Town of Paonia
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WaterSMART Small-Scale Water Efficiency Projects For Fiscal Year 2024 and Fiscal Year 2025

Bureau of Reclamation Funding Opportunity No. R24AS00059

Town of Paonia, Colorado
Municipal Meters for Water Efficiency
January 8, 2025

Applicant:
Town of Paonia
214 Grand Avenue
PO Box 460
Paonia, Colorado 81428

Project Manager:
Stefen Wynn, Town Administrator
214 Grand Avenue
Paonia, CO 81428
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970-527-4101

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Technical Proposal

Executive Summary

Date: January 8, 2025
Applicant Name: Town of Paonia, Delta County, Colorado
Task Area: A, Small Scale Water Efficiency Project Grant
Applicant Category: A
Estimated Project Cost: $240,572
Grant Funding Request: $116,000
Non-Federal Matching Funds: $124,572

The Town of Paonia (Town) seeks USBR funds to help finish updating the Town's radio-read metering system. Currently Lee's Trailer Park has its water main and 23 meters located under the trailers. This is dangerous and a significant hurdle to the completion of updating all the Town's meters to radio-read meters which will improve and streamline services. The Town proposes to move the distribution pipe into the Town's easement around the edge of Lee's Park and then reinstall the meters in a location where they can be automatically read. The updated metering and the necessary movement of the water main are supported by multiple planning documents.

Estimated Completion Date: September 2026

Project Location

The Town of Paonia (38.867900, -107.597900) is in Delta County, Colorado on the North Fork of the Gunnison River. Lee's Trailer Park is located within Town boundaries at 38.872856, -107.594195.

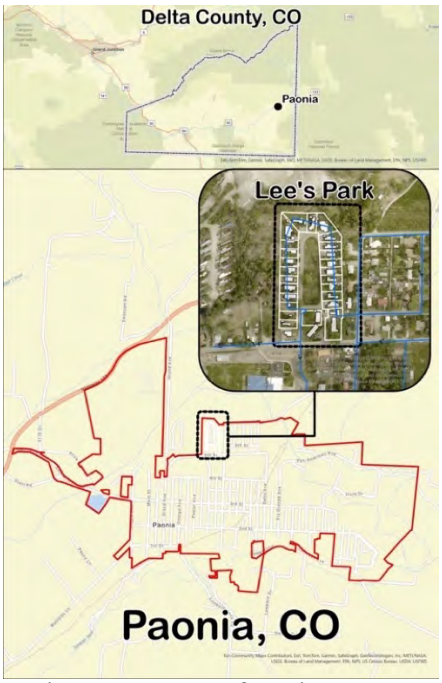


Figure 1: Map of Project Area

Technical Project Description

The Town of Paonia is working to improve the metering of its water consumption by installing radio-read meters on all taps as indicated in several planning documents created by the Town since 2021. These meters are more accurate than hand-read meters and provide more consistent and cost saving services to the people and businesses the Town serves. The largest impediment to the completion of this effort is Lee's Trailer Park.

Lee's Trailer Park is a small development within the Town established in the 1980's. It contains 23 units, each of which are privately owned. The units are arranged around Lee's Park, an oval grass park, which is owned and maintained by the Town. The park is watered through a system of sprinklers that use irrigation water, not treated water.

Located at the northern edge of the community, the water distribution line for Lee's Trailer Park is located underneath the trailers along with the meters. In the current configuration, the Public Works Department would have to climb under each of the trailers to disconnect the old meters and then relocate and install a new radio-read meter in a place where its signal could be read by the passing vehicle containing the reader. This situation makes the installation of new meters nearly impossible due to time constraints, meter access and cost. The current position of the water main is also dangerous to the owners of the trailers. The water main is thin walled 2" PVC pipe that is over 40 years old. If the water main were to break, it would be very difficult to repair, could harm the trailer under which it broke and any residents inside that trailer. Other nearby trailers in the park and surrounding area could be out of water for weeks since making repairs would be difficult and time consuming. Since there are no shut off valves to isolate the Park from the rest of the system, many residents would be out of water during any repairs. To compound the issues, no fire hydrants are present in Lee's Trailer Park and the closest is over 1,000 feet away.

While it is highly beneficial to the Town's water system that the current meters be replaced and updated, it is imperative that the water main be replaced in t Lee's Trailer Park and a fire hydrant be installed.

To replace the meters, the current water main will be abandoned, and another installed in the easement surrounding Lee's Park located in the center of the development. This will involve the boring and laying of approximately 1600 feet of 6" C900 PVC pipe with 2 shut off valves to facilitate isolation during a water break, service, or repair. Another 500 feet of service lines will then be bored to the individual 23 trailers, ¾" Pure Cor piping laid, and radio meters installed on those lines. Finally, a fire hydrant will be installed in the park.

Evaluation Criteria

E.1.1. Evaluation Criterion A. Project Benefits (35 points)

Clearly explain the anticipated water management benefits to the Category A applicant's water supply delivery system and water customers.

