WaterSMART Small-Scale Water Efficiency Project

D.2.2.2 Title Page

The Town of Taylor Arizona is a small (Population 3,995) rural community with a rich history and strong sense of faith and community. Like many rural, blue-collar municipalities, Taylor has limited funds available for major capital improvement projects to provide adequate, sustainable water delivery in the varied climatic conditions they experience.

The project for which the Town is seeking this matching grant has two major components:

- 1. Embark on Phase Two of a system wide, turnkey residential meter replacement program utilizing radio read meters and associated billing program. Most of the Towns remaining meters, not replaced as part of Phase One, are in excess of twenty (20) years old and have recorded over one million (1,000,000) gallons of flow. Testing of a representative sample of twelve (12) of the systems water meters showed all but two (2) meters were under-recording, especially at low flows. Phase One is complete and the Town was able to immediately begin billing with the new meters and program which significantly increased revenues and enhanced the ability to track and reduce water loss. Using radio reads has also reduced the errors inherent in manually reading and recording the meter reads on paper along with drastically reducing the labor, equipment and other resources necessary to manually read meters. Because the Town was able to enter the readings from the old meters not changed out in Phase One project directly into the radio read handheld device, the laborious process of transferring the meter readings from paper into the billing computer was eliminated. The Town was so pleased with the result of Phase One that they now want to embark on the second phase of this project.
- 2. Phase One of this project identified approximately thirty (30) locations on Town owned buildings, parks and irrigation lines which previously did not have their usage tracked on which they wished to install new meters. As part of Phase One, ten (10) new meters were installed on Town irrigation lines for which usage documentation had previously not been recorded. While these irrigation lines are not billed, the newly installed meters give the Town the ability to better track usage and adjust the flows to avoid wasting of water from over irrigation. They will also give the Town more accurate documentation to use in calculating the amount of actual water loss. Being able to track water usage in these areas will also aid in locating leaks and in the case of the irrigation lines, ensure the vegetation is not being over watered.

The Town of Taylor lies in a broad valley in east-central Arizona at an elevation of 5,640 feet with the Mogollon Rim to its west and the White Mountains to the south. The Town is in Navajo County and although small in population, its incorporated area covers twenty-six (26) square miles which is indicative of a huge potential for growth. The GPS coordinates for Taylor are 34°27'57"N 1 10°6'16"W. Town of Taylor contact information is:

Gus Lundberg, Town Manager 425 Papermill Road PO Box 158 Taylor, AZ 85939 (928)-536-7366 gus@tayloraz.org

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WaterSMART Water and Energy Efficiency Project Application

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WaterSMART Water and Energy Efficiency Project Application

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Executive Summary

The Town of Taylor Arizona is a small rural community with approximately 4,447 residents located in Navajo County in east/central Arizona. The Town has numerous capital improvement needs and required infrastructure upgrades and as result, a five-year capital plan was formulated to prioritize their needs. Taylor has a small customer base and limited revenues available to fund their necessary capital improvement projects therefore obtaining grant funds to help defer some of these costs is critical to their continued successful water system operations. In conjunction with completion of their five-year capital plan the Town has also undertaken a rate study and adopted new water rates to allow for adequate operational funding and begin establishing sufficient capital reserves to fund future capital needs projects. The Town applied for and was awarded a WaterSMART matching grant from the BOR (funding opportunity R21AP10101.00) in 2020 which allowed them to complete Phase One of their water meter replacement project. Phase One was highly successful and significantly increased the amount of water billed along with dramatically reducing the cost to read and bill our water customers.

