Quality Waters by the Oklahoma Water Resources Board (OWRB). This designation allows for enhanced waterbody protection, such as the source water protection area in portions of the Blue River. Additionally, the Blue River is one

of the few free-flowing rivers left in Oklahoma, and it is sourced from a unique and sensitive karst aquifer that has seen increased pressure from mining and domestic use in the region. This project will increase water conservation, resulting in less water diverted from the Blue River.

- *Will the project benefit species (e.g., federally threatened or endangered, a federally recognized candidate species, a state listed species, or a species of particular recreational, or economic importance)? Please describe the relationship of the species to the water supply, and whether the species is adversely affected by a Reclamation project.*

  The project, which will decrease water diversions from the Blue River, will benefit species within the Blue River watershed. The watershed covers portions of four Oklahoma counties, including Bryan, Johnston, Pontotoc and Murray.

  There are four Federally-listed endangered or threatened species that rely on rivers, streams, and wetlands of the Blue River watershed for habitat. The Whooping Crane (Grus americana), Interior Least Tern (Sterna antillarum), Piping Plover (Charadrius melodus), and the American Burying Beetle (Nicrophorus americanus), are the Federally-listed threatened and endangered species that can be found in the Blue River watershed.

  Whooping Cranes pass through Oklahoma each spring and fall during migration. While in Oklahoma, they are typically found in shallow wetlands, marshes, the margins of ponds and lakes, sandbars and shorelines of shallow rivers, wet prairies and crop fields near wetlands.

  Terns live along large rivers and may sometimes be found hunting fish in shallow wetlands and the margins of ponds and lakes. Least Terns require bare sand and gravel for nesting. Widespread loss and alteration of its riverine nesting habitat has eliminated the Least Tern from many locations within its former breeding range in the interior U.S. The construction of large reservoirs has permanently submerged some nesting areas and has altered the season flooding dynamics that are required to build and sustain the sandbars that the terns need for nesting. Ecosystems and rivers without reservoirs, such as the Blue River, can still provide valuable flooding dynamics and nesting areas that they seek.

  Piping Plovers migrate through Oklahoma and are found on mudflats, sandy beaches and shallow wetlands with sparse vegetation. They may be found along the margins of lakes and large rivers where there is

exposed (bare) sand or mud. Piping Plover populations have declined in their nesting range as a result of habitat destruction and alteration due to dam construction and channelization projects along rivers and streams, as well as the draining and filling of shallow wetlands.

The American Burying Beetle lives in many habitats across eastern Oklahoma and is known as a habitat generalist. The Conservation Priority Areas identified in Oklahoma include counties within the Choctaw Nation, including portions of the Blue River watershed. For reproduction, the beetles rely heavily on small carrion, such as small birds of mammals. Currently, they are listed as endangered.

Each of these species can rely on suitable habitat provided by the Blue River watershed. Improving water use efficiency through smart meter installation makes more water available to maintain these habitats. The impact may be most beneficial during drought conditions where flows are too low to provide riffles and maintain shallow wetlands. Improving habitat conditions specifically during drought conditions for threatened and endangered species serves to support their recovery over the long term by fostering critical habitat throughout the species' life cycle.

These species are not adversely affected by a Reclamation Project.

- *Will the project benefit a larger initiative to address water reliability?*

The Choctaw Nation has been actively investing in a comprehensive regional water planning initiative for their jurisdictional homeland in Southeast Oklahoma. The goal is to provide a suite of water resources strategies aligned with the seven essentials concept.

The seven essentials aim to balance the environmental, economic, and social components to result in bearable, equitable, viable and sustainable water solutions. In this role, the Choctaw Nation has a vested interest in ensuring that communities across the region, including the City of Durant, are able to meet their water needs. In fact, the City is currently the sole source of water to Choctaw Nation Properties in Durant. A letter of support from the Choctaw Nation for the proposed project is attached.

- *Will the project benefit Indian tribes?*

As addressed in the previous answer the Choctaw Nation has a vested interest in supporting sustainable water conservation solutions across their territory, which covers a large portion of the Blue River watershed.

- *Will the project benefit rural or economically disadvantaged communities?*

The City has numerous State, county, local and tribal agencies serving senior citizens and the low-income population, which specifically attracts those needing these services, causing an increased growth pattern. Although, the city has experienced substantial population growth over the last 10 years, there is a significant amount of city residents who are suffering from poverty and substandard living conditions.

Bryan County a rural county that includes the City, had a 2017 unemployment rate of 3.3% with individual poverty level at 18.2%, more than the state poverty level of 15.8%. There are about 7,500 senior citizen residents in Bryan County over 65 and approximately 20% are below poverty level. The City sells treated water to Bryan County Rural Water Districts 2 and 5.

The City of Durant School District, with a student enrollment of 3,800, has over 2,400 students that qualify as economically disadvantaged, or 63 percent, which are served free or reduced lunches.

- *Describe how the project will help to achieve these multiple benefits. In your response, please address where the conserved will go and where it will be used, including whether the conserved water will be used to offset groundwater pumping, used to reduce diversions, used to address shortages that impact diversions or reduce deliveries, made available for transfer, left in the river system, or used to meet another intended use.*

  By implementing this project, the City will decrease water diversions from the Blue River. This will improve threatened and endangered wildlife habitat that live in or migrate through the Blue River and its watershed. Reduced water loss reduces the City's water diversions from the Blue River during times of drought, which is when the Blue River's flows may be low and less reliable.