The Town's water distribution system has almost 23 miles of gravity fed distribution piping in a system which is fed by 32 springs located on the mountains surrounding the Town. The system

serves 1,046 active taps of which 966 are located in the Town and 632 which supply out of town customers and 27 small water companies.

The distribution system is old with pipes ranging from 0.75 inches to 12 inches of varying material including steel, cast iron, PVC, DIP, and HDPE. Due to the age of the piping (35% over 40 years old) and numerous leaks, unaccounted water in the entire system has historically ranged from 36%-40%. Recent major repairs to numerous parts of the system have reduced the amount of unaccounted water to 19%. It is uncertain how much of this remaining water loss is due to the infrastructure in Lee's Trailer Park. This part of the system was specifically identified as a necessary priority for improvement by the Town's engineers in 2021.

Currently 94% of Town's water meters can be read automatically. Lee's Trailer Park is the last large parcel with meters that need to be replaced. The installation of radio-read meters throughout town has resulted in cost savings to the Town by reducing the manpower, and associated time to read meters and record the information, leading to much more efficiency. In the 18 months since the Town has brought the new radio-read meters on-line, it has saved approximately $60,000 in employee salaries and benefits. The Town anticipates further savings with the new meters installed in Lee's Trailer Park.

The water main in Lee's Trailer Park is located under the trailers with the meters attached to it. It is not reasonable to replace the meters without also moving and replacing the water main. Replacing the 40-year-old, thin-walled PVC pipe with new, upgraded materials will eliminate any leaks in this part of the system. This is expected to reduce water loss.

Moving the water main will also ensure the safety of the people living in the trailer park. At present, heavy machinery cannot access the water main so any leaks will need to be hand dug to repair. Because there are no shut off valves, all the residents of the park will be without water until the leak is repaired, which could be days or weeks. This is a threat to the health and safety of the residents. Spill water can also undermine the foundations of the trailers, leading to structural instability and damage. Installing shut off valves in the new piping will isolate future leaks or breaks reducing water loss in the entire system. It will also prevent a loss of pressure in the system.

Lee's Trailer Park was designed and permitted without fire hydrants. This is dangerous to the health and safety of the residents and will be addressed in this project.

Will the project result in more efficient management of the water supply?
Finishing the installation of radio-read meters in Town and replacing this water main will provide more efficient water supply management since more accurate and timely readings can result in swift and effective leak detection and fast repairs for customers. This can prevent excess water loss thus ensuring that all treated water is beneficially used. It will also reallocate the use of Town's resources and employee hours so that they can spend their time on other important tasks. It will allow for meter readings in the middle of winter when snow can block access to meters which then may not be read for months. This creates disruption in water use tracking and data collection.

Finally, this project will address a large section of the meters yet to be converted to radio-read and will help complete the full automation of the Town's water system. With the replacement of the 23 meters in Lee's Trailer Park, only 50 radio-read meters out of 966 meters serviced by Town will remain to be updated to the radio-read system.

Where any conserved water as a result of the project will go and how it will be used?
Any water saved due to a reduction in leaks and lost water will be maintained in the system and put to beneficial domestic or commercial use. When the snowpack melts in the spring, more raw water is produced than the Town can use. By reducing treated water loss through infrastructure improvements, more spring overflow water can be spilled into the ditches that feed local agriculture and eventually flow into the North Fork of the Gunnison River.

Explain the significance of the anticipated water management benefits for the Category A applicant's water delivery system and customers.
Increased quantification of water use will benefit all the users of the system by ensuring correct billing, greater beneficial use due to less water loss, increased monitoring to find problems in the system earlier, and a reduction in infrastructure failure and service disruption. All these benefits are a significant improvement to the current system.

Are customers not currently getting their full water right at certain times of year?
The Town's water rights are secure. When the Town is unable to store the excess water the springs produce during the spring run-off, it is spilled into ditches where it can be used for agricultural purposes. Customer access to water is not limited by any issues with water rights.

Does this project have the potential to prevent lawsuits or water calls?
A break in the old water main could have serious consequences for the residents of Lee's Trailer Park. Not only would they be without water until the repairs are made, but damage could also occur to the foundational supports of the trailers leading to lawsuits to pay for the repairs.

What are the consequences of not making the improvement?
The hand reading of meters in Lee's Trailer Park will continue to take up valuable employee time and resources. The inability to read meters in the winter due to snow will continue resulting in inaccurate water bills, undetected leaks, water loss, and a delay in repairs. The infrastructure under the trailers will continue to degrade increasing the chances for a significant break and damage, loss of property and weeks of no water to the surrounding area. The fire danger remains until a cost-effective way can be found to install fire hydrants to a water main which is currently not easily tapped.

Are customer water restrictions currently required?
At the present time the Town is under a voter approved water tap moratorium due to a significant water outage in 2019. Until the Town can provide a certified water engineer's assessment that it has sufficient water to supply the Town and out of town customers for the foreseeable future, the moratorium will remain in effect. Installing the radio-read meters and replacing aging infrastructure is part of the plan to lift the moratorium as it provides more accurate accounting of water usage and reduces the amount of leakage in the system.

