

**WaterSMART: Small-scale Water Efficiency
Programs for (FY) 2022
Installing Smart Water Meters for Ivins
Irrigation Company Phase II
NOFO: R22AS00195**



**WASHINGTON COUNTY
WATER CONSERVANCY DISTRICT**

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April 27, 2022

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TECHNICAL PROPOSAL

Executive Summary

Date, applicant name, city, county, and state

April 27, 2022

Washington County Water Conservancy District (WCWCD)

Saint George, Washington County, Utah

Indicate type of applicant.

Applicant type A

One paragraph project summary that provides the location of the project, a brief description of the work to be carried out, any partners involved, expected benefits and how those benefits relate to the water management issues you plan to address.

Water Conservation – Irrigation Flow Measurements

In this project, WCWCD will install water meters with automatic meter reading (AMR) capability for the end users of Ivins Irrigation Company (IIC). WCWCD delivers water out of the Santa Clara River to this system. Since Ivins City has an established automatic meter



infrastructure (AMI) using Badger meters with Itron meter reading components, the equipment of choice will be the same. These meters have been tested by other water districts in the state and have been proven to work well in secondary water conditions. Overall, the project can provide information on water use which can assist in understanding irrigation needs focusing this phase on residential water users and assist in better management of the water resource. The WCWCD will be brought in to offer free landscape irrigation audits to provide individual education on correct irrigation practices and provide a customized, recommended irrigation schedule

Specifically, the information collected from the meters can:

- Create a bigger picture of water use and assist in making needed and wise policy decisions.
- Aid in the reduction of water use through ability to audit the system, maintain water allotments among the users and determine high water users.
- Allow financial incentives when users conserve water.
- Provide watering habits; hourly data provides education to homeowner in dispute of water use and watering habits.
- Identify high water users to help educate them on their use and if necessary, penalize them for irresponsible use allowing high water users to pay the brunt of the cost when additional water supply is driven by the demand of irresponsible users.
- Allow for equitable use on the system.

State the length of time and estimated completion date for the proposed project including the construction start date (month/year)

The project's timeline will begin on July 1, 2023 and complete by June 30, 2025.

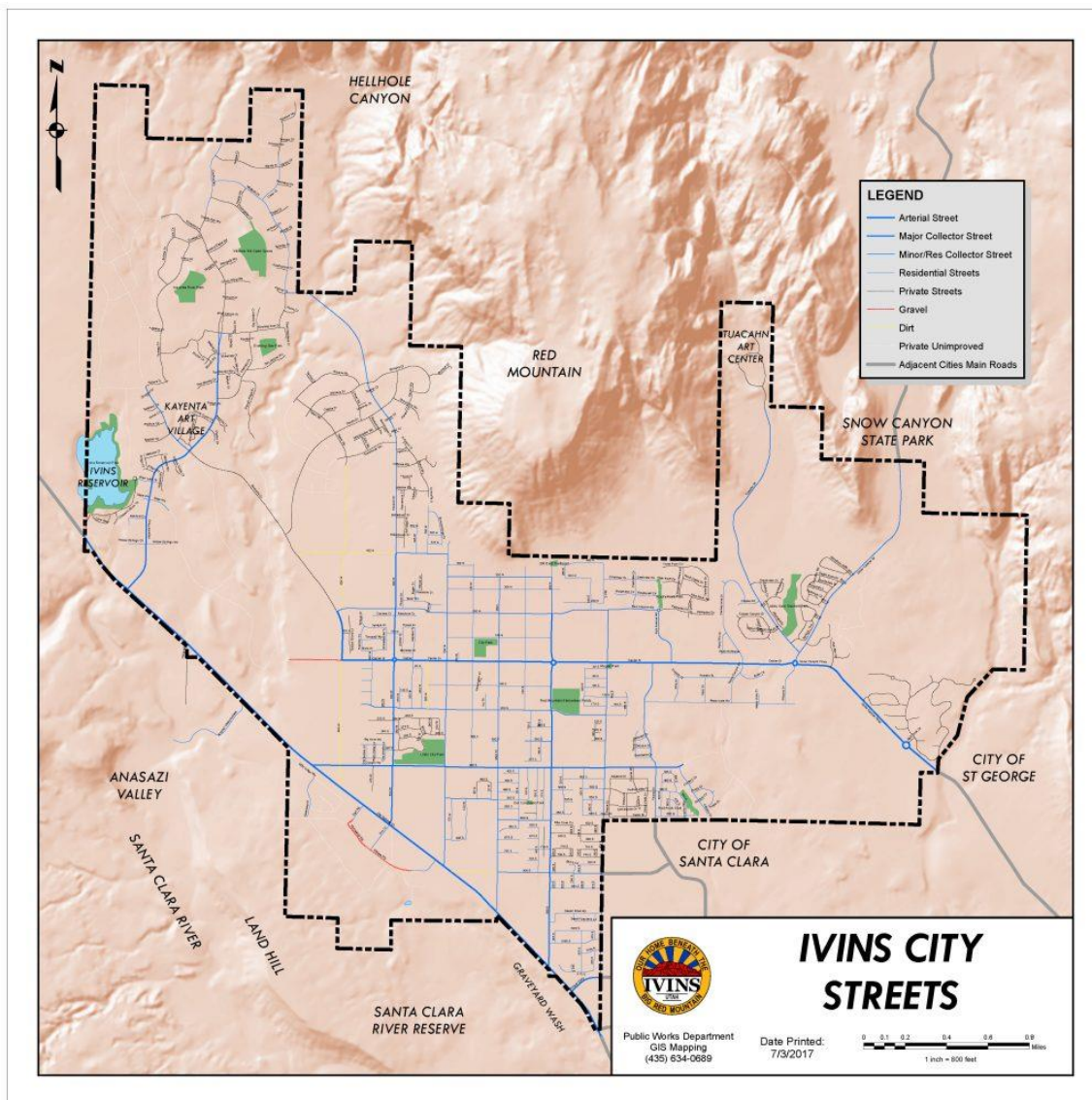
Whether or not the proposed project is located on a federal facility