  Increasing water reliability will also aim to protect rural and economically disadvantaged students, community members living in poverty and the large population of elderly individuals.

- *Does the project promote and encourage collaboration among parties in a way that helps increase the reliability of the water supply?*

  This project promotes collaboration and support between a number of parties, including the Choctaw Nation and the Blue River Foundation of Oklahoma. These parties all support increased water reliability across their territory, which includes water conservation efforts such as targeting water losses in water systems.

  - *Is there widespread support for the project?*

The Choctaw Nation has expressed their support for this project and has provided a letter of support, which is attached to this application.

The Durant City Utilities Authority (DCUA), an entity within the City, has also provided a letter of support for this project. The DCUA unanimously approved support of the project, while designating the Oklahoma Water Resources Board funds as the non-Federal match at the March 12, 2019 meeting. The Durant City Council approved support for the project on March 12 with a resolution, which is attached to this application.

The Blue River Foundation of Oklahoma (BRF), which mirrors the goals embraced by the Choctaw Nation related to water and related resources, including the Blue River watershed, aim at protecting and sustaining the Blue River and its watershed. The BRF has provided their support for this project, along with an attached letter of support.

Additionally, United States Senator James (Jim) Inhofe and United States Congressman Markwayne Mullin have provided their support for this project, along with attached letters of support.

- *What is the significance of the collaboration/support?*

  All supporters have provided letters of support. Additionally, the Choctaw Nation has a long working relationship with the City in addressing regional and local water issues across their territory, including within the City of Durant.

- *Is the possibility of future water conservation improvements by other water users enhanced by completion of this project?*

  Effective implementation of conservation projects such as this one will serve as an example to nearby communities and the Choctaw Nation for their conservation priorities into the future.

- *Will the project help to prevent a water-related crisis or conflict? Is there frequently tension or litigation over water in the basin?*

  Although the Choctaw Nation supports water conservation efforts by the City of Durant, there has been concerns expressed over decreasing water reliability for their properties currently being served by the City's water. The Choctaw Nation has numerous properties, including a Resort, which serves over 300,000 people annually. The Choctaw Nation wants to make sure these properties have access to reliable water now and into the future. This project which aims to increase reliability and decrease unnecessary water losses will serve to address ongoing concerns from the Choctaw Nation.

Additionally, the Blue River Foundation's goals of protecting and sustaining the Blue River and watershed are often conflicting with the City's growing water needs from the Blue River. Addressing conservation efforts and decreasing water needed from the Blue River will work to satisfy both parties overall goals.

- *Describe the roles of any partners in the process. Please attach any relevant supporting documents.*

  The Durant City Utilities Authority (DCUA), which is a part of the City of Durant, will participate in the project as well. The Oklahoma Water Resources Board (OWRB) loan funding a portion of this project is required to be pass through the DCUA. DCUA has provided a letter of support and unanimously approved support of the project, while designating the Oklahoma Water Resources Board funds as the non-Federal match at the March 12, 2019 meeting. The Durant City Council has approved support for the project on March 12 with a resolution.

  All letters of support for all partners are attached to this application and referenced in the appendix.

- *Will the project address water supply reliability in other ways not described above?*

  All efforts addressing water supply reliability have been previously described above.

Evaluation Criterion C – Implementing Hydropower (18 points)

Describe the amount of energy capacity. Not applicable.

Describe the amount of energy generated. Not applicable.

Describe any other benefits of the hydropower project. Not applicable.

Evaluation Criterion D – Complementing On-Farm Irrigation Improvements (10 points)

- *Describe any planned or ongoing projects by farmers/ranchers that receive water from the applicant to improve on-farm efficiencies.*

  The City sells water to Bryan County Rural Water District 2 and 5. In these districts and the City there are approximately 1,200 agriculture related properties and about 25,000 acres of row crop farming.

  Although the City is not aware of any planned or ongoing projects by farmers there is a potential that there are farms that receive water from the City and may be investigating on-farm efficiencies.

- *Describe how the proposed WaterSMART project would complement any ongoing or planned on-farm improvement.* The City is not aware of any ongoing on-farm improvements.
- *Describe the on-farm water conservation or water use efficiency benefits that are expected to result from any on-farm work.*
  The City is not aware of any benefits.

Evaluation Criterion E – Department of the Interior Priorities (10 points)

The City of Durant will use smart meters and network infrastructure to more efficiently manage their water supplies, including the identification and repair of water leakage and losses currently occurring in the City's municipal water system. Such water stewardship and conservation measures are also a priority of the Department of the Interior. This project will also result in enhanced water reliability through water conservation, particularly during drought conditions. This is also an initiative of the WaterSMART Program, through which Reclamation works with tribal and other entities to increase water supply through infrastructure modernization and related activities. From an environmental/ecosystem perspective, the City's anticipated increased water efficiency will result in less water being pumped from the Blue River.

The fostering of relationships with conservation organizations such as the Blue River Foundation of Oklahoma will also be achieved through this project. The Choctaw Nation also has a vested interest in regional water conservation efforts and this project would foster this.