Further, as the summers become hotter and the available moisture continues to decline in the watershed due to climate change, other water restriction measures may need to become part of the regular water plan. At present, water restrictions are put in place when there are problems at the treatment plant or with treated water storage facilities so that adequate water for unrestricted water use can be maintained. Water restrictions are further implemented when drought conditions threaten the mid-summer supply from the springs. It is easier to impose water restrictions when accurate date is easily obtained from meters rather than relying only on monthly data collected when meters are hand-read. The water use rates are based on a tiered system where increased water usage results in increased bills to encourage conservation. Correct metering of water is essential for the successful operation of this system

Other significant concerns that support the need for the project.
It is important that all members of the community are treated fairly. Without adequate metering in this subdivision, the poorest members of the Town are not receiving the same kind of service as other areas. They are also subject to large bills when leaks cannot be caught when snow coverage makes meters inaccessible. Further, when bills must then be for months at a time, large discrepancies resulting in higher-than-normal water bills can occur when the meters are finally read. This puts another financial burden on the citizens living in Lee's Trailer Park.

Broader Benefits*: Describe the broader benefits that are expected to occur as a result of the project.*
With increased monitoring of all parts of the water distribution system, the Town can quantify the actual amount of water flowing through the system to make data informed decisions. These decisions can result in more raw water being available to other downstream users, such as agricultural producers, the North Folk of the Gunnison River and associated river levels and river habitats.

Will the project improve broader water supply reliability at sub-basin or basin level?
This project is relatively small and self-contained. However, any loss of water due to leakage results in less water available for users at all levels.

Will the proposed project increase collaboration and information sharing among water managers in the region?
The more accurate data the Town can supply regional water managers, the better it can utilize and conserve the water it has. This project will increase the reliability of the data the Town provides them.

Is the project in an area that is experiencing, or recently experienced, drought or water scarcity? Will the project help address drought conditions at the sub-basin or basin scale?
The area is in a long period of drought. Snowpacks on Mount Lamborn and Land's End Peak watershed where the Town collects its water are decreasing resulting in less water in the 32 springs that supply the Town. While data collected from the Colorado Division of Water Resources and the Town are limited and spotty, records for 1993 collected by Consolidated

Consulting Services in a 1995 report[1] compared with data collected by the Town in 2022 show a 52% to 62% reduction in spring flow in the months of June, July and August, and an increased flow of over 50% during the months of January and February. These data demonstrate higher temperatures on the mountain, resulting in more melting in the middle of the winter and leading to less water retention for summer high-demand months.

While this project will not significantly alleviate drought conditions at the basin or sub-basin levels, any metering done can help quantify usage. These data can help plan for the future. This project will also reduce leakage and retain water for beneficial use.

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)?
No

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.
The Town is surrounded by various agricultural enterprises including ranches, orchards, vineyards and organic farms that serve other communities within 100 miles. When the Town conserves water through accurate metering and leak detection, it leaves more water for these sectors. More water can lead to greater agricultural yields and increased profits.

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)?
No

E.1.2. Evaluation Criterion B. Planning Efforts Supporting the Project (25 points)

Plan Description and Objectives:
Is your project supported by a specific planning document or effort? If so, describe the existing plan. When was the plan developed? What is the purpose and objective of the plan?
The Town has invested significantly in its water distribution system over the last six years and has plans through numerous short- and long-range planning documents to continue investing in improvements. While this plan is not supported by one specific planning document or effort, it is supported by multiple planning efforts since the early part of the decade including:

- JDS Hydro Town of Paonia Water System Evaluation, May 2021
- Town of Paonia Water Enterprise Capital Improvement Plan 11-18-2022
- Town of Paonia, Municipal Water Efficiency plan (Kevin Reidy Water Conservation Specialist kevin.reidy@state.co.us) 11-27-22
- Asset Inventory/Capital Improvement Plan by SGM September 2021

All the plans were initiated by the Town, developed in cooperation with the Town and with the Town's involvement.

[1] Consolidated Consulting Services, *Town of Paonia Reconnaissance Assessment Raw Water Supply.* Delta, CO. 1995

Plan Development
Who developed the planning effort?
The plan was developed by the Town's Administrator, Public Works Director and Deputy Public Works Director, the Town's contractors RESPEC, and SGM.

What is the geographic scope of the plan?
The plan covers the Lee's Trailer Park subdivision.

Support for the Project: *Describe to what extend the proposed project is supported by the identified plan.*
Support for the project is identified in each of the plans as listed below:

- Asset Inventory/Capital Improvement Plan by SGM September 2021
  Lee's Trailer Park water mains (*problem and need to be addressed*)
- Town of Paonia Water Enterprise Capital Improvement Plan 11-18-2022
  Meter replacements with radio-read meters in-town (*goal*)
- Town of Paonia, Municipal Water Efficiency plan (Kevin Reidy Water Conservation Specialist kevin.reidy@state.co.us) 11-27-22
  Improved metering (*goal*)
- JDS Hydro Town of Paonia Water System Evaluation, May 2021
  The need for better customer metering. (*problem and need to be addressed*)

In 2022 the Town upgraded fifty (50) analog meters to digital, radio-read meters. The Town continued to upgrade meters in 2023 and upgraded seventy-three (73) meters from analog to digital, radio-read meters. The area selected for this project continues past efforts to improve the Town's water distribution system and tackles an area that needs upgraded water mains in addition to the meters. It also provides a fire hydrant to an area of Town that currently does not have any nearby.

