

WaterSMART Grant:

Small-Scale Water Efficiency Projects
Funding Opportunity Announcement No. R22AS00195
For Fiscal Year 2022
\$100,000 Grant Request

April 28, 2022

Water Metering and Data Management Upgrade

Hyde Park City, UT

Applicant

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HYDE PARK CITY

established in 1860



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EXECUTIVE SUMMARY

Date: 4/22/2022

Applicant: Hyde Park City
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PROJECT SUMMARY:

For this project, Water Metering and Data Management Upgrade, 562 failing domestic water meters in Hyde Park City will be upgraded to new meters coupled with cellular endpoints for improved data analytics and water management. The project will increase efficiency in Hyde Park City's distribution system and help achieve the city's goal of providing quality drinking water to its users through efficient management and conservation. Proposed funding in the amount of \$100,000 acquired through the Bureau of Reclamation will be used to purchase the upgraded metering equipment while an equal or greater portion of funds will be provided as a matching contribution by Hyde Park City to implement the project.

Applicant Eligibility	Category A
Estimated Start Date:	Aug 1st, 2022
Approximate Project Length:	10 Months
Estimated Completion Date:	October 2023
Federal Facility:	This project is not located on a federal facility

BACKGROUND DATA

As applicable, describe the source of water supply, the total quantity of water supply managed and supplied, the water rights involved, current water uses (i.e., agricultural, municipal, domestic, or industrial), the number of water users served, and the current and projected water demand. Also, identify potential shortfalls in water supply.

For municipal systems, please include the total approximate length of distribution lines, number and sizes of storage tanks, number of pump stations and capacities, and the number of connections and/or number of water users served and any other relevant information describing the system.

Identify any past working relationships with Reclamation. This should include the date(s), description of the relationship(s) with Reclamation, and a brief description of the project(s).

Hyde Park City is located in Utah in Cache County. The estimated population of Hyde Park City is 4,600 people. The city is located five miles north of the City of Logan and four miles south from the city of Smithfield Utah.

WATER SYSTEM

Hyde Park City's water system is fed by one spring and two wells. The city has 1739 residential water connections, seventy-one commercial water connections, and four storage tanks. The system is operated in seven different pressure zones.

WATER SOURCE

One spring and two wells are the current suppliers of water to the Hyde Park City. Birch Creek Canyon Spring, Post Office Water Well, and the Old Underground Water Well are the sources of water for this city. The spring is up Birch Creek Canyon, northeast of Hyde Park City. The two well are located within the city limits of Hyde Park City. The capacities of each of these connections are shown in Table 1.

Table 1. Water Source Capacity

Water Source	Discharge (gpm)	Discharge (cfs)
Birch Creek Canyon Spring	250-1200	0.56 - 2.67
Old Underground Water Well	600	1.34
Post Office Water Well	1150	2.56
Total	2000-2950	4.40-6.51

Recently Hyde Park City increased the capacity of the Post Office Well by installing a new pump and motor in 2017 that increased the discharge from the well to 1150 gpm. Well logs indicate that the aquifers can handle the increase in flow without significant drawdown. The city is actively investigating areas for a new well to be drilled for supplemental water to the system.

DISTRIBUTION SYSTEM

Hyde Park City has a quality well-looped water distribution system. Pressures throughout the city are commonly greater than forty psi. Any additional connections that are added to the system are added to a water model beforehand to determine the impacts that it will have on the system.

WATER RIGHTS

Hyde Park City currently owns four water rights. These rights account for 5.84 cfs of the city’s water. Table 2 detail the water rights along with their sources.

Table 2. Active Water Rights

Water Right	Priority	Discharge (cfs)	Volume (ac-ft)	Associated Source
Birch Canyon WR E1428	2/14/1979	1	724	Spring
Birch Creek Canyon WR 25-3065	8/9/1934	0.5	362	Spring
Underground Water Well WR 25-4734	4/5/1967	1.34	969	Old Well
Underground Water Well WR 25-8919	7/14/1988	3	2172	New Well
Total		5.84	4227	

CONSERVATION PLAN

Hyde Park City has a complete water conservation plan that supports water conservation measures. The conservation plan details educational, financial, and regulatory incentives. Hyde Park City uses a tiered water rate structure, which charges users more as their use of water increases.

PROJECT LOCATION

Provide detailed information on the proposed project location or project area including a map showing the geographic location. For example, {project name} is located in {state and county} approximately {distance} miles {direction, e.g., northeast} of {nearest town}. The project latitude is {###°##'N} and longitude is {###°##'W}.