Evaluation Criterion F – Implementation and Results (6 points)

Subcriterion F.1 – Project Planning

Does the applicant have a Water Conservation Plan and/or System Optimization Review (SOR) in place?

The City of Durant's 30-year infrastructure capital project summary identifies continued investment in water loss reduction and water conservation initiatives over the next 7 years.

Provide the following information regarding project planning:

1. *Identify any district-wide, or system-wide, planning that provides support for the proposed project. This could include a Water Conservation Plan, SOR, Drought Contingency Plan or other planning efforts done to determine the priority of this project in relation to other potential projects.*

The City has a 30-year infrastructure plan which includes aspects of water conservation which focuses on water system loss reduction. Additionally, Bryan County, which includes the City of Durant, has a Hazard Mitigation Plan, with a section devoted to droughts and potential water conservation steps to take to reduce water usage.

The City also participated in developing the Arbuckle-Simpson Drought Contingency Plan (2017). The Arbuckle-Simpson Aquifer springs contribute substantially to flows in the upper reaches of the Blue River. This plan outlines near-term to long-term strategies to collaboratively mitigate impacts of drought, related to spring flows, such as in the Blue River.

Additionally, the Choctaw Nation has been developing a comprehensive regional water planning initiative, which includes strategies aligned with sustainable water solutions that also balance environmental and economic components.

2. *Describe how the project conforms to and meets the goals of any applicable planning efforts and identify any aspect of the project that implements a feature of an existing water plan(s).*

Mid-term strategies identified by the Arbuckle-Simpson Drought Contingency Plan includes improving water system management through leak detection, repair and system audits. These strategies will be directly implemented by this project.

This project is supported by the Choctaw Nation and their planning initiative as it directly addresses both environmental and economic components related to sustainable water solutions.

Subcriterion F.2 – Performance Measures

Provide a brief summary describing the performance measure that will be used to quantify actual benefits upon completion of the project (e.g., water saved or better managed, energy generated or saved).

Water savings will be a performance measure. This performance measure will be broken up by two sectors: distribution system water savings and customer water savings.

The project implementation of smart meters and network infrastructure will allow estimates of water losses before and after project implementation, leading to a measure of water savings in the distribution system and from customer connections.

Subcriterion F.3 – Readiness to Proceed

- *Describe the implementation plan of the proposed project. Please include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.*

The following table outlines the major tasks, milestones and schedule for the proposed project. The project is estimated to require 18 months for completion and includes the installation of 5,999 smart meters and network infrastructure following notice of award.

TABLE 1. PROJECT SCHEDULE. YEARS AND QUARTERS ARE IN RELATION TO THE NOTICE OF AWARD AND NOT BASED ON A YEARLY CALENDAR QUARTER SYSTEM.

Project Tasks and Milestones	Year 1				Year 2	
	Q1	Q2	Q3	Q4	Q1	Q2
Receive notice of award	★					
1. Grant and Compliance Administration	■					
2. Procurement of contractors and engineering services	■					
3. Project engineering	■	■	■	■	■	
4. Selection and acquisition of materials/supplies	■					
5. Installation of 5,999 AMR smart meters and AMI network infrastructure		■	■	■	■	
6. Final Performance Report and Interim Report				☆		★

Required financial reports and an interim performance report will be submitted at least on a semi-annual basis. A Final Performance Report will also be submitted after the project is completed and will include whether the project objectives and goals were met, a discussion of the benefits achieved by the project, including performance measures, and any relevant documentation, including photos.

- *Describe any permits that will be required, along with the process for obtaining such permits.*

  It is not anticipated that the project will require any permits as the installation of materials will occur within existing meter locations.

- *Identify and describe any engineering or design work performed specifically in support of the proposed project.*

  Engineering will be required for the following components: construction contract development, bidding package development and support, plans and specifications development, procurement assistance, and construction oversight and inspection.

- *Describe any new policies or administrative actions required to implement the project.*

No new policies or administrative actions are expected to be needed to implement the project. Both the City of Durant and the Durant City Utilities Authority have already approved support of the project.

- *Describe how the environmental compliance estimate was developed. Has the compliance cost been discussed with the local Reclamation office?*

  No significant environmental compliance costs are expected so no estimate was performed.

Evaluation Criterion G – Nexus to Reclamation Project Activities (4 points)

- *Is the proposed project connected to Reclamation project activities? If so, how? Please consider the following:*
  - *Does the applicant receive Reclamation project water?*

    No.
  - *Is the project on Reclamation project lands or involving Reclamation facilities?*
    No.
  - *Is the project in the same basin as a Reclamation project or activity?*
    The Blue River is spring fed by the Arbuckle-Simpson Aquifer. Protecting spring flow is paramount to protecting the sole water source for the City of Durant, the Blue River. The Bureau of Reclamation participated in the advisory group that developed the Arbuckle-Simpson Drought Contingency Plan (2017). This plan, which the City of Durant also participated in, outlines near-term to long-term strategies to collaboratively mitigate impacts of drought, which includes water conservation through water system loss reduction.
  - *Will the proposed work contribute water to a basin where a Reclamation project is located?*

    No.