1. Background Data

The project for which this grant application is being submitted is Phase Two of a turnkey system wide water meter replacement program and conversion to a radio read documentation and billing process. Additionally, Taylor desires to install water meters on the remaining twenty (20) Town owned buildings, parks and irrigation systems to allow them to document the total amount of water being used in an effort to accurately calculate their total water loss. Phase One of the meter replacement project was a tremendous success and the Town realized both an increase in the amount of water billed and a reduction in the cost and labor to read and bill our water customers. Taylor Arizona is in Navajo County, located approximately at GPS coordinates; Latitude: 34°27.9024' N and Longitude: 110°5.4738' W. Snowflake Arizona is on Taylor's northern border and Show Low Arizona is approximately sixteen (16) miles south.

Taylor's water system is supplied totally by ground water and for calendar year 2021 their total pumpage was five percent (5%) lower than in 2020. While this is not a huge drop it is indicative that the residents are conserving more water based on accurately being charged for the water they use. As we complete the meter changeout project it is expected that the reduction in groundwater withdrawal will

continue and eventually increase dramatically. Taylor supplies water to approximately 1,340 accounts with a majority being residential and the remainder a mix of commercial, industrial, multi-family and agricultural. Although Taylor has a population of about 3,995 residents, the incorporated boundaries cover twenty-six (26) square miles and the potential for a significantly increased population and water demand is high. While the population dropped a bit in the 2020 census, with the pandemic waning and the housing market rebounding Taylor is experiencing record numbers of new house starts and water and sewer hookups over the past 2 years.

2. Project Description

Like many small rural communities, Taylor Arizona struggles to provide cost effective services to its residents and visitors with a limited budget and minimal staffing. Operation of a Municipal water system is becoming more expensive and complex as the plethora of new State and Federal regulations coupled with a dwindling statewide water supply and labor pool have increased the cost of providing this most basic of human needs. The Town and its Manager have identified efficiency and conservation as a priority need to meet the demands of successfully operating a water system in the long-term.

Taylor currently has approximately one thousand three hundred and thirty-nine water accounts (1,339), one thousand two hundred sixty (1,260) are residential and seventy-nine (79) are commercial/multi-residential. It had been over twenty years since the Town last conducted a system wide replacement of its residential water meters prior to embarking on Phase One of their replacement project on 2021. The remainder of the meters not replaced in the 2021 project still require the labor-intensive task of field staff manually recording the meter reads on their handheld reader each month and then having the billing clerk transfer the reading into the billing computer. This task used to take a week or more to complete each month and, because the reads are being manually entered twice, the potential for a billing error are significant. Phase One of this project resulted in significant reduction in both the cost and time to read the water meters and reading/transferring errors which require re-reads and increased work for the billing staff. The Town realized a cost savings of about \$57,000 per year in reading and billing water meters.

Prior to Phase One the town realized that meters, particularly residential, slow as they age especially when they have in excess of one million gallons recorded. The Town decided to have a representative sample of the existing meters of varying age and gallons logged tested by an independent testing agency prior to Phase One of the project. Of the twelve (12) meters the Town sent in for testing, ten (10) failed to meet the minimum standards for accuracy. The finding from the testing for all twelve (12) meters showed the following cumulative results:

• Low Flow: Eighty seven percent of flow recorded

- Medium Flow: Ninety-six percent of flow recorded
- High Flow: Ninety-six percent of flow recorded

The results of the low flow testing are particularly troubling as small leaks, which the resident would likely not discover, are not being accurately recorded yet can add up to a significant amount. A one quarter (1/4) gallon per minute leak adds up to over ten thousand (10,000) gallons per month. The type of meter currently installed in Taylor does not have the benefit of a low flow leak detector which modern meters have as a built-in feature. Because most residential leaks are low flow and a significant majority take place in the toilet mechanism, this is potable water that is literally going down the sewer with no benefit to the Town or customer. The Town conducted a water rate review and analysis in 2018 and a corresponding rate increase was approved by Council and became effective in January of 2019. With obsolete, under-reporting water meters, raising the rates did not have a significant impact on water conservation as most customers were still not be charged for

by Council and became effective in January of 2019. With obsolete, under-reporting water meters, raising the rates did not have a significant impact on water conservation as most customers were still not be charged for the actual amount of water they use. Accurate documentation of water use along with a conservation-based water rate system is the most effective tool for encouraging lower usage. Combining a meter replacement program with such a rate system makes customers much more aware of the amount of water they are using thereby increasing conservation compliance.