Hyde Park's city offices are located at 113 E Center St. Hyde Park City, UT 84318. Approximately five miles north from the City of Logan Utah. Hyde Park City is four miles south of Smithfield Utah. Hyde Park City has identified 562 specific of its worst performing meters that are needing replacement. All these meters that need replacement fall within the city's boundaries. Eventually, all 1,677 3/4" meters will be replaced with the upgraded technology. However, at this time, we are requesting assistance in replacing 562 meters.

PROJECT DESCRIPTION

Provide a more comprehensive description of the technical aspects of your project, including the work to be accomplished and the approach to complete the work. This description should provide detailed information about the project including materials and equipment and the work to be conducted to complete the project. This section provides an opportunity for the applicant to provide a clear description of the technical nature of the project and to address any aspect of the project that reviewers may need additional information to understand.

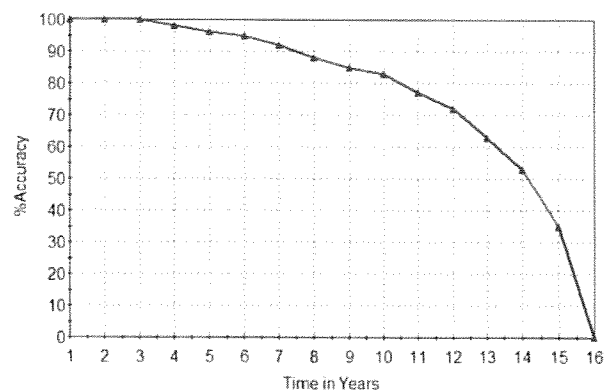
PROBLEMS AND NEEDS

Hyde Park City faces three fundamental issues stemming from present drought conditions and the current meters. These issues include an unprecedented and prolonged drought resulting in a 70% decrease in spring flows, an aging infrastructure, and the inability to conserve water in accordance with Hyde Park City's water conservation plan.

AGING INFRASTRUCTURE

Typical mechanical water meters have a service life of 10 to 15 years before accuracy begins to decline to an unacceptable level. When these types of meters begin to fail, the accuracy declines at a slow and steady rate before taking a significant and noticeable drop in accuracy (see Figure 3). Hyde Park City's method of meter data tracking is not robust enough to detect faulty meters until after the significant drop in accuracy, resulting in prolonged and unnecessary losses in water supply and revenue.

Figure 1: Accuracy of Water Meter Over Time



Many of the existing meters within the Hyde Park City's system are more than 20 years old and are experiencing significant drops in accuracy. Hyde Park City has budgeted to replace 562 meters that are reading far below typical flows or have stopped transmitting data wirelessly.

STRAIN ON CITY RESOURCES

The size and nature of Hyde Park City's service area is not conducive to the drive-by radio data collection required by the current meters. Currently, the water department is forced to drive every street of the city to have the meter send a signal so endpoints can be billed accordingly. The current system puts a strain on equipment and manpower, as well as consumes excess amounts of fuel.

WATER CONSERVATION

A recent study estimates that lost & unaccounted for water from Hyde Park City's failing meters ranges from 15% to 30% of actual flows. Hyde Park City's conservation plan states that responsibilities on the part of the purveyor include leak detection and system maintenance. The current meters and data reporting method do not provide the ability to detect small leaks within the system. Any leaks from the system are additional water demanded from the sources supplying water to Hyde Park City and creating a larger drain on resources

PROJECT DESCRIPTION

To help correct the issues described above, Hyde Park City intends to upgrade all their meters. However, the city is beginning by replacing 562 old and malfunctioning meters with new Allegro Universal AMI meters and Allegro Pit Endpoints. The proposed project will require 30 minutes to remove and install each upgraded meter. Hyde Park City plans to complete the project at a rate of sixteen meters a week to finish the project within the 10-month allotted timeframe. No meters will be installed in the months of November to April due to winter weather. The winter months are not included in the 10-month timeframe.

The upgraded cellular endpoints collect data from the meters at 15-minute intervals and store the information for 72 hours within the unit. Four times each day, the endpoints send stored data through a cellular network to a cloud-based data management system. Using this upgraded system, both Hyde Park City and consumers will be able to access information regarding water usage to improve water management and conservation.