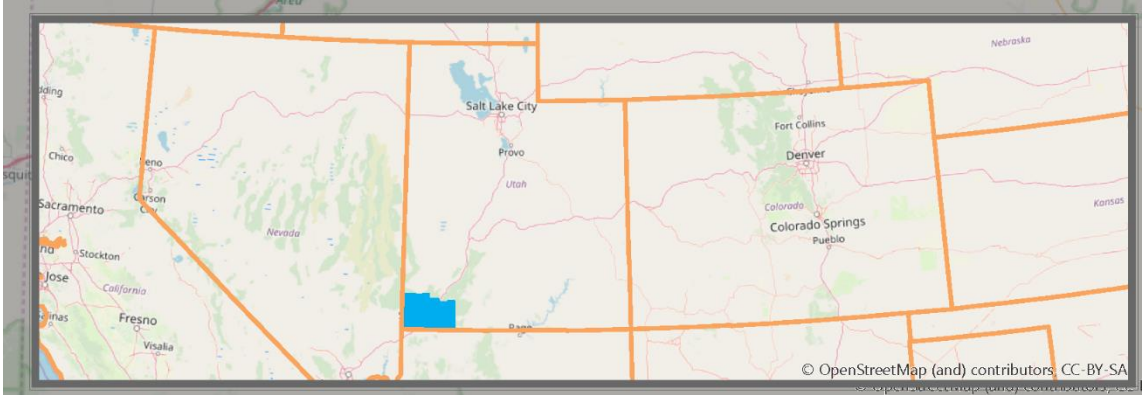
This project is not located on a federal facility.

Project Location

Provide specific information on the proposed project location or project area including a map showing the geographic location.

Ivins City is located in Washington County. The county is in the Virgin River/Kanab Basin located in the southwest corner of Utah. This area is located in the Lower Colorado River Basin and is a tributary to Lake Mead which is identified as a highly likely area to experience a water crisis by the year 2025. The following maps shows the location of Ivins City and the county location in the state of Utah.





Technical 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 aspects of the project that reviewers may need additional information to understand. [no milestones, no project benefit]

The proposed project will install new AMR meters on shareholders with a connection of 4-inch valves in the Ivins Irrigation system. A two phased project, the first phase addressed the portion of largest water users and replace all the 4-inch meters on the system for a total of 19. Phase 2 will address the residential connection totally 140 1-inch meters. Because of the limitation of total project costs, and the increase in materials, this will have another phase to complete the project with 20 2-inch meters. In the end, after the completion of the three phases, new AMR meters will be installed on all 179 shareholders in the Ivins Irrigation system. The following paragraphs explain what Phase 2 of the project will accomplish with the 140 1-inch meters:

Shareholder education and outreach – This will reduce negative feelings and prepare shareholders for the upcoming change. It will also promote proper irrigation practices and help identify water use habits and change them to reduce use. Since this phase deals with the residential connection only, the district will work with the residents on proper irrigation, offering landscape water audits and providing them with a customized irrigation schedule. The district has found by offering these “water checks” to the residents in Washington County, on average its been found 30 percent water reduction.