3. Performance Measures

The Town proposes to track performance of these improvements by several methods:

- Tracking the increase in the amount of water billed; Phase One of this project increased the amount of water billed twenty-two percent (22%) and the Town anticipates further increases with the completion of Phase Two. The increase in water billed should eventually flatten out as customers get billed for the actual amount of water used and begin to employ conservation measures.
- Correspondently track the total water pumped to the system and track whether the accurate water use now being recorded and an increase in the water rates has lowered the amount pumped and increased the amount billed.
- Calculate, to the best of the Towns ability, the current unaccounted-for water and then once all the new meters are installed determine the extent to which this number has been reduced. Currently because of the magnitude of under reporting meters along with municipal buildings and irrigation lines being unmetered, it is difficult to accurately determine their water loss.
- Document the efficiencies realized by conversion to a radio read meter system. Because Taylor has a significant amount of area within its corporate boundaries (26 square miles), to manually read the meters involves traveling significant distances between subdivisions and isolated residences versus the typical water system and its contiguous neighborhoods which allow the meter reader to walk most of their route. The amount of time to read the entire system manually normally involves four to seven days, longer if there is snow or bad weather. This cost was reduced significantly in Phase One and should decrease more until all of the old meters are replace with radio reads.
- Document the amount of time saved by the billing clerk in generating the monthly water bills and the reduction in re-reads or incorrect bills due to the elimination of manually transferring the readings into the meter books and then from the meter books to the billing program. Again, as with Phase One, the amount of time saved was significant.

4. Evaluation Criteria

Evaluation Criterion A - Project Benefits Maximum Points: 35

Benefits to the Category A Applicant's Water Delivery System: Describe the expected benefits to the Category A applicant's water delivery system. Address the following:

- Clearly explain the anticipated water management benefits to the Category A applicant's water supply delivery system and water customers.
- Explain the significance of the anticipated water management benefits for the Category A applicant's water delivery system and customers. Consider the following:
 - o Are customers not currently getting their full water right at certain times of year?
 - o Does this project have the potential to prevent lawsuits or water calls?
 - o What are the consequences of not making the improvement?
 - o Are customer water restrictions currently required?
 - o Other significant concerns that support the need for the project.

To aid in their water conservation efforts, the Town adopted a Drought and Water Shortage Preparedness Plan which complies with regulatory guidelines. This plan identifies pumping levels at which restrictions will be enacted and the corresponding conservation regulations. The Town also desires to establish a water conservation plan however, because of the condition of the systems water meters it is not possible to accurately document the water loss between the amount pumped and the amount billed. A component of this overall project is to install meters on the Towns buildings and irrigation lines to better manage the amount of watering based on climate, time of year and type of vegetation along with domestic use in their facilities. This information will be invaluable in reacting to changes in climactic and land use variables. The advancement in meter recording and billing operations makes it possible to track water use and concurrently the wasting of water. Radio read technology has significantly reduced the manpower necessary to read and bill meters while at the same time reducing reading and billing errors.

The Town is involved in Little Colorado adjudication process and this type of water use documentation is invaluable in a successful long-term water assurance process. The adjudication is a lengthy and contentious process with the parties concerned about protecting their future water supplies. By taking the initiative to enhance their water use documentation and conservation, the Town is showing they are committed to ensuring future water supplies which should help reduce some of the tensions. The Town, and many of the other water systems involved in the adjudication are small rural communities who struggle with having sufficient funding to embark on this type of project. The Taylor Town Manager has reported on the positive results from the completion of the Phase One component of the replacement program has had to other utility and governmental officials with whom he has met. If

Taylor is successful in completing this project it would supply motivation and a blueprint for others to follow suit. This program will be well received by the adjudication group as it moves towards the long-term goal of assured future water supplies.