Hyde Park City will additionally utilize GIS to manage upgraded assets. The new metering system will operate through Allegro AMI Fixed Network data collection system and integrate with Hyde Park City's GIS data to support predictive rather than reactive management. Importantly, the upgrade will allow Hyde Park City to conserve resources required to complete monthly meter reads and more accurately identify when meters begin to show signs of failure and when there is a leak in the system.

EVALUATION CRITERIA

The evaluation criteria portion of your application should thoroughly address each criterion and sub criterion in the order presented to assist in the complete and accurate evaluation of your proposal.

It is suggested that applicants copy and paste the evaluation criteria and subcriteria in Section E.1. Technical Proposal: Evaluation Criteria into their applications to ensure that all necessary information is adequately addressed.

EVALUATION CRITERION A: PROJECT BENEFITS (35 POINTS)

Up to 35 points may be awarded based upon evaluation of the benefits that are expected to result from implementing the proposed project. This criterion considers a variety of project benefits, including the significance of the anticipated water management benefits and the public benefits of the project. This criterion prioritizes projects that modernize existing infrastructure in order to address water reliability concerns, including making water available for multiple beneficial uses and resolving water related conflict in the region.

- ***Describe the expected benefits and outcomes of implementing the proposed project.***
The proposed meter upgrade project to Hyde Park City's water system is expected to benefit the city by improved water conservation techniques. Additional financial benefits will apply to Hyde Park City in the form of increased revenue and savings. The project will also allow for the closer monitoring of water resources amid drought and dryer times of the year. The innovative technology will allow for better conservation practices to be implemented. Increased savings for Hyde Park City creates the ability to implement other and more advanced infrastructure and conservation practices in the future.
- ***Clearly explain the anticipated water management benefits to the Category A applicant's water supply delivery system and water customers.***
Hyde Park City will benefit from the upgraded water meters. Benefits will include reduced water waste and increased awareness of failing meters. Hyde Park City will be able to accurately account for all water leaving their system. The city will be able to create more accurate prediction for water needs.
- ***Explain the significance of the anticipated water management benefits for the Category applicant's water delivery system and customers. Consider:***
 - ***Are customers not currently getting their full water right at certain times of year?***
Customers are getting their full water rights year-round
 - ***Does this project have the potential to prevent lawsuits or water calls?***
Yes, this project does have the potential to prevent lawsuits. Currently, water meters are inaccurate and do not relay data on a monthly basis. Hyde Park City may avoid lawsuits by providing accurate water bills monthly.

- *What are the consequences of not making the improvement?*
Due to the current drought conditions that Hyde Park City is facing, conservation efforts must be made in the case the drought continues. If the upgraded meters are not installed, water will continue to be wasted. Inaccurate bills are being sent to residents due to the faulty readings of the meters.
- *Are customer water restrictions currently required?*
There are no current restriction on water consumption in Hyde Park City
- *What are the benefits to the applicant's water supply delivery system?*
Upgrading Hyde Park City's water meters will improve the overall efficiency of the water delivery system. The new metering and data management project will provide greater accuracy, earlier detection of leaks, and improve usage understanding by all parties to help reduce and manage water consumption in Hyde Park City's service area.
- *Extent to which the proposed project improves overall water supply reliability*
Upgrading Hyde Park City's water meters and data collection method will reduce the consumption of precious water supplies amid this unprecedented drought, thereby improving the longevity of those water sources. Importantly, by reducing the amount of water waste, more will be used for its intended purpose. Thus, allowing for more water to be in the system, creating a more reliable water system to the citizens of Hyde Park City.
- *The expected geographic scope benefits from the proposed project (e.g., local, sub-basin, basin)*
The proposed meter upgrade will provide benefits to the Bear River Watershed, and the Logan River Watershed. Since the majority of water for Hyde Park City comes from aquifers that both watersheds rely on, increasing the efficiency of the overall system will aid in avoiding drawdown of the groundwater resources. Upgraded meters will allow for better management to take place through early leak identification and better conservation practices. Hyde Park City will be able to accurately bill users for the water that they are using aiding in conservation efforts.
- *Extent to which the proposed project will increase collaboration and information sharing among water managers in the region*
Advanced data management and accessibility made possible through the upgraded metering system will provide beneficial data and information to help collectively manage Hyde Park City's water. The upgrade meters will allow Hyde Park City accurately inform residents of water usage.