Is the project identified specifically by name and location in the planning effort?
Yes, as identified in the above section.

Is this type of project identified in the planning effort?
Yes, as identified in the above section.

Explain whether the proposed project implement a goal, objective, or address a need or problem identified in the existing planning effort?
Yes, as identified in the above section.

Explain how the proposed project has been determined as a priority in the existing planning effort as opposed to other potential projects/measures.
The Lee's Trailer Park water main and metering project has been a priority for several years as shown in the SGM report of 2021 and the Capital Improvement Plan of 2022, as well as metering issues identified in the JDS Hydo Report and the Municipal Water efficiency Plan. However, the Town has not had the funds to complete it. When this grant opportunity was brought to the Town's attention and it had an available grant writer, the grant became a priority since the Town now had a path to obtaining the funds. The Town is also excited for the opportunity to complete

the project as it moves a water main from private property into a right of way already secured by the Town. Even further, the inclusion of a fire hydrant in this area will be included in the Town's next ISO Rating and should help in obtaining an ISO rating reduction.

E.1.3. Evaluation Criterion C. Implementation and Results (20 points)

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.

Task #	Task Description/Date		Responsible Party	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	Project Mobilization													
	Nov ' 25 - Jan '26	Admin set up	Town Admin											
	Jan 5-20, 2026	System set up, order parts	Town Admin, PPW Dir											
	Feb - Apr '26	Write and publish RFP	Town Admin											
	May - Jun '26	Review and hire Contractor	Town Admin, PPW Dir											
2	Park Construction													
	Jul 5-9	Contractor mobilization	Contractor											
	Jul 11- 25	Contractor boring and laying main water pipe	Contractor											
	Aug 1 - 5	PPW digs meter pits	PPW											
	Aug 11-30	Contractor boring 23 service lines	Contractor											
	Sep 2- 25	PPW hooking Trailers to new service lines	PPW											

Task 1 Project Mobilization ***Responsible Party: Town Administrator, Clerk***

11/11-25 Present to Paonia Town Board of Trustees for acceptance of grant
11/12/25 - 1/30/26 Grant contract signature and set up systems in Town Administrative Office to track grant and fulfill all grant requirements.
1/20/26 Order meters
4/24/26 Publication Date of Contractor RFP
5/15/26 Proposal Deadline
5/22/26 Contractor Finalist Interviews
5/26/26 Board of Trustees Approval of Contract
6/1/26 Kickoff meeting with Contractor and Town Administrator

6-1-26 Milestone 1 – Grant Contractor Hired

Task 2 Metering in Lee's Trailer Park ***Responsible Party: Public Works Department and Town Administrator***

7/5/26 Contractor mobilization
7/11/26 Contractor begins boring and laying pipe for main water line.
8/1/26 Paonia Public Works digs meter pits along main water line.
8/11/26 Contractor bores service lines.
9/2/26 Paonia Public Works begins installing and hooking up trailers to new meters and main service line.
9/25/26 Milestone 2 - **Metering in Lee's Trailer Park Completed**

Project Budget

The Town is applying for a Small-Scale Water Efficiency Project under Category A. The total plan cost is $240,571 The Town is contributing $124,572 in cash and in-kind services. The Town is absorbing all administrative costs for this grant and not asking for reimbursement.

Table 1. —Summary of Non-Federal and Federal Funding Sources

FUNDING SOURCES	**AMOUNT**
Non-Federal	
Town of Paonia	$ 124,572
Federal	$ 116,000
TOTAL PROJECT AMOUNT	$ 240,572

The Town Board of Trustees authorized submission of the WaterSMART grant at their Board meeting on 12-10-24 with a commitment of $124,571 in cash and in-kind work by staff.

Describe any permits and agency approvals that will be required along with the process and timeframe for obtaining such permits or approvals.

No permits nor agency approval are required.

Identify and describe any engineering or design work performed specifically in support of the proposed project. What level of engineering design is the project currently? If additional design is required, describe the planned process and timeline for completing the design.

No preliminary engineering has been completed for the Lee's Trailer Park project. It will be performed by the Town's engineer in January and February of 2026.

Does the applicant have access to the land or water source where the Project is located?

Yes, it is within Town limits.

Has the applicant obtained any easement that are required for the project?

Yes, the Town owns the easement where the new pipe will be laid.