- *Will the project benefit any tribe(s)?*

  The Choctaw Nation territory covers a large portion of the Blue River, which is the sole source of water for the City of Durant. The Choctaw Nation has been actively investing in a comprehensive regional water planning initiative for their jurisdictional homeland in Southeast Oklahoma. These investments aim to ensure communities across the region, including the City of Durant, are able to meet their water needs. Additionally, the City of Durant provides water to numerous Choctaw facilities, including the Choctaw Headquarters, medical facilities, children development center, senior citizen center and housing, wellness center, food distribution facility, travel plazas, as well as the Choctaw Resort. The Choctaw Nation have actively worked with the city to improve their water reliability and conservation efforts, which directly affect their Choctaw properties.

Evaluation Criterion H – Additional Non-Federal Funding (4 points)

*Up to **4 points** may be awarded to proposals that provide non-Federal funding in excess of 50 percent of the project costs. State the percentage of non-Federal funding provided using the following calculation:*

Non-Federal funding provided is 60 percent of the total project costs. Below shows the numbers and calculation used.

$$\frac{Non - Federal\ Funding}{Total\ Project\ Cost} = \frac{\$2{,}250{,}060}{\$3{,}750{,}060} \times 100 = 60\%$$

PROJECT BUDGET

Funding Plan and Letters of Commitment

In addition to in-kind costs provided by the City, a low interest loan from the Oklahoma Water Resources Board (OWRB) Clean Water State Revolving Fund will be accessed for the remaining non-Federal cost portion of the project. The City has been pre-approved for this loan through the Durant City Utilities Authority (DCUA), an entity within the City.

A letter of commitment is required and will be provided by the OWRB once the loan application is approved, which will take between one to two months. Additionally, a letter of commitment from the DCUA is also attached to this application.

Please identify the sources of the non-Federal cost share contribution for the project, including:

- *Any monetary contributions by the applicant towards the cost-share requirement and source of funds (e.g., reserve account, tax revenue, and/or assessments)*

  There are no monetary contributions by the applicant.

- *Any costs that will be contributed by the applicant*

  The applicant will contribute in-kind labor and equipment costs at a total of $110,565.

- *Any third party in-kind costs (i.e., goods and services provided by a third party)*

  There are no third party in-kind costs.

- *Any cash requested or received from other non-Federal entities.*

  A low interest loan from the Oklahoma Water Resources Board (OWRB) Clean Water State Revolving Fund has been applied for by the City, through the Durant City Utilities Authority. The loan amount is $2,139,495.

- *Any pending funding requests (i.e. grants or loans) that have not yet been approved and explain how the project will be affected if such funding is denied.*

  A low interest loan from the Oklahoma Water Resources Board (OWRB) Clean Water State Revolving Fund has not yet been approved. It will take the OWRB approximately one to two months to approve this application. Currently, this project is pre-approved and listed on the OWRB's project priority list. Although it is not anticipated, since the applicant's project has already been pre-approved, if this loan is not approved the applicant will pursue other loan options.

In addition, please identify whether the budget proposal includes any project costs that have been or may be incurred prior to award.

No budget proposal items or costs are anticipated to be incurred prior to award.

Budget Proposal

Table 2 provides a total project cost summary. Costs to be paid by the applicant consist of in-kind contributions of $110,565 and a low interest loan from the Oklahoma Water Resources Board (OWRB) State Revolving Fund of $2,139,495, which will be passed through the Durant City Utilities Authority.

TABLE 2. TOTAL PROJECT COST TABLE

SOURCE	Amount
Costs to be reimbursed with the requested Federal funding	$1,500,000
Costs to be paid by the applicant	$,2,250,060
Value of third party contributions	$0
Total Project Cost	**$3,750,060**

Table 3 provides a summary of the proposed project budget. The budget narrative below explains the budget proposal in more detail.

TABLE 3. BUDGET PROPOSAL

BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity Type	TOTAL COST
	$/Unit	Quantity		
Salaries and Wages				
Greg Buckley - Assistant City Manager	$51.24	10	Hours	$512.40
Marty Cook - Public Works Director	$36.59	68	Hours	$2,488.12
Grants Coordinator	$33.00	136	Hours	$4,488.00
Utilities Supervisor	$23.42	136	Hours	$3,185.12
Line Maintenance Supervisor	$26.03	260	Hours	$6,767.80
Line Maintenance Crew Leader	$15.11	2080	Hours	$31,428.80
Fringe Benefits				
Greg Buckley - Assistant City Manager	$14.72	10	Hours	$147.20
Marty Cook - Public Works Director	$14.01	68	Hours	$952.68
Grants Coordinator	$11.98	136	Hours	$1,629.28
Utilities Supervisor	$12.12	136	Hours	$1,648.32