- *Any anticipated positive impacts/benefits to local sectors and economies (e.g., agriculture, environment, recreation, tourism)*
Conservation of water and management resources is expected to benefit the local economy by enabling application of saved resources to other endeavors, water uses, infrastructure improvements, and opportunities both locally and regionally. Additional water to the Bear River Watershed will provide impacts to recreation while simultaneously supporting Federal and regional environmental initiatives. Additional water is expected to assist in avoiding drinking water shortages during summer months

- *Extent to which the project will complement work done in coordination with NRCS in the area (e.g., with a direct connection to the district’s water supply). Describe any on-farm efficiency work that is currently being completed or is anticipated to be completed in the future using NRCS assistance through EQIP or other programs.*
Not applicable to this project.

- *Will the project help address drought conditions at the sub-basin or basin scale?*
Yes, much of the Bear River Watershed is reliant on groundwater for culinary purposes. The upgraded meters will reduce the amount of water that is needed by eliminating wasted water benefiting the entire basin.

EVALUATION CRITERION B: PLANNING EFFORTS SUPPORTING THE PROJECT (30 POINTS)

Up to 30 points may be awarded based on the extent to which the proposed on-the-ground project is supported by an applicant’s existing water management plan, water conservation plan, System Optimization Review, or identified as part of another planning effort led by the applicant. This criterion prioritizes projects that are identified through local planning efforts and meet local needs.

Describe how your project is supported by an existing planning effort.

- *Does the proposed project implement a goal or address a need or problem identified in the existing planning effort?*

Hyde Park City’s Water Conservation Plan states “The City has and will continue to exercise measures to assure that water use is carefully monitored and appropriately used.” The plan also states Hyde Park City’s existing water supplies must be properly managed through conservation. The proposed project is in accordance with Hyde Park City’s conservation plan to modernize the distribution system and manage water through conservation.

- ***Explain how the proposed project has been determined as a priority in the existing planning effort as opposed to other potential projects/measures.***

Hyde Park City recognizes meter replacement and upgrading efforts as an annual priority because of the high return on investment for making the improvements. Hyde Park City recognizes the important role of meter accuracy in revenue generation which translates directly to the ability to fund other needed improvements. Hyde Park City also recognizes the value on the conservation side, especially where lighter demands translate to direct benefits due to reduced water consumption. Reduced demands for manpower and equipment, with their related costs, saved in meter reading efficiencies through higher-technology meter upgrades also represents a savings on the demand side of the equation.

- ***Is the project identified specifically in the planning effort?***

Yes, the project is identified in the fiscal budget of Hyde Park City. The city also plans to allot the hours and funds needed by construction crews to complete the project.

- ***Explain whether the proposed project implement a goal or address a need or problem identified in the existing planning effort?***

Hyde Park City has recognized that inaccurate meter readings are an issue and need a resolution. Currently, citizens do not have access to accurate amounts of culinary water that they can use.

EVALUATION CRITERION C: IMPLEMENTATION AND RESULTS (20 POINTS)

Up to 20 points may be awarded based upon the extent to which the applicant is capable of proceeding with the proposed project upon entering into a financial assistance agreement. Applicants that describe a detailed plan (e.g., estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates) will receive the most points under this criterion.

- ***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.***

The project of installing the new water meters will be implemented by Hyde Park City employees as typical daily duties. Meter installation would begin in August 2023 and proceed at a rate of twenty meters per month minimum. The total project length is estimated to be 21 months for a completion date of October 2024. Table 2 shows the proposed schedule of implementation.

Table 2. Proposed Project Schedule

Project Tasks and Milestones	Year 1				Year 2			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Receive Funding Award								
Coordinate with Reclamation on Agreement								
Order Meter and Necessary Supplies								
Install Upgraded Meters								
Integrate Meters into Data Management System								
Project Closeout and Final Report								

- Describe any permits that will be required, along with the process for obtaining such permits.**
 No permits are required by Hyde Park City for this project. Replacing the outdated meters with the better equipment will be completed as a maintenance project under Utah Department of Environmental Quality
- Identify and describe any engineering or design work performed specifically in support of the proposed project.**
 No engineering or design work is required for this project.
- Describe any new policies or administrative actions required to implement the project.**
 No new policies or administrative actions are required to implement the project. However, Hyde Park City accounting and GIS staff will be advised of the upgraded technology and receive training and direction on how to utilize the improved technology to archive and represent the data for use by Hyde Park City managers in administering the system. The trainings will be focused on how efficiencies gained through the upgraded meter system can be recognized and capitalized
- 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?**
 Whereas the proposed project (Metering and Data Management Upgrade) represents improvements to local meter assemblies at specific sites that have already been disturbed (there are existing meters in place at each of the sites), environmental impacts are expected to be negligible and Utah Department of Environmental Quality (UDEQ) compliance is expected to be tenable through a Categorical Exclusion. Compliance efforts and anticipated costs have been discussed with the local Reclamation office. It is anticipated that Reclamation will perform the work necessary to document NEPA compliance. For budgeting purposes, 3% of the direct costs have been included in the budget proposal to account for this expense, though costs are expected to be minimal.