Locate and map all 140 connection points – A GPS device with survey grade capabilities shall be used to locate these points and provide digital and physical maps to the irrigation company for future use. Illegal connections shall also be looked for and eliminated when found.

Purchase and Install Water Meter Equipment – The project will install meter boxes and meter setters and install AMR meters on all active connections that currently being used by shareholders.

Management – Establish agreements and ensure proper software capabilities between the irrigation company and Ivins City for the reading of the meters and sending of billing statements.

Establish procedures for evaluating usage and protocols for proper reactions to overuse.
Establish procedures for identifying leakage.

EVALUATION CRITERIA

Evaluation Criterion A: Project Benefits—Municipal Metering

Up to 35 points based upon the evaluation of the expected benefits and outcomes of 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 to address water reliability concerns, including making water available for multiple beneficial uses and resolving water related conflict in the region.

Water Management Improvements for delivery system and customers.

The meter of choice is the Badger E-series (larger meters will be Master Meter Octave meters) have been tested by other water districts in the state and have been proven to work well in secondary water quality. The AMI devices will be as manufactured by Itron so that it will be compatible with the City's meter reading capabilities.

The water that is to be conserved is water that is currently lost due to system losses, illegal connections, and overuse due to unmetered flows. Currently, a complete audit cannot be performed on the system because meters are not available at end use. Although this phase of the project will not allow for an audit on the system to find water losses on the system, it will track water use on the largest water users on the system.

Improved Water Supply Reliability

This project is for a small secondary water system in Ivins City. The community contains small agriculture spaces interspersed among the new developments. This project will allow better management of water delivery through installing smart meters on end users of the system. IIC delivers 70 percent of the water to agriculture. 30 percent is delivered to residential. Right now, the water is only tracked at WCWCD's point of delivery. This phase of the project, IIC will be able to track 140 residential users' water by the upgrade to meters. The meters will bring better management of these users and make sure water use does not go above the allocated water. This will also assist WCWCD as they administer delivery of all the water shortages to all water users on the river system.

The irrigation company delivers between 1,000 and 1,700 acre-feet of water. Even with only 140 1-inch connections of residential use, there is huge potential in water use reduction of all residential customers. It's estimated around 25 percent water savings can be found converting to a meter and providing education (such as an irrigation audit). Meters on these users will be able to identify any water waste, inefficiency and overuse of allocated water. Currently, these connections are not metered, and this project will allow for verification of:

- Tracking system water-efficiency measures. Increased measurement will allow for better management of water.
- Providing education to water users on watering habits; data provides education to homeowner in monthly statement of water use.
- Identifying high water users to help educate on their use and if necessary, penalize for irresponsible use allowing high water users to pay the brunt of the cost when additional water supply is driven by the demand of irresponsible users.
- Allowing for equitable use on the system within these water users.
- Providing data for flagging these accounts with excess water use on the system.

The estimated savings on a full usage water year for the residential portion should be 375 acre-feet based on our assumptions and analysis as described below.

Increase in collaboration and information sharing among water managers and water users.

Support and Collaboration

Support letter from Ivins City (Appendix D) and a resolution from Ivins Irrigation Company board (Appendix C) can be found in the appendices.

IIC's service area is located in Ivins City. Ivins City has plans to implement a city-wide irrigation system to all residences. The City has a population of 10,065 with expectations to grow to 25,000 over the next 30 years with a current growth rate of 4 percent. It is critical for the City to implement an efficient irrigation system to meet the future demands. The City is extremely interested to see the irrigation company implement water metering because that would enable the two irrigation systems to be interconnected and operated as a single system, using the same water source.

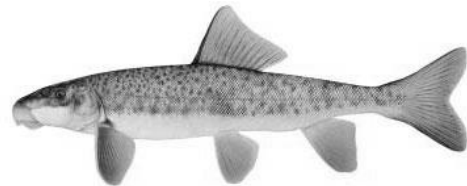
Consumer Engagement

This project will have a high consumer engagement implementing the installation of the meters and tracking monthly water use. Information will be presented prior to installation and through the installation process. The project will also measure the success of these customers that engage in the self-monitoring, self-assessment and consumption changes provided each month. This will promote what WCWCD is anticipating a conservative 10 percent reduction in those residential water users. The public outreach campaign will assess the water user's willingness to monitor, assess and correct water use (using the existing unmetered, no information provided system) to the system that will be available after the installation of the AMI/AMR tools are available.

Positive impacts/benefits to local sectors, economies, agriculture, environment, recreation, tourism.