Line Maintenance Supervisor	$10.93	260	Hours	$2,841.80
Line Maintenance Crew Leader	$8.99	2080	Hours	$18,699.20
Travel				
Not applicable				
Equipment				
One ½ ton pick-up truck	$17.20	2080	Hours	$35,776
Supplies and Materials				
Smart Meters				
5/8” - 3/4"	$230	5,260	Each	$1,209,800
1"	$344	233	Each	$80,152
1 -1/2"	$596	7	Each	$ 4,172
2"	$783	443	Each	$346,869
3"	$2,081	10	Each	$20,810
4"	$2,378	19	Each	$45,182
6"	$3,819	21	Each	$80,199
8"	$8,822	3	Each	$26,466
10"	$10,980	3	Each	$32,940
Miscellaneous parts for meter installation				
Boxer, riser, parts, etc..	$199,991	1	Lump	$199,991
AMI Network Infrastructure				
AMI software, system integration, hosting	$30,350	1	Each	$30,350
Meter Interface Units (gateways)	$9,400	12	Each	$112,800
Contractual/Construction				
Engineering Services				
Preliminary engineering, engineering	$95,892	1	Lump	$95,892
Contract development, bidding support, procurement assistance	$41,642	1	Lump	$41,642
Construction oversight and inspection	$163,135	1	Lump	$163,122
Installation				
Smart Meter Installation	$704,058	1	Lump	$704,058
AMI Network Installation	$112,775	1	Lump	$112,775
Third-Party Contributions				
Not applicable				

Other				
10% contingency	$300,656	1	Lump	$300,656
OWRB Loan Bond and financial advisor fees	$31,618	1	Lump	$31,618
TOTAL DIRECT COSTS				**$3,750,060**
Indirect Costs				
Not applicable				
TOTAL ESTIMATED PROJECT COSTS				**$3,750,060**

Budget Narrative

The proposed total project cost is $3,750,060. This application requests Reclamation funding of $1,500,000 to support the proposed project cost. The applicant will support the remaining $2,250,060 of the project costs through in-kind services and a low interest loan from the Oklahoma Water Resources Board (OWRB) Clean Water State Revolving Fund. The following items provide more detail on the proposed budget.

Salaries and Wages: Hourly rates listed for City of Durant staff exclude fringe benefits and are included as in-kind leverage for the project. The rates listed in the budget proposal table represent the labor rates of the identified personnel. A total of six City staff will contribute to this project in the form of project administration, management and grant compliance, meter conversion administration, and construction oversight and liaison. As the project evolves the City of Durant anticipates more in-kind labor to be contributed than what is currently committed. Below is a table outlining the tasks and estimated hours each staff will be contributing.

TABLE 4. BREAKDOWN OF IN-KIND STAFF HOURS PER PROJECT TASK.

City of Durant Staff	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6
Greg Buckley - Assistant City Manager	10					
Marty Cook - Public Works Director		33		25		10
Grants Coordinator	90	20				26
Utilities Supervisor					68	68
Line Maintenance Supervisor				60	200	
Line Maintenance Crew Leader					2080	

Fringe Benefits: Fringe benefits are included in the project budget for every City staff and range from 22 to 37 percent of staff salaries. These benefits are also considered in-kind contribution to the project.

Travel: Reimbursable travel is not required by the applicant staff for this project.

Equipment: The City will be using a half-ton pickup truck during this project as in-kind contribution. The rate of $17.20 an hour is consistent with the US Army Corps of Engineers expense schedule. No equipment purchases will be made.

Materials and Supplies: The City will direct purchase the materials and parts from the project, which will allow them to be tax exempt and allow the contractors warranty to cover both installation and materials. They include: 5,999 smart meters, ranging in size from 5/8" to 10", 12 AMI Meter Interface Units (MIU), AMI software, and miscellaneous parts and accessories.

Contractual: The City will contract with an engineering company for the following: construction contract development, bidding package development and support, plans and specifications development, procurement assistance, and construction oversight and inspection. The engineering services budget was provided through quotes and reviewed by City staff.

The City will also contract with a company for the installation of the smart meters, and AMI MIUs. The contractual budget was estimated through provided quotes. The City of Durant, Durant City Utilities Authority and a professional engineer on the City's staff will conduct a competitive public bidding process for the procurement of materials and contractual installation.

Proper procurement methods for materials and contractors will be followed according to required methods.

Third-Party In-Kind Contributions: Not applicable.

Environmental and Regulatory Compliance Costs: Minimal, if any, environmental and regulatory compliance costs are expected and will be covered by the City if they do arise.

Other Expenses: A 10 percent contingency expense of $300,656 is included in the budget in case of unforeseen increases in material, or labor costs between now and the project initiation.

Additionally, the OWRB Loan will require a bond and has associated financial advisor fees. This cost is approximately 1.5 percent of the total loan amount.

Indirect Costs: Not applicable.

Additional requested information is as follows:

- The City of Durant is registered in the System for Award Management (SAM)
- Unique Entity Identifier: DUNS Number 010473114
- The City will maintain an active SAM registration with current information at all times during which it has an active Federal award or application under consideration by a Federal awarding agency.

Environmental and Cultural Resources Compliance

The following paragraphs respond to the Environmental and Cultural Resources Compliance questions outlined in the FOA.

Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.

The proposed project will not significantly impact the surrounding environment. Installation of the project materials and supplies will occur within the already developed areas of the water system within the City's water service area.

Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?

The activities associated with the proposed project are not anticipated to affect any threatened or endangered species, or related critical habitat.

Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States?" If so, please describe and estimate any impacts the proposed project may have.

There are no impacts anticipated to wetlands or surface waters as a result of the proposed project.

When was the water delivery system constructed?

The City of Durant's water system was built in the decade of 1910.

Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.

No, the proposed project does not involve an irrigation system.

Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.

No, there are no buildings, structures, or features listed or eligible for listing on the National Register of Historic Places.

Are there any known archeological sites in the proposed project area?

No, there not any known archeological sites in the proposed project area.

Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?