EVALUATION CRITERION D: NEXUS TO RECLAMATION (10 POINTS)

Up to 10 points may be awarded based on the extent that the proposal demonstrates a nexus between the proposed project and a Reclamation project or activity. 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:

Yes. The metering and data management upgrade project is expected to conserve water resources and introduce efficiencies into Hyde Park City's culinary water system.

- ***Does the applicant receive Reclamation project water?***

No, Hyde Park City does not receive Reclamation project water.

- ***Is the project on Reclamation project lands or involving Reclamation facilities?***

No. The project is not on any project land or Reclamation facilities.

- ***Is the project in the same basin as a Reclamation project or activity?***

Yes. The project is in the Cache County basin which includes the Newton Dam Project and the Hyrum Reservoir Project.

- ***Will the proposed work contribute water to a basin where a Reclamation project is located?***

No, the water saved from this project will not contribute to a Reclamation project

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

No, the water saved is not going to directly benefit any tribes.

EVALUATION CRITERION E: PRESIDENTIAL AND DEPARTMENT OF THE INTERIOR PRIORITIES (10 POINTS)

Up to 10 points may be awarded based on the extent that the proposal demonstrates that the project supports Department and Reclamation priorities. Please address those priorities that are applicable to your project. It is not necessary to address priorities that are not applicable to your project. A project will not necessarily receive more points simply because multiple priorities are addressed. Points will be allocated based on the degree to which the project supports one or more of the Priorities listed, and whether the connection to the priority(ies) is well supported in the proposal.

Up to 10 points may be awarded based on the extent that the project demonstrates support for the Biden-Harris Administration's priorities, including E.O. 14008: Tackling the Climate Crisis at Home and Abroad, E.O. 13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, and the President's memorandum, Tribal Consultation and Strengthening Nation-to Nation Relationships. Points will be allocated based on the degree to which the project supports the priorities listed, and whether the connection to the priority(ies) is well supported in the application.

Without repeating benefits already described in previous criteria, describe in detail how the proposed project supports a priority(ies) below.

This project supports Department of the Interior’s Priority 5 – Modernizing our Infrastructure. Hyde Park City’s meter upgrade project will continue modernization of its infrastructure and support advanced cyclic maintenance. The upgraded technology proposed in this project will reduce slippage, more accurately reading low flow usage that is currently unaccounted for, resulting in increased revenue that would be applied to other infrastructure modernization and water conservation technologies. Furthermore, the technology will reduce the demand for manpower and equipment currently absorbed in meter reading efforts, thus allowing those manpower and equipment assets to be utilized to implement other priorities.

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.

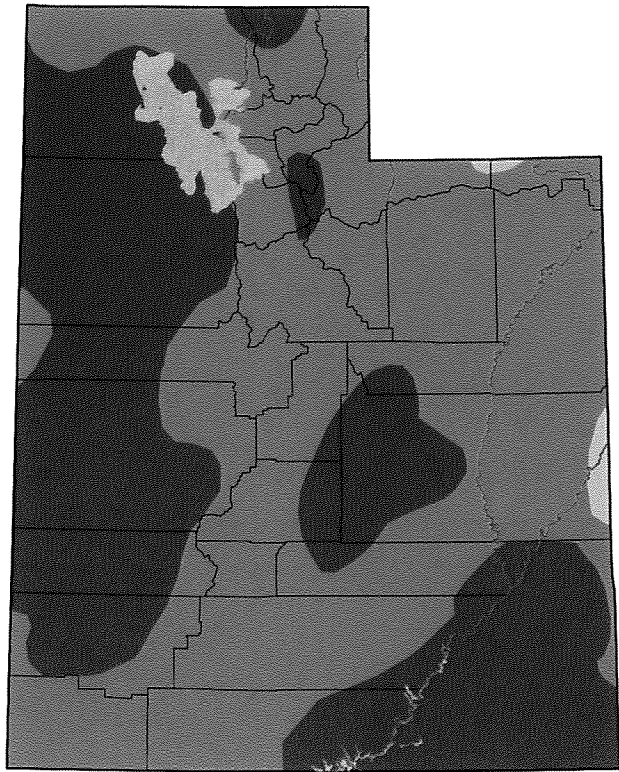
Combating the Climate Crisis

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:

- *Please provide specific details and examples on how the project will address the impacts of climate change and help combat the climate crisis.*

Currently, the state of Utah is in the worst drought on record. With 8 of the last 10 years recording severe drought levels across the state of Utah. Recently, Utah’s Governor Spencer Cox issued an emergency order due to the prolonged drought. The upgraded meters will allow for Hyde Park City to conserve water. The meters will reduce the amount of water that is needed and wasted. Figures below show current drought conditions across the state of Utah



Map released: Thurs. April 21, 2022

Data valid: April 19, 2022 at 8 a.m. EDT

Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

Figure 3. Utah Drought Conditions

- ***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?***

Yes, the proposed project will strengthen the water supply sustainability. With the spring that supplies Hyde Park City with water discharging just 70% of normal levels, other actions need to be taken. Upgrading water meters to reduce wasted water is an ideal option for Hyde Park City. It will allow the city to be resilient during the climate crisis that the world is facing.

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.*

The upgraded meter project will serve the citizens of Hyde Park City. Over the summer of 2021, Hyde Park City’s spring flows reached record lows. The upgraded meters can alleviate the demand for water and allow for more water to remain in tanks to serve the citizens more reliably over the course of dry months

- *Please describe in detail how the community is disadvantaged based on a combination of variables that may include:*

- *Low income, high and/or persistent poverty*
- *High unemployment and underemployment*
- *Racial and ethnic residential segregation, particularly where the segregation stems from discrimination by government entities*
- *Linguistic isolation*
- *High housing cost burden and substandard housing*
- *Distressed neighborhoods*
- *High transportation cost burden and/or low transportation access*
- *Disproportionate environmental stressor burden and high cumulative impacts*
- *Limited water and sanitation access and affordability*
- *Disproportionate impacts from climate change*
- *High energy cost burden and low energy access*
- *Jobs lost through energy transition*
- *Access to healthcare*

The community of Hyde Park City is disadvantaged in two major areas. The first is limited water and disproportionate impact from climate change. Hyde Park City has recently drilled for a new well. The new well came back dry. The city is currently working with a hydrogeologist to identify a new well location. Hyde Park City has experienced drought condition for the past eight out the last ten years with the previous two being extreme droughts. Citizens of Hyde Park City have been asked to reduce the amount of water they use.

- *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.*

Hyde Park Citizens have not been denied a full opportunity to participate in aspects of economic, social and civic life.

Sub-criterion No. E.3. Tribal Benefits

- *Does the proposed project directly serve and/or benefit a Tribe? Will the project improve water management for a Tribe?*

Not applicable to this project. No tribes will be affected by this project.

- *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?*

No tribes will be directly affected by this project.

PROJECT BUDGET

The project budget includes:

- (1) Funding plan and letters of commitment*
- (2) Budget proposal*
- (3) Budget narrative*

Project costs for environmental and cultural compliance and engineering/design that were incurred or are anticipated to be incurred prior to award should be included in the proposed project budget.

FUNDING PLAN AND LETTERS OF COMMITMENT

Describe how the non-Federal share of project costs will be obtained. Reclamation will use this information in making a determination of financial capability.

This WaterSMART Grant application for small-scale water efficiency projects is requesting \$100,000 in federal funding from the Bureau of Reclamation. Hyde Park City will fund the remaining \$124,853 for the project using in-kind services and cash reserves. No other federal funding has been requested for this project and there are no other pending funding requests. This project will not incur any costs prior to the estimated start date. Table 3 summarizes the proposed financing sources for this project.

Table 3. Project Funding Sources

Funding Sources	Amount
Reimbursed with Requested Federal Funding	\$100,000
Costs to be Paid by Hyde Park City	\$124,853
Third-Party Contributions	---
Total Project Cost	\$224,853

Since this project is not requesting funding from other third parties, no letters of commitment from partnering funding agencies are required. Hyde Park City has already designated matching funds and resources in its budget for this fiscal year

BUDGET PROPOSAL

The total project cost (Total Project Cost), is the sum of all allowable items of costs, including all required cost sharing and voluntary committed cost sharing, including third-party contributions, that are necessary to complete the project. Note: The budget proposal must include the cost of all equipment, materials and supplies, and labor or contractual costs to complete the project. Applicants must include the costs of all equipment, materials and supplies, and labor required to complete the project in the budget proposal.