Accurately being able to track their water loss will enable the Town to aggressively identify leaks and wasted water, this will in turn result in a reduction in the amount of water pumped from the aquifer. By being proactive in its water use documentation and conservation, the Town will show its residents and neighboring communities that it takes our future water supply availability seriously and indicate their commitment to future generations. A critical component to water conservation is to lead by example. Because the Town does not currently meter municipal building and irrigations systems, the residents may balk at a program which the Town does not follow. Metering of these facilities will make it more transparent for the residents to clearly see that the Town is taking the lead on water conservation and subsequently get on board with the program. The Town currently supplies reclaimed water for on-farm irrigation. Potable water is not normally supplied for this purpose but with the abundance of livestock ranching in the area, the Town would have the ability to provide emergency livestock water in case of an extended drought or shortage.

Broader Benefits: Describe the broader benefits that are expected to occur as a result of the project. Consider the following:

- Will the project improve broader water supply reliability at sub-basin or basin scale?
- Will the proposed project increase collaboration and information sharing among water managers in the region? Please explain.
- Will the proposed project positively impacts/benefit various sectors and economies within the applicable geographic area (e.g., impacts to agriculture, environment, recreation, and tourism)? Please explain. Will the project complement work being done in coordination with NRCS in the area (e.g., the area with a direct connection to the districts water supply)? Please explain.
- Will the project help address drought conditions at the sub-basin or basin scale? Please explain.

Evaluation Criterion B - Planning Efforts Supporting the Project Maximum Points: 30 Plan Development:

• Describe how your project is supported by an existing planning effort. Identify the planning effort and who developed it. If the planning effort was not developed by the Category A applicant, describe the Category A applicant's involvement in developing the planning effort.

Support for the Project: Describe to what extend the proposed project is supported by the identified plan. Address the following:

- Is the project identified specifically in the planning effort?
- Explain whether the proposed project implement a goal or address a need or problem identified in the existing planning effort? Explain how the proposed project has been determined as a priority in the

existing planning effort as opposed to other potential projects/measures.

A system wide turnkey water meter replacement program was identified in 2017 as the Town's top priority on its Capital Improvements Plan priority list. The priority list was drafted based on initial input.from; the Town Manager, Public Works Director, Utilities Supervisor and other city staff. The Town's utility consultant then merged the information into a document and sent it to all involved for review and comment. After receiving the comments, a final draft of the list was prepared and sent to all involved for a final review and approval. The Town Council while not required to approve the capital list, is aware of and supports the projects listed.

A majority of the Towns existing water meters were in excess of twenty (20) years old and have recorded over one million (1,000,000) gallons of flow. Testing of a representative sample of twelve (12) of the systems water meters showed all but two (2) meters were under-recording, especially at low flows. Once the install is complete the Town would be able to immediately begin billing with the new meters and program which would significantly increase revenues and greatly enhance their ability to track and reduce water loss.

Based on this information the Town realized raising the rates, while not addressing the obsolete underreporting water meters will not have a significant impact on water conservation as most customers will
still not be charged for the actual amount of water they use. Accurate documentation of water use along
with a conservation-based water rate system is the most effective tool for encouraging lower usage.
Having a significant number of under recording meters will also not generate sufficient revenues to fund
the Capital Improvement Projects which the Town is in need of completing to continue successful and
regulatory compliant operation of their water system. Combining a meter replacement program with
such a rate system makes customers much more aware of the amount of water they are using thereby
increasing conservation compliance while maintaining sufficient revenues to fund additional needed
capital improvements. Ensuring that all customers are being billed/or the actual amount of water they
use will also make the rates equitable and fair for all.