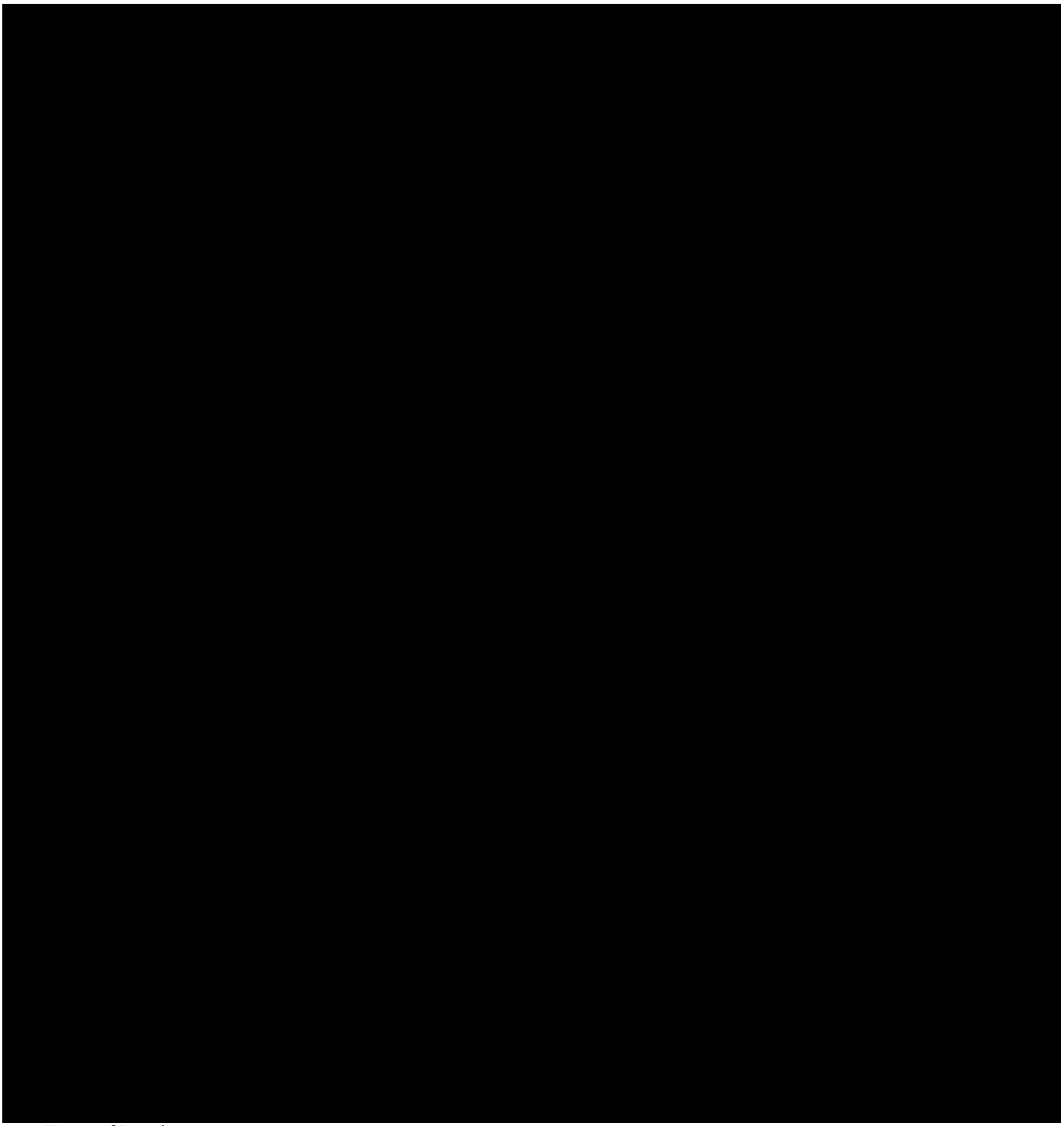
Identify whether the applicant has contacted the local Reclamation office to discuss the potential environmental and cultural resource compliance requirement for the project and the associated costs.