A summary of the proposed project budget is provided in Table 4. The budget narrative explains the proposed budget in more detail.

Table 4. Summary of proposed budget

Cost of Materials				
Item	\$/Unit	Quantity	Unit Type	Total Cost
3/4" Allegro Meter	\$ 240.00	562	EA	\$134,880
Cellular Endpoint	\$ 55.00	562	EA	\$30,910
Meter Box Lid Cover	\$ 15.50	562	EA	\$8,711
Total Cost of Materials				\$174,501
Salaries and Wages				
Maintenance Worker	\$ 20.00	281	HR	\$5,620
Total Labor Costs				\$5,620
Fringe Benefits				
Maintenance Worker	\$ 9.19	281	HR	\$2,582
Total Fringe Benefits				\$2,582
Equipment				
Backhoe	\$ 75.00	281	HR	\$21,075
Worktruck	\$ 75.00	281	HR	\$21,075
Total Equipment Costs				\$42,150
Total Costs for Project				\$224,853

BUDGET NARRATIVE

Submission of a budget narrative is mandatory. An award will not be made to any applicant who fails to fully disclose this information. The budget narrative provides a discussion of, or explanation for, items included in the budget proposal. The types of information to describe in the narrative include, but are not limited to, those listed in the following subsections. Costs, including the valuation of third-party in-kind contributions, must comply with the applicable cost principles contained in 2 CFR Part §200, available at the Electronic Code of Federal Regulations (www.ecfr.gov).

Salaries and Wages

The proposed budget includes estimated time for Hyde Park City's employees administering and overseeing the project including meetings, project visits, all required paperwork, reporting, and other duties involved with the project. Salaries and wages are based on 2022 figures and represent an in-kind or cash matching contribution to the project by Hyde Park City. Hyde Park City will prepare the following reports and submit them to Reclamation: SF-425 Federal Finance Report, an interim performance report, and a final report.

The employee positions tasked with the project are Maintenance Worker. The Maintenance Worker will provide the majority of the labor required for meter installation. The Maintenance Worker will be responsible for the assembly and installation of the new meters.

Fringe Benefits

The provisional fringe benefits rates for Hyde Park City personnel are based on 2022 benefits expenses. Fringe benefits include PTO, retirement, and insurance. Fringe benefits anticipated for the project represent an in-kind or cash matching contribution to the project by Hyde Park City. Fringe benefits are contractually agreed upon by both employee and Hyde Park City.

Travel

Expense related to travel are not eligible for reimbursement under this FOA and as such are not included in the project budget. Local travel costs are included in vehicle usage rates as part of the Equipment section.

Equipment

Equipment costs incurred are for use of Hyde Park City owned equipment. Local vehicle travel costs and loader operating costs are included as part of the proposed budget. All equipment rates have been determined using the Army Corps of Engineers recommended rates and represent an in-kind or cash matching contribution to the project by Hyde Park City.

Materials and Supplies

Hyde Park City will purchase all 562 meters and cellular endpoints required for upgrade directly from the manufacturer, Allegro. Pricing for additional supplies such as meter lids and miscellaneous fittings has been compared to various local suppliers to verify appropriate costs. Requested funding from Reclamation is proposed to be applied towards materials and supplies costs.

Contractual

Whereas Hyde Park City will install the upgraded meters with in-house crews, a contractor will not be retained to complete the work. Hyde Park City anticipates using Sunrise Engineering, Inc. under the existing on-call services agreement between the parties where necessary to support Hyde Park City's efforts in reporting/coordinating with Reclamation. However, these services are not included as part of the project budget.

Environmental and Regulatory Compliance Costs

Discussions with representatives of the Bureau of Reclamation have determined that there will likely be no Environmental Compliance costs associated with a project of this nature.

Indirect Cost

No indirect costs are anticipated as part of this project and as such have not been included in the proposed budget

Total Costs

The estimated total project cost for the Water Meter and Data Management Upgrade project is \$224,853. The requested federal share is \$100,000 and the remaining balance of \$124,853 will be provided by Hyde Park City.