The Taylor Town Council has approved a resolution supporting applying for this grant and completed the meter changeout program. The Taylor Mayor has also drafted a personal letter of support which is included as an attachment to this application.

Evaluation Criterion C - Project Implementation Maximum Points: 20 •

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

- Identify and describe any engineering or design work performed specifically in support of the proposed project.
- Describe any new policies or administrative actions required to implement the project
- Describe the timeline for completion of environmental and cultural resource compliance. Was the timeline for completion of environmental and cultural resource compliance discussed with the local Reclamation office?
- In 2019, The Town researched options to obtain new meters and it appeared that the best and most expeditious option was to reach an agreement with a larger agency to utilize their water meter contract derived from a competitive bidding process. The Town has received permission from the City of Mesa, AZ to piggyback on a large-scale radio read meter replacement program they competitively bid which will result in a significant savings due to the economy of scale. The meter manufacturer (Sensus) has indicated they would honor the pricing in the Mesa contract which will also save the Town the cost of preparing and advertising bids for the water meters and associated equipment. It is anticipated that all phases of this project will replace approximately one thousand two hundred sixty (1,260) residential meters, fifty-two (52) 1" meters will be installed For the Town to bid the meter purchase on their own would result in higher pricing because of the small number of meters they require versus a city with a population of over five-hundred thousand (500,000) residents.
- The program includes installation of all new residential meters by a qualified firm contracted with the Town (a component of the Mesa bid and project). The Town has a very small workforce and installing that many meters with their limited staff would take many years and detract from their other duties. Having the meters installed by contracted staff who are well trained in the process would be more efficient and result in less damage and mistakes in transfer of information to the new billing program. By utilizing the Mesa contract the Town is able to forgo the lengthy, costly and labor intensive process of advertising, bidding, analyzing and awarding a new meter contract. If the Town is successful in obtaining this grant, meter installation for Phase Two would begin immediately and would be completed in about 90 days.
- Due to the Town utilizing the Mesa contract no engineering or design work would be required and the other component, an associated rate study and implementation of new rates has been, completed and approved.

Evaluation Criterion D - Nexus to Reclamation Maximum Points: 5

- Describe the nexus between the proposed project and a Reclamation project or activity, including:
- Is the proposed project connected to a Reclamation project or activity?
- If so, how? Please consider the following:

• Does the applicant receive Reclamation project water?

water in these rural areas.

- Is the project on Reclamation project lands or involving Reclamation facilities?
- Is the project in the same basin as a Reclamation project or activity?
- Will the proposed work contribute water to a basin where a Reclamation project is located?

The Town of Taylor supplies residents with only ground water so it does not directly utilize Reclamation water. However, the Town is located in the Little Colorado River Basin which flows into the Colorado River that in turn provides water to Arizona, California and Nevada. By reducing current and future pumping from the aquifer, this project will enhance the available water feeding the basin and contribute to the users of reclamation waters from the river and downstream groundwater supplies. The Town does supply reclaimed water from its water reclamation facility for farming and agricultural

uses and while that practice is not directly related to this process, it reduces use of ground and surface

Evaluation Criterion E - Presidential and Department of the Interior Priorities Maximum Points: 10

Sub-criterion No. E1. Climate Change: Points will be awarded based on the extent the project will reduce climate pollution; increase resilience to the impacts of climate change; protect public health; and conserve our lands, waters, oceans, and biodiversity. Address the following as relevant to your project.

Combating the Climate Crisis: E.O. 14008: Tackling the Climate Crisis at Home and Abroad, focuses on increasing resilience to climate change and supporting climate- resilient development. For additional information on the impacts of climate change throughout the western United States, see: https://www.usbr.gov/climate/secure/docs/2021secure/2021SECUREReport.pdf. Please describe how the project will address climate change, including the following:

- Please provide specific details and examples on how the project will address the impacts of climate change and help combat the climate crisis.
- Does this proposed project strengthen water supply sustainability to increase resilience to climate change? Does the proposed project contribute to climate change resiliency in other ways not described above?