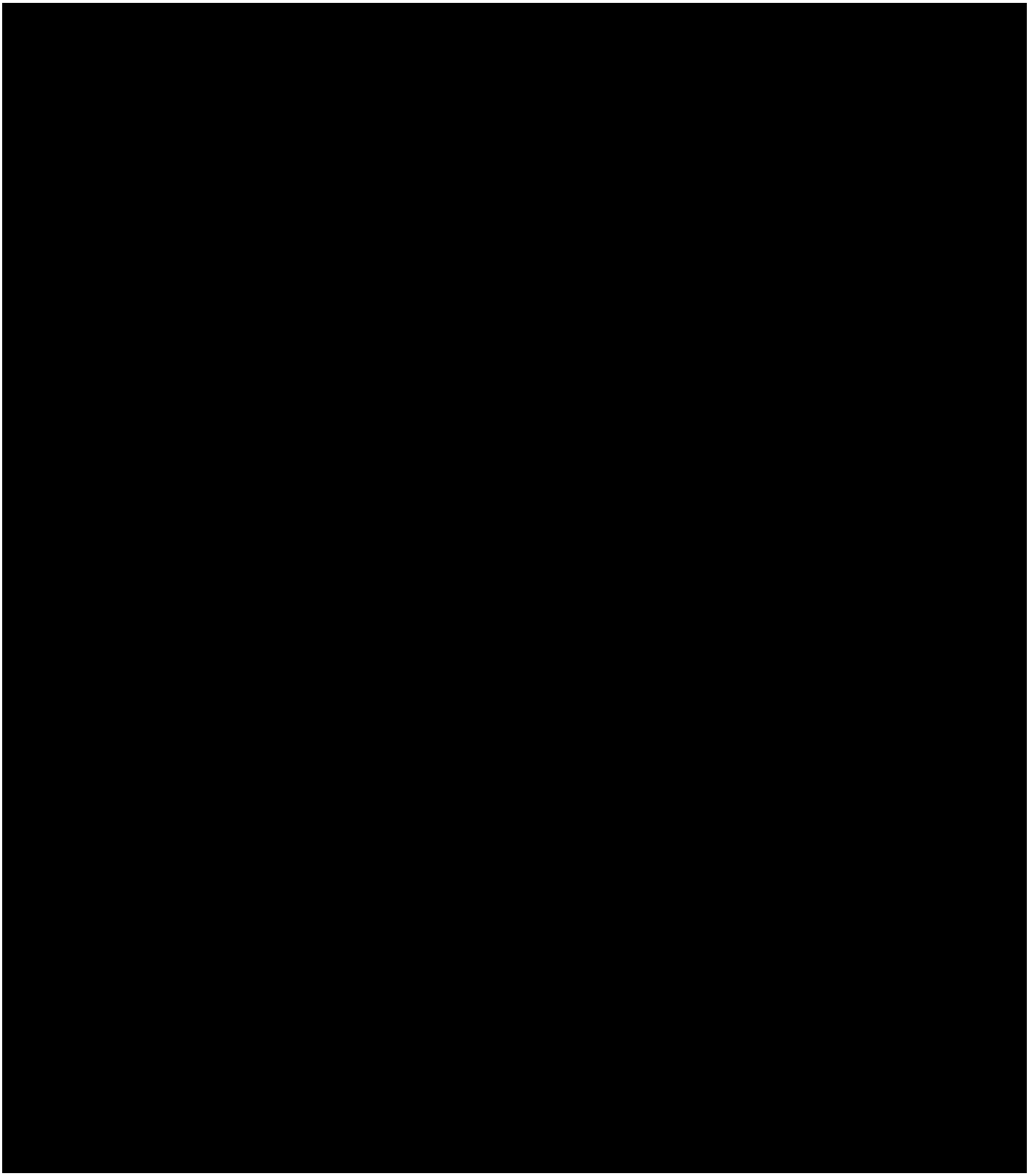
The Town attempted to contact the local Reclamation office but never received any response to its efforts.

E.1.4 Evaluation Criterion D: Nexus to Reclamation (5 points)

Is the proposed project connected to a Reclamation project or activity?

The Town has no nexus to any Bureau of Reclamation project or activity.





D.2.2.3. Budget Narrative

See Attachment B

D.2.2.4. Environmental and Cultural Resources Compliance

Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)?
The work in Lee's Trailer Park will not impact the surrounding environment as it is developed and within the Town limits. Construction impacts will include noise, dust and short water outages as new meters are installed.

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?
There are no known species that are listed or proposed to be listed as Federal threatened or endangered species in this area or designated critical habitat.

Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdictions "Waters of the United States"?
There are no wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdictions "Waters of the United States".

When was the water delivery system constructed?
The raw water collection system was constructed in 1978. In 1909, wood pipes banded with iron were installed that delivered water to the town, and were replaced with metal pipes in the 1950's. The Town's water system was installed as the Town expanded and replaced over the years. Currently, water infrastructure in the Town ranges from 80 years to just a few years old. Only 19% (12,998 linear feet) has been upgraded to PVC since 2000.

Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)?
No, the project is for domestic water meter installation and pipe replacement within the Town limits.

Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places?
No, there are no such buildings or structures in the area.

Are there any known archeological sites in the proposed project area?
There are no known archeological sites in the area.

Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?
This project will not adversely affect low or minority populations. In fact, the opposite is true. The median income of those living in Lee's Trailer Park is below the Town average and this project will improve their water delivery system and provide increased safety with a nearby fire hydrant.

Will the proposed project limit access to, and ceremonial use of, sacred sites or result in other impacts on Tribal lands?
This plan area is not near any Tribal land.

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, this plan will not involve the introduction or spread of any weeds or non-native species.

D.2.2.5. Required Permits or Approvals
No permits or approvals are required for the formation of this plan.

D.2.2.6. Overlap or Duplication of Effort Statement
No other competing proposals have been written or submitted for a scope of work similar to this grant.

D.2.2.7. Conflict of Interest Disclosure Statement
There exist no actual or potential conflicts of interest at the time of submission.

D.2.2.8. Uniform audit reporting statement
The Town has not received $750,000 in Federal awarded monies.

D.2.2.9. Certification Regarding Lobbying
The Town does not have any lobbying activities.

D.2.2.10.SF-LLL: Disclosure of Lobbying Activities (required, if applicable)
No lobbying activities have taken place.

D.2.2.11. Letters of Support
The Town has received letters of support from State Senators Bennett and Hickenlooper. All letters of support are included as attachments.