No, the proposed project will not have any adverse effect on low income or minority populations.

Will the proposed project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?

No, the proposed project will not limit access to or ceremonial use of Indian sacred sites. It will not result in any negative impacts to tribal lands.

Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?

No, the proposed project will not contribute to the introduction or spread of noxious weeds or invasive species.

Required Permits or Approvals

No permits are anticipated to complete this project.

ATTACHMENTS

- Letters of Project Support
    - Durant City Utilities Authority
    - Choctaw Nation
    - Blue River Foundation of Oklahoma
    - United States Senator James (Jim) Inhofe
    - United States Congressman Markwayne Mullin
- Official Resolution from the City of Durant
- Shapefile of the City of Durant water service area
- Mandatory Federal Forms

THE DURANT CITY UTILITIES AUTHORITY

DURANT
· OKLAHOMA ·

March 14, 2019

Bureau of Reclamation
Financial Assistance Support Section
Attn: Mr. Darren Olson
P.O. Box 25007, MS 84-27814
Denver, CO 80225

RE: Durant, OK- 2019 WaterSMART Water & Energy Efficiency: BOR-DO-19-F004 City-wide Automatic Meter Reader Installation and AMI Network Infrastructure Funding Group II

Dear Mr. Olson,

The City of Durant is located 90 miles north of the DFW Texas area and is the largest city in Bryan County. Even though it is considered rural, this community is recognized as one of the fastest growing areas in Oklahoma, with exponential growth in residential, commercial and industrial areas. As the county seat, Choctaw Nation Headquarters, a regional medical, commercial and social services hub, as well as, home to Southeastern Oklahoma State University, Durant's estimated population has grown 12%, since the 2010 US Census documented population of 15,856. The considerable growth is causing a severe strain for the City of Durant infrastructure and utility services; however, the City and the Durant City Utilities Authority (DCUA) continue to make quality, affordable services a priority for the Durant community.

During 2018, the City of Durant experienced almost 48% water loss that was not identified for billing because of the deteriorated, broken or uncounted for meters. This is a detriment to the City, as this major loss continues to affect reduced revenue to the city, vital for budgeting purposes and quality of life necessities. In addition to the city utility customers, the City of Durant also supplies treated water to nearby Bryan County Rural Water Districts No. 2 and 5, and to Choctaw Nation properties, requiring more water supply. The proposed project is one element of a larger effort by the City to improve aging water infrastructure, increase capacity and maximize water reliability, with responsibility for conserving natural resources. The overall effort, including this proposed project, is supported by existing local and regional water resource planning efforts, including technical assistance from the Choctaw Nation of Oklahoma, headquartered in Durant.

The Durant City Utilities Authority fully supports the opportunity to submit a grant application through The Department of Interior's Bureau of Reclamation 2019 WaterSMART Water and Energy Efficiency Program for the proposed Automatic Meter Reader and AMI Network project. On Tuesday, March 12, the Durant City Utilities Authority unanimously approved utilizing the OK Water Resources Board loan funds, as **a minimum $ 2,139,495 non-federal share for the Funding Group II grant request of $1,500,000**. This crucial project, will include city in-kind labor and equipment for administration and field work, with an approximate total project of $3,750,060.

The City of Durant has a proven track record for making essential improvements for quality of life amenities, as well as many grant success stories. The city makes continued efforts to utilize funds from multiple sources to improve public services and infrastructure. The federal assistance through the **2019 WaterSMART Water & Energy Efficiency program** will make this vital project feasible to significantly improve water efficiency, sustain quality of life and continue viable economic development.

Thank you for your consideration to fund this valuable project - vital to Durant and southeastern Oklahoma.

Respectfully,

Jerry L. Tomlinson
Chairman
Durant City Utilities Authority

Choctaw Nation of Oklahoma

Water Resources Department
P.O. Box 1210, Durant, Oklahoma 74702-1210
Phone: (580) 924-8280 Toll Free: (800) 522-6170

Gary Batton
Chief
Jack Austin Jr.
Assistant Chief

March 13, 2019

Bureau of Reclamation
Financial Assistance Support Services
Attn: Mr. Darren Olson
P.O. Box 25007, MS 84-27814
Denver, CO 80225

RE: Bureau of Reclamation WaterSMART: Water and Energy Efficiency Grant Opportunity (No. BOR-DO-19-F004)

Dear Mr. Olson:

On behalf of the Choctaw Nation of Oklahoma, I would like to express our support of the City of Durant's application for the Automatic Meter Reading (AMR) project, including Advanced Metering Infrastructure (AMI). This project will improve the city's water efficiency and assist them with their diligent stewardship efforts to protect our unique water resources, as well as maintain adequate and affordable utility services for the local communities and economic growth occurring in Durant, Oklahoma. This project closely aligns with the Choctaw Nation of Oklahoma's goals to improve water resource management and increase collaboration between communities for sustainable water solutions.

It is the Choctaw Nation of Oklahoma's privilege to state its unwavering support of the City of Durant's application to the Bureau of Reclamation for their AMR and AMI project. If you have any questions or comments, please feel free to contact me at 580-579-9291 or via email at eschuth@choctawnation.com .