Sub-criterion No. E2. Disadvantaged or Underserved Communities: Points will be awarded based on the extent to which the Project serves economically disadvantaged or underserved communities in rural or urban areas.

- Will the proposed project serve or benefit a disadvantaged or historically underserved community? Benefits can include, but are not limited to, public health and safety by addressing water quality, new water supplies, or economic growth opportunities.
- Please describe in detail how the community is disadvantaged based on a combination of variables that may include the following:
 - o Low income, high and/or persistent poverty
 - o High unemployment and underemployment

- o Racial and ethnic residential segregation, particularly where the segregation stems from discrimination by government entities
- o Linguistic isolation
- o High housing cost burden and substandard housing
- o Distressed neighborhoods
- o High transportation cost burden and/or low transportation access o Disproportionate environmental stressor burden and high cumulative impacts
- o Limited water and sanitation access and affordability
- o Disproportionate impacts from climate change
- o High energy cost burden and low energy access
- o Jobs lost through energy transition
- o Access to healthcare
- If the proposed project is providing benefits to an underserved community, provide sufficient information to demonstrate that the community meets the underserved definition in E.O. 13985, which includes populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life.

This project will have a positive effect on reducing climate change in two specific areas:

- Because of the geographical size of Taylor (26 square miles) and the significant distance between homes in many areas, being able to drive the streets at a slow speed while automatically reading meters through their radio read capabilities will greatly reduce the stops and starts of their vehicles. This will reduce the carbon footprint versus stopping up to 200 times during a reading cycle.
- O Starting a vehicle then getting it back up to speed is a huge waste of fuel. By having the ability to drive the entire meter reading route at a slow speed will drastically reduce the amount of fuel used. This method of meter reading also reduces the amount of lubricants utilized in maintenance of the vehicles. Both of these will reduce the Town's dependance on fossil fuels and reduce their damaging emissions.

By charging water users for the correct amount of water used the overall withdrawal from the groundwater aquifers will be reduced thereby strengthening the Towns water supply sustainability.

While the Town does not actually meet the definition of EO 13985, as the commercial hub in this area they do draw a large number of residents from the surrounding rural area who do meet some of the criteria. To remain viable in serving the surrounding residents Taylor having a sustainable, affordable water supply is a great benefit.

Sub-criterion No. E.3. Tribal Benefits Points will be awarded based on the extent to which the Project will honor the Federal government's commitments to Tribal Nations.

- Does the proposed project directly serve and/or benefit a tribe? Will the project improve water management for a tribe?
- Does the proposed project support tribal resilience to climate change and drought impacts or provide other tribal benefits such as improved public health and safety by addressing water quality, new water supplies, or economic growth opportunities?

While the Taylor area does include a large population of Native Americans, a majority live outside the corporate boundaries. Taylor is utilized by many of the tribal members for shopping, entertainment, etc... and staying viable as a commercial hub in these trying times is a benefit to many Native Americans.

Reducing the amount of groundwater withdrawn from the aquifer will benefit the tribes by not lowering the water table on their private wells along with reducing the effects on surface water streams and rivers in the Little Colorado basin.

D.2.2.4

Project Budget

1. Funding Plan:

The Town has sufficient capital reserves on hand to fund their portion (\$75,000) of the matching grant. A portion of these capital reserves are a direct result of Phase One of the water meter replacement project which resulted in a 22% increase in the amount of water billed. The Town is also prepared to have staff assist in the coordination and monitoring of this project in any way necessary.