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 should consider 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 proposed project will occur at 562 specific locations within Hyde Park City's boundary. Whereas the project contemplates replacing existing meters with improved technology, the sites have already been disturbed and no new disturbance is expected. Excavation activities will be minimal for some sites and non-existent at most sites. Minimal dust may occur but is not expected to affect air, water, or animal habitat. Activities are not expected to result in a significant impact to the local environment.

- ***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?***

Several endangered, threatened, or sensitive species, such as the Yellow-Billed Cuckoo, are located within Hyde Park City's boundaries. These endangered species would benefit from the water that remains in the Bear River and is deposited in the Bear River Migratory Bird Refuge. There are 13 endangered, threatened, or sensitive species, which live in or near Hyde Park City. None of the species will be directly affected by activity at the proposed meter upgrade locations since the work is local to the meters only. By contrast, many of the species will be benefited by the water conservation results of this project.

- ***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.***

Whereas the improvements will occur at specific meter sites within Hyde Park City's service area boundaries, no impact to wetlands or other surface waters will occur.

- ***When was the water delivery system constructed?***

As the demand for water steadily increased, Hyde Park City constructed a pipeline that was fed by the Birch Creek Canyon spring. In 1992, Hyde Park City connected all citizens if they were within three hundred feet of a water connection.

- *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.*

This project has no effect on an irrigation system, other than to promote conservation of resources for use in other areas.

- *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.*

This project has no effect on an irrigation system, or any buildings, structures, or features listed or eligible for listing on the National Register of Historic Places. The improvements are limited to the meter assemblies only.

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

No sites are known. The improvements will be made at specific meter sites which have already been disturbed. No new disturbances are anticipated.

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

No. The proposed project will improve service to low income and minority populations. Upgraded meters will promote early leak detection and provide more accurate and fair billing for water use at all improved connections.

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

No, there will be no limitations of access to Indian sacred sites or 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, this project will not contribute to any spread of noxious weeds or non-native invasive species.

REQUIRED PERMITS OR APPROVALS

Applicants must state in the application whether any permits or approvals are required and explain the plan for obtaining such permits or approvals.

No permits are required for this project. It will be completed as a maintenance project under Utah Division of Environmental Quality (UDEQ) Bureau of Safe Drinking Water (BSDW) rules.

OFFICIAL RESOLUTION

An official resolution meeting the requirements set forth above is mandatory. If the applicant is unable to submit the official resolution by the application deadline because of the timing of board meetings or other justifiable reasons, the official resolution may be submitted up to 30 days after the application deadline.

An official resolution has been drafted and approved by Hyde Park City. The signed resolutions are attached to this application.



April 15, 2022

Mayor Bryan Cox
133 East Center Street
Hyde Park City, UT 84318

The Cache Water District understands that Hyde Park City is seeking federal funding to upgrade their domestic water meters. We support this project and its ability to better manage the water resources of Cache Valley.

This project - Water Metering and Data Management Upgrade - will replace older domestic water meters in the City of Hyde Park with upgraded new meters that are coupled with cellular endpoints for improved data analytics and water management. This new metering system will not only assist the city, but the water users will also be able to check their water usage at any time. In addition, the smarter metering system will also be able to alert high flows that point toward leakage in a timely manner – hours rather than monthly. The project will increase efficiency in Hyde Park’s distribution system and help achieve the city’s goal of providing quality drinking water to its users through efficient management and conservation.

Therefore, the Cache Water District wishes to express its support for your project and hopes that you are successful in obtaining the desired federal funding.

Sincerely,

Nathan Daugs
Manager
Cache Water District
199 North Main Street
Logan, UT 84321

RESOLUTION 2022 - 06

HYDE PARK CITY

WHEREAS, Hyde Park City must maintain, provide for, and service the Water System,

WHEREAS, The City sees the need to improve water efficiency,

WHEREAS, The City desires to obtain grant funding from the Bureau of Reclamation through the Small-Scale Water Efficiency Projects Program.

NOW THEREFORE, BE IT RESOLVED that the City Council agrees and authorizes that:

1. The Small-Scale Water Efficiency Project Grant application prepared by Sunrise Engineering has been reviewed by the City Council and supports the contents therein;
2. Hyde Park City is capable of providing the amount of funding specified in the funding plan; and
3. If selected for a WaterSmart Grant: small-scale Water Efficient Project, the City will work with the Bureau of Reclamation to meet established deadlines for entering into a cooperative agreement.

DATED: 4/13/22

Byron J. Cox

Authorized Signature(s)

ATTEST:

Donna Wright