United States Senate
Washington, D.C. 20510

January 12, 2024

The Honorable Commissioner Camille Calimlim Touton
Bureau of Reclamation
U.S. Department of Interior
1849 C Street NW
Washington, D.C. 20240

Dear Commissioner Touton:

We write in support of the application submitted by the Town of Paonia (Paonia) to the Bureau of Reclamation for funding from the WaterSMART Small-Scale Water Efficiency Projects grant program. If awarded, Paonia will use funds to replace old water meters with new radio read meters.

Paonia has installed new radio read meters throughout the town to update the town's water system, resulting in cost savings in labor, time and efficiency. With Water SMART funds, Paonia will replace additional meters, relocate the water main that runs under a trailer park, and re-bore the service lines to reconnect the trailers to the new meters and main line. In addition, Paonia will install fire hydrants where no hydrants are currently located. This project will not only upgrade the system efficiency at all levels, but it will also replace aging infrastructure to improve safety to citizens in an underserved area.

We encourage you to give the application submitted by the Town of Paonia your full and fair consideration consistent with all applicable laws and regulations. Thank you for your review, and please notify our offices of any funds awarded.

Sincerely,

Michael F. Bennet
United States Senator

John Hickenlooper
United States Senator

WaterSMART Small-Scale Water Efficiency Projects
For Fiscal Year 2024 and Fiscal Year 2025
Bureau of Reclamation Funding Opportunity No. R24AS00059
Town of Paonia, Colorado
Municipal Meters for Water Efficiency

Budget Narrative

Budget Summary

Summary Figures in this summary table are calculated from entries made in subsequent categories, only blank white cells require data entry.			
6. Budget Object Category	**Total Cost**	**Federal Estimated Amount**	**Non-Federal Estimated Amount**
a. Personnel	**$22,015**		
b. Fringe Benefits	**$20,473**		
c. Travel	**$0**		
d. Equipment	**$6,000**		
e. Supplies	**$0**		
f. Contractual	**$0**		
g. Construction	**$192,084**		
h. Other Direct Costs	**$0**		
i. Total Direct Costs	**$240,572**		
j. Indirect Charges	**$0**		
Total Costs	**$240,572**	**$116,000**	**$124,572**
Cost Share Percentage		**48%**	**52%**

Section B – Budget Categories

6. Object Class Category

a. Personnel $22,015

Project Manager: Stefen Wynn, Town Administrator

Mr. Wynn will manage the project from an administrative position, ensuring that all contractors perform in accordance with the terms of their contracts, ensure deliverables arrive on schedule and are of the quality expected, that all billing is timely and up to the standards required. The Administrator will also ensure that all reporting requirements are met on time. The Town is absorbing all administrative costs for this grant and is not seeking reimbursement for them.

Personnel Position Title	**Responsibilities**	**Hours**	**Rate**	**Total Cost**	**Rate Basis**	**Comment**
Public Works Director:	The Public Works Director will manage the project on the ground, ensuring work is performed on schedule and up to the required standards.	50	$ 35.34	$1,767	Current Salary	Compensation rates are consistently applied to Federal and non-Federal activities
Deputy Public Works Director	The Deputy Public Works Director will manage the day-to-day operations in the field, supervising and assisting other public works employees	100	$ 28.83	$2,883	Current Salary	Compensation rates are consistently applied to Federal and non-Federal activities
Water Operator	Ensure compliance, install meters as needed, work with contractors to ensure compliance	150	$ 28.83	$4,325	Current Salary	Compensation rates are consistently applied to Federal and non-Federal activities
Public Works Worker 1	Assisting with construction, physical labor, installing meters, assisting the contractor as needed, reseeding and relocating park sprinklers	150	$ 26.97	$4,046	Current Salary	Compensation rates are consistently applied to Federal and non-Federal activities
Public Works Worker 2	Assisting with construction, physical labor, installing meters, assisting the contractor as needed, reseeding and relocating park sprinklers	180	$ 23.93	$4,307	Current Salary	Compensation rates are consistently applied to Federal and non-Federal activities
Heavy Equipment Operator	Trenching, digging and relocating meter pits, backfilling and resurfacing	180	$ 26.04	$4,687	Current Salary	Compensation rates are consistently applied to Federal and non-Federal activities
Totals		**810**		**$22,015**		

b. Fringe Benefits $20,473
Percentage rate: The Town's fringe benefits costs are estimated at 93% of employee compensation costs and consists of FICA (16%), SUTA (33%), short term disability insurance (1%), workers compensation (1%), life, medical, dental and vision (41%), retirement (5%) and annual/sick leave/holidays (3%).

c. Travel $0
Not applicable

d. Equipment $6,000
The Trimble R8 unit is necessary to accurately map and geo-locate the installed fixtures associated with this project. The unit is necessary for recalling fixture locations. The $6,000 is based on the published price of the unit. Rental costs for this unit are $305 per day for a total of $70,150 for the duration of the project.