Sincerely,

Ethan Schuth

Ethan Schuth
Water Resource Manager
Choctaw Nation of Oklahoma

P.O. Box 971
Tishomingo,OK 73460
John Moody, Chairman
512.289.4676
info@blueriverfoundationokla.com

BLUE RIVER
FOUNDATION OF OKLAHOMA
www.blueriverfoundationokla.com

Bureau of Reclamation
Financial Assistance Support Section
Attn: Mr. Darren Olson
Mail Code: 84-27814
P.O. Box 25007
Denver, CO 80225

Dear Mr. Olson:

Re: Bureau of Reclamation WaterSMART: Water and Energy Efficiency Grant Opportunity (No. BOR-DO-19-F004).

On behalf of the Blue River Foundation of Oklahoma, we would like to express our support of the City of Durant's application for the Automatic Meter Reading (AMR) project, including Advanced Metering Infrastructure (AMI). The City of Durant, Oklahoma recognizes stewardship responsibility for water resources, including the Blue River watershed municipal supply, and it has determined the critical need for AMI throughout the entire community. This project will improve water efficiency through diligent stewardship efforts and thereby promote conservation of the Blue River water resource. As we understand, the implementation of this project will help maintain adequate and affordable utility services for the extensive community and economic growth occurring in Durant, Oklahoma.

This project is consistent with the Blue River Foundation's goals to promote sustainable management of the Blue River watershed and increase collaboration between the many beneficiaries of this significant water resource. We look forward to working closely with the City of Durant as they implement the AMI project and improve their water infrastructure and water efficiency. We ask that you consider the beneficial impacts this project will have on the City of Durant and the surrounding Blue River watershed.

If you have any questions or comments, please feel free to contact John Moody at 512.289.4676.

Sincerely,

John Moody
Blue River Foundation of Oklahoma

JAMES M. INHOFE
OKLAHOMA

WASHINGTON OFFICE
205 RUSSELL SENATE OFFICE BUILDING
WASHINGTON, DC 20510-3603
(202) 224-4721

TULSA OFFICE
1924 SOUTH UTICA, SUITE 530
TULSA, OK 74104
(918) 748-5111

OKLAHOMA CITY OFFICE
3817 NORTHWEST EXPRESSWAY, SUITE 780
OKLAHOMA CITY, OK 73112
(405) 208-8841

United States Senate

WASHINGTON, DC 20510–3603

COMMITTEES:
ARMED SERVICES
CHAIRMAN

ENVIRONMENT AND PUBLIC WORKS

SMALL BUSINESS AND ENTREPRENEURSHIP

INTELLIGENCE
EX OFFICIO

March 15, 2019

Bureau of Reclamation
Financial Assistance Support Section
Attn: Mr. Darren Olson
P.O. Box 25007, MS 84-27814
Denver, CO 80225

RE: Durant, OK- 2019 WaterSMART Water & Energy Efficiency: BOR-DO-19-F004 City-wide Automatic Meter Reader Installation and AMI Network Infrastructure

Dear Mr. Olson:

It is my pleasure to provide a letter of support for the 2019 Department of The Interior Bureau of Reclamation WaterSMART Water and Energy Efficiency Program supporting a complete city-wide AMR project benefiting the citizens of Durant and economic development growth. The $1.5 million grant request in the Funding Group II will provide essential federal funding for an approximate $3,750,060 project to install the proposed 5,999 critically needed AMR units and an AMI Network System to reduce water loss, and make the most efficient use of limited water supply from the Blue River, the City's sole source of water.

The proposed project is one element of a larger effort by the City to improve aging water infrastructure, increase capacity and maximize water reliability, with responsibility for conserving natural resources. The overall effort, including this proposed project, is supported by existing local and regional water resource planning efforts, including technical assistance from the Choctaw Nation of Oklahoma, headquartered in Durant.

In 2018, the City of Durant experienced almost a 48 percent water loss, which is a detriment to the City, as this major loss continues to affect reduced revenue to the city, vital for budgeting purposes and quality of life necessities. At the national level, it is apparent there is a significant need across America to manage our natural resources, improve water efficiency, sustain affordable water for all households and to continue economic development for the future of our country.

The City of Durant has a proven track record for making essential improvements for quality of life amenities, as well as many grant success stories. The city makes continued efforts to utilize funds from multiple sources to improve public services and infrastructure. The 2019 Department of The Interior Bureau of Reclamation WaterSMART Water and Energy Efficiency Program will provide critical funds for the City of Durant in their prudent efforts for vital water conservation.

Thank you for your consideration for this worthy project benefiting the City of Durant in southeastern Oklahoma. Please feel free to contact me if you have any additional questions.

Sincerely,

James M. Inhofe
United States Senator

MARKWAYNE MULLIN
2ND DISTRICT, OKLAHOMA

ENERGY AND COMMERCE COMMITTEE
SUBCOMMITTEES
ENERGY
HEALTH
DIGITAL COMMERCE AND
CONSUMER PROTECTION

Congress of the United States
House of Representatives
Washington, DC 20515–3602

March 11, 2019

Bureau of Reclamation
Financial Assistance Support Section
Attn: Mr. Darren Olson
P.O. Box 25007, MS 84-27814
Denver, CO 80225

RE: Durant, OK- 2019 WaterSMART Water & Energy Efficiency: BOR-DO-19-F004 Citywide Automatic Meter Reader Installation and AMI Network Infrastructure

To Whom It May Concern:

Across America, there is a desperate need for responsibility of our natural resources - which includes critical water efficiency. Without federal funding assistance, it is not feasible for many communities to improve deteriorated infrastructure necessary for water conservation, to grow thriving communities, sustain quality of life and continue viable economic development.