2. Budget Proposal:

Table 1.-Total Project Cost Table

SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal funding	\$100,000
Costs to be paid by the applicant	\$125,388.30
Value of third-party contributions	\$0
TOTAL PROJECT COST	\$225,338.30

BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity	TOTAL
	\$/Unit	Quantity	Туре	COST
Salaries and Wages				
Employee 1				\$

Employee 2		\$
Employee 3		\$
Fringe Benefits		

Full-Time Employees				\$		
BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity	TOTAL		
	\$/Unit	Quantity	Type	COST		
Salaries and Wages						
Employee 1				\$		
Employee 2				\$		
Employee 3				\$		
Fringe Benefits						
Full-Time Employees				\$		
Part-Time Employees				\$		
Travel						
Trip 1				\$		
Trip 2				\$		
Trip 3				\$		
Equipment						
1" water meter including tax	\$284.46	40	each	\$11,378.40		
3/4" water meter including tax	\$182.88	450	each	\$82,296		
Single port radio read	\$213.31	390	each	\$83,190.90		
Dual port radio read	\$284.46	50	each	\$14,223		
Supplies and Materials						
Item A				\$		
Item B				\$		
Contractual/Construction	Contractual/Construction					
Meter Install and Data Transfer	\$70	490	each	\$34,300		
Contractor B				\$		
Environmental ar	d Cultural Reso	urces Co	mplianc	e		
TOTAL DIRECT COSTS				\$		
Indirect Costs						
Type of rate	percentage	\$base		\$		
TOTAL ESTIMATED PROJECT COSTS				\$225,388.30		

Budget Narrative:

The Town has limited funds and staffing to assist with completion of capital projects and because of its small size, the pricing they receive on commodities is normally higher than in larger population centers. Because of this the Town utilizes contracts which are shareable with other governmental agencies and allow smaller communities to "piggyback" on larger agencies contracts. This was the case with Phase One of the meter project as the pricing was originally budgeted on a City of Goodyear contract with Neptune Technologies.

Subsequent to submitting the Phase One Grant application the Town was approached by Sensus Meter, whose products the Town had been using who offered to meet or beat the City of Goodyear Project. Sensus had a contract with Mesa, AZ (population 500,000), which resulted from a competitive bidding process. Sensus agreed to provide their meters at a cost less than the Mesa Contract and as a result the Town was able to increase the number of meters replaced from what was shown in the original application.

World events including the pandemic supply chain issues (especially electronics) and inflation have increased the cost and availability of most utility system parts and supplies including water meters. This is true across the industry as discussions with other meter suppliers have indicated they are experiencing the same issues and most cannot deliver more than 10 or 20 meters at a time. The timing of this grant works well for the Town as it is anticipated that by late summer/early fall the meter supply should be more robust however pricing is not expected to lower for some time, if at all. The Town has been trained on, and is familiar with the Sensus meters and reading/billing equipment so it is in the best interest to continue with Sensus water meters.

Because of the twenty-two percent increase in billed water the Town has been able to set aside their portion of the grant match so they are ready to put this project in motion immediately upon award should they be chosen by the BOR. The same company who completed the meter installation and data transfer has indicated they are again available to perform the same duties. The pricing has gone up some however with the cost of gas, lodging, food, etc.... having increased substantially. Because of the pandemic and inflation this was expected.

D.2.2.5 Environmental and Cultural Resources Compliance

To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with each application, all applicants must respond to the following list of questions focusing on the NEPA, ESA, and NHPA requirements. Please answer the following questions to the best of your knowledge. If any question is not applicable to the project, please explain why. The application should include the answers to:

• 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 meter replacement project will not have an impact on the surrounding environment as all of the meters being replaced are already located in a meter box so no soil will be disturbed in replacing them. The meters being installed on Town buildings and grounds which previously did not have water have existing boxes installed for the shutoff valve and these will be utilized for the water meters.

- 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?

 NO.
- 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.

NO

• When was the water delivery system constructed?

Work on the potable water delivery system began in the 1950's and the most recent addition was in 2018 when a new water reservoir was constructed to replace an obsolete and non-compliant water reservoir.

• 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 this project will not have any effect.