e. Supplies $0
Not applicable

f. Contractual $0
Not applicable

g. Construction $192,084
Equipment Use

Equipment Item	Hours	Rate	Total Cost	Purpose
Hydraulic Excavator 11'3" digging depth	125	$14.71	$1,839	Necessary for digging to correct depth for pipes and meters.
Skid Steer with 62" Wide Bucket	70	$23.00	$1,610	Necessary for moving materials while on site.
Dump Truck 32,000 lbs GVW 2 Axle with Rear 7CY Dump Body (severe Depreciation)	40	$59.00	$2,360	Necessary for moving materials and spoils
"Jumping Jack" Compactor 9" x13.2" shoe	30	$4.00	$120	Necessary for finishing the grade on project and properly bedding pipe
Vibroplate Compactor 2,250 lbs impact	30	$2.60	$78	Necessary for finishing the grade on project and properly bedding pipe.
185 CFM Air Compressor	20	$12.39	$248	Necessary for operating tools and completing

				the project.
k970 Ring Blade Concrete Saw	40	$3.87	$155	Necessary for operating tools and completing the project.
Subtotal			**$6,255**	

The Town owns all the necessary equipment and machinery that will be required for this project. The hourly rates are the rates established by the United States Army Corps of Engineers within the Construction Equipment Ownership and Expense Schedule for the Region. Estimated number of project hours for each machine were extrapolated using actual numbers and data from similar sized projects the Town has completed in the past.

Construction materials

Item	Quantity	Unit Cost	Total Cost	Purpose
5/8" x 3/4" Badger Meter with Encoder and Endpoint	23 each	$615	$14,145	Necessary to meter the water usage in one of the last areas of town that uses analog meters.
3/4" Meter Risers	23 each	$375	$8,625	Necessary to correctly install and hold the meter in place.
Meter Pit	60 each	$38	$2,280	Necessary to correctly install and house the meter underground.
Aluminum Body Risers (Lid Housing)	23 each	$158	$3,634	Necessary to correctly house and hold the lid of the meter in place.
Frost-free Inner Lid (Plastic)	23 each	$29	$667	Necessary to protect the meter screen from frost and debris.
Lids with Center holes (for endpoint)	23 each	$30	$690	Final protection for meter and allows for an endpoint to be installed.
6" x 6" Mechanical Joint Tees	6 each	$245	$1,470	Used for Hydrants, curb stops and valves coming off of the main.
6" Diameter Mechanical Joint Coupler at 11 1/4 degree angle	6 each	$135	$810	Necessary to tie into main water lines around curblines.
6" Diameter Mechanical Joint Coupler at 22 1/2 degree angle	6 each	$127	$762	Necessary to tie into main water lines around curblines.
6" Diameter Mechanical Joint Coupler at 45 degree angle	6 each	$138	$828	Necessary to tie into main water lines around curblines.
6" Diameter Mechanical Joint Coupler at 90 degree angle	2 each	$170	$340	Necessary to tie into main water lines around curblines.

5' ; 1 & 1/2" Pole Fire Hydrants	1 each	$3,825	$3,825	Necessary for Life, Health, Safety of the area for which they're installed.
6" Gate Valves	4 each	$1,150	$4,600	Necessary to isolate areas should repairs be needed and also utilized as Fire Hydrant Valvestops.
6" Stargrip Mechanical Joint action restraint	16 each	$52	$832	Holds pipe in place at valve connections.
6" SBR Mechanical Joint Gaskets	16 each	$9	$144	Rubber Gaskets keep water from leaking at connections.
3/4" x 3 1/2" T-Bolts	96 each	$7	$672	Bolts needed for each mechanical joint to complete connections.
6" x 3/4" Saddle Taps	23 each	$575	$13,225	Necessary for each service line to tap into the main distribution line.
6" x 20' C900 certalock pipe bellhousing with Gasket and Spline	1600 each	$23	$36,800	Pipe necessary to complete the project and move distribution main into publicly held rights of way.
3/4" Purcor Pipe	500 each	$2	$1,000	Pipe necessary to complete the project for connecting service lines and move distribution main into publicly held rights of way.
2" Polyurethane Tubing	3 each	$300	$900	Necessary to complete connections of services lines.
3/4" Stiffeners for Purcor	100 each	$2	$200	Necessary to complete connections of services lines.
8" x 8" x 16" Cordblock	20 each	$4	$80	Thrustblock at corners.
Concrete for Thrust blocks at corners	50 each	$10	$500	Quikrete necessary to install thrust blocks at pipe turns.
Subtotal			**$97,029**	Necessary to meter the water usage in one of the last areas of town that uses analog meters.

All the materials and supplies needed for the project are listed above. The supplies are itemized by unit price and quantity. All costs were derived from actual product costs or from quotes received on each product within the last year.

Contractual

Contractor Name	Description of Services	Cost	Basis of Cost
TBD	Directional Drill/Boring Services	**$88,800**	Estimate prepared by a local contractor for the project and includes a 6” for Main and Service lines

A directional drilling contractor contract will be awarded by the Town at the beginning of the project. The award process will comply with the Town’s purchasing policy which requires at minimum 3 bids. The cost was based on an estimate from a local contractor and includes a 6” bore for main and service lines. It includes 120 hours work at $740 an hour.

h. Other Direct Costs $0 Not Applicable

i. ***Total Direct Cost*** **$240,572**

j. Indirect Costs $0
Not Applicable

k. ***TOTAL*** **$240,572**