In 2018, the City of Durant experienced almost 48% water loss, which is a detriment to the City, as this major loss continues to affect reduced revenue to the city, vital for budgeting purposes and quality of life necessities. To correct this, the City is pursuing the installation of Automatic Meter Reading (AMR) meters (i.e. smart meters) and an AMI Network System to address water loss, improve water-metering accuracy, promote water conservation, and to support future water planning efforts both locally and regionally.

In addition to the city utility customers, the City of Durant also supplies treated water to nearby Bryan County Rural Water Districts No. 2 and 5, and to Choctaw Nation properties, requiring more water supply. The proposed project is one element of a larger effort by the City to improve aging water infrastructure, increase capacity and maximize water reliability, with responsibility for conserving natural resources. The overall effort, including this proposed project, is supported by existing local and regional water resource planning efforts, including technical assistance from the Choctaw Nation of Oklahoma, headquartered in Durant.

The City of Durant has a proven record of accomplishment for making essential improvements for quality of life amenities, as well as many grant success stories. The city makes continued efforts to utilize funds from multiple sources to improve public services and infrastructure.

1113 LONGWORTH HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
(202) 225-2701

1 E CHOCTAW, SUITE 175
MCALESTER, OK 74501
(918) 423-5951

3109 AZALEA PARK DRIVE
MUSKOGEE, OK 74401
(918) 687-2533

200 S. LYNN RIGGS BOULEVARD
CLAREMORE, OK 74017
(918) 283-6262

Please accept this letter of support for the 2019 Department of The Interior Bureau of Reclamation WaterSMART Water and Energy Efficiency Program supporting a complete citywide AMR project benefiting the citizens of Durant and economic development growth. The **$1.5 million** grant request in the **Funding Group II** will provide essential federal funding for an approximate **$3,750,060** project to install the proposed 5,999 critically needed AMR units and an AMI Network System to reduce water loss, and make the most efficient use of limited water supply from the Blue River, the City's sole source of water.

Thank you for the consideration to award this valuable project for the City of Durant.
Please feel free to contact me if you have any questions.

Sincerely,

Markwayne Mullin

Markwayne Mullin
Member of Congress

Resolution No. 2019–08

A RESOLUTION FOR PROJECT SUPPORT AND MATCH FUNDS COMMITMENT
U.S. Department of Interior - Bureau of Reclamation
FY19 WaterSMART: Water and Energy Efficiency Program BOR-DO-19-F004

The City of Durant, Oklahoma recognizes stewardship responsibility for water resources and has determined the critical need for an **Automatic Meter Reader (AMR) project** throughout the entire community, to include **AMI Network Infrastructure.**

WHEREAS, due to a large number of outdated, non-functioning and un-documented meters, as well as the lack of automation capability, the city has been consistently plagued with substantial water leaks, inaccurate meter readings, and increasing revenue loss - with almost 48% not billed for in 2018; and

WHEREAS, a city-wide AMR project with an AMI Network System is necessary to improve water efficiency through diligent stewardship efforts, in order to protect water resources, as well as maintaining adequate and affordable utility services for the extensive community and economic growth occurring in Durant, Oklahoma; and

WHEREAS, the City of Durant is submitting a grant application to the U.S. Department of Interior - Bureau of Reclamation through the **FY19 WaterSMART Water and Energy Efficiency Program** requesting grant funds in the amount of **$ 1,500,000** for the Automated Meter Reader (AMR) equipment, AMI Network System and necessary apparatus; and

WHEREAS, the city-wide AMR project would include a **Funding Group II** grant request in the amount of **$1,500,000** with a minimum of **$2,139,495** provided through an OK Water Resource Board CWSRF loan, as well as Public Works and administrative staff facilitation of **$110,565** for a project total of approximately **$ 3,750,060**. This crucial endeavor would greatly benefit all residents and the City of Durant for long term efforts to reduce error and water usage cost, while significantly increasing water efficiency. Proposed improvements include: 5,999 Neptune compatible meters, fittings, parts, and an AMI Network System, with software and antenna equipment**;** and

WHEREAS, the City of Durant City Council supports the proposed **FY19 WaterSMART Water and Energy Efficiency Program** grant request and is committed to provide the required non-federal match source to support the application budget necessary for a successful project.

NOW THEREFORE, BE IT RESOLVED, the City of Durant commits a minimum of **$ 2,139,495** as non-federal match and approximately **$ 110,565** city in-kind support for the **FY19 WaterSMART Water and Energy Efficiency Program** grant budget to implement the Automatic Meter Reader (AMR) project upgrades and AMI Network System.

PASSED AND APPROVED by the Mayor and City Council of the City of Durant, Oklahoma this March 12, 2019, at a regularly scheduled meeting of the governing body, in compliance with the Open Meeting Act, 25 O.S. § 301 et seq.

Jerry L. Tomlinson, Mayor

ATTEST:

Cynthia Price, City Clerk

CITY OF DURANT OFFICIAL SEAL STATE OF OKLAHOMA