The Town reached out to Lisa Rivera from your Phoenix office regarding whether a new CEC Study would be required for the application and based on the response below it will not.

Hi Dan,

I relayed your questions about environmental and cultural compliance to our office's Environmental Resource Management Division. Please see the message below with their response. Since this is a SWEP and the anticipated EC costs are low (\$2,500), you do not need to include these costs in your budget as Reclamation would cover those expenses outside of the grant funds.

Please let me know if you have any additional questions.

Thank you,



Patriotic Traditions

April 6, 2022

Department of the Interior Bureau of Reclamation PO Box 25007 MS 84-27133 Denver, CO 25007

RE: WaterSMART Grant Funding Opportunity R22AS00195

In my position as Mayor of the Town of Taylor, I am keenly aware of the challenges facing rural small towns when it comes to funding capital projects along with the hiring and retention of staff. The Town is extremely conservative when it comes to large capital expenditures and when our Town Manager first proposed applying for a BOR matching grant in 2019 to partially fund Phase One of a system wide water meter replacement project the Council was rightfully skeptical. After review of additional information related to the replacement project, we voiced our support and passed a resolution supporting the application.

Phase One of the meter replacement project has been completed and based on the results of that phase, I am can now give my wholehearted support to continuing this project in Phase Two and applying for another matching grant (Funding Opportunity R22AS00195). The increase in billed water, ability to more accurately track water use and dramatic reduction in cost and labor to read and bill our water meters is tremendous. With our limited staff the reduction in labor directly relates to the ability to complete additional tasks and projects. The increase in billed water has two significant aspects:

- An increase in revenues will provide desperately needed capital project funds which can
 be used for needed improvements which will in turn increase efficiencies and reduce the
 overall cost of operation.
- Being billed for the actual amount of water passing through a customer's water meter is an outstanding tool to enhance water conservation which will assist in meeting the overall goal of reducing the amount of water withdrawn for the aquifers.

Please contact me if I can provide any additional information.

David Smith, Mayor Town of Taylor

(928) 536-7366

TOWN OF TAYLOR RESOLUTION R2022-04

A RESOLUTION SUPPORTING A SYSTEM WIDE WATER METER REPLACEMENT PROJECT AND APPROVING SUBMISSION OF A GRANT APPLICATION (Funding Opportunity BOR-R22AS00195) TO THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION.

WHEREAS, The TOWN is in need of improvements to its water usage recording, documentation and billing infrastructure.

WHEREAS, The Bureau of Reclamation is accepting application for Small-Scale Water Efficiency Projects Funding Opportunity (\$100,000 Maximum Award) through its WATER SMART program.

WHEREAS, The TOWN has identified a system wide water meter replacement and installation of meters on Town owned buildings and property.

WHEREAS, The TOWN has successfully completed Phase One of the system wide meter replacement program utilizing a previously awarded BOR grant.

WHEREAS, The Bureau of Reclamation has indicated these type system improvements are eligible for submission of a Water Smart Small-Scale Water Efficiency Projects Funding Opportunity grant application.

THEREFORE, BE IT RESOLVED, by the Mayor and Council of the Town of Taylor, Navajo County, Arizona;

- 1. The Taylor Town Council supports providing matching funds from their capital projects account for Phase Two of a system wide water meter replacement program and installation of water meters on Town buildings and property
- 2. The Taylor Town Council approves submission of a Water Smart Small-Scale Water Efficiency Projects Funding Opportunity application to the Bureau of Reclamation and will work with the Bureau of Reclamation to meet established deadlines for entering into a grant agreement
- 3. The Town Council authorizes Town Manager Gus Lundberg having the legal authority to review and submit this grant application and enter into an agreement for grant funding.

Adopted and approved this 7th day of April, 2022.

ATTEST:

Geri Judd, Town Clerk

David Smith, Mayor

APPROVED AS TO FORM:

William Sims

William J Sims III, Town Attorney