Project Benefits Endangered Species

Also, in the recent study published by the BOR: Colorado River Basin Water Supply and Demand Study, it identifies this area as one to experience a 9 percent decrease in the Colorado River basin flows in the next 50 years due to climate change. This report considers four options to resolve the imbalance of water supply and demand. One of those options is to reduce demand in water and energy. This project would work toward utilizing that option. The water conserved from the project will improve the ability of water users to ensure base flows in the Santa Clara River per the agreements that have previously been established.



The county's major river, Virgin River, is home to some of the rarest fish species on earth. A contributory river to the Virgin and one that the IIC receives its water from is the Santa Clara River. This river has 2 endangered fish in its reaches. Water users on this river system have also entered into an agreement, known as the Santa Clara Project. The agreement can be found here: <http://www.wcwcd.org/wp-content/themes/wcwcd/pdf/municipal/Shivwits-Band-Water-Right-Agr.pdf>.

The agreement provides a pooling of water rights of both surface and ground water in the Santa Clara River system. This river system has erratic flows, and most years does not supply sufficient water to satisfy all existing water rights. This agreement settles the water right claims of the Shivwits Band of Paiute Indians, conserves water and provides for a more dependable

water supply for users and provides certain instream flows in the Santa Clara River below Gunlock Reservoir for the Virgin River Spinedace. Signers of this agreement are: Bloomington Canal Company; Lower Gunlock Reservoir Corporation; New Clara Field Canal Company; Gunlock Irrigation Company; Shivwits Band of the Paiute Indian Tribe of Utah; Southgate Irrigation Company; City of St. George, Utah; St. George Clara Field Canal Company; the United States of America; State of Utah; Ivins Irrigation Company; and WCWCD.

This project will help deal with the rations of IIC's river allotment that are shared by all users on the river and meet the obligations found in the Shivwits Water Settlement Act and The Virgin Spinedace Conservation Agreement and Strategy. (Agreement can be found here: https://virginriverprogram.org/wp-content/uploads/2019/05/2009_Virgin_Spinedace_MOU_Signatures.pdf.) Measuring water delivery and reducing water use on IIC system will minimize losses and improve these water delivery obligations.

The Washington County area has been consistently growing at a rate higher than the rest of the State of Utah. Water resources are always under pressure in this desert environment regardless of pressures from community growth. It is critical that this project proceed so that the resource can be used most efficiently. The extra water that is generated from this project but not needed to sustain the minimum flows needed in the Santa Clara River will be available for growth of the irrigation system and reduce the demand on the culinary system.

It is the responsibility of the District to find all possible ways to conserve and improve the efficiency of use of local water resources in addition to planning future water projects to meet the county's water needs. This proposed water efficiency project is part of the district's efforts to balance the water needs for residents while preserving the threatened and endangered species, critical habitat, and other fish and wildlife impingements.

Extent to project complements work done in coordination with NRCS in the area, on-farm efficiency work using NRCS assistance. (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.

This phase of the project only will be converting valves to meters for the 140 residential customers.

Addressing drought conditions at the sub-basin or basin scale

This project addresses drought conditions by bringing equity during drought and cutbacks on water delivers. Also, by metering the system, AMI will be able to track losses in the system, high water users, water waste, and identify leaks at the residential end user.

Evaluation Criterion B: Planning efforts Supporting the Project

Describe how project is supported by an existing planning effort.

Water Conservation Plan

Ivins City has adopted a water conservation plan that identifies Ivins Irrigation Company as a water resource and inclusion in the conservation plan. This project meets the following conservation measures identified in the plan.

- Promote the use of new conservation technologies.
- Promote a secondary water system for irrigation purposes.

The plan can be found here: <https://www.ivins.com/wp-content/uploads/2019/02/2018-Ivins-City-Water-Conservation-Plan-Final-Adopted.pdf>.

In 2019, the state developed water conservation goals for its nine regions. Washington County is in the Lower Colorado River South region and has been given a target goal of 260 gallons per capita daily (gpcd) by 2030. WCWCD's current water conservation plan can be found at:

<https://www.wcwcd.org/conservation/plan/>.

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

Ivins City has established a goal to reduce the gallons used per capita by 10% by the year 2027. Another goal has been to identify and replace water meters that are old or inaccurate and locate and repair underground leaks.

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

Ivins City has plans to implement a city-wide irrigation system to all residences. The City has a population of 9,000 with expectations to grow to 25,000 over the next 30 years with a current growth rate of 4 percent. It is critical for the City to implement an efficient irrigation system to meet the future demands. The City is extremely interested to see the irrigation company implement water metering because that would enable the two irrigation systems to be interconnected and operated as a single system, using the same water sources. With this in mind, it is not an option to not have meters on irrigation system and all efforts to fund this expense must be pursued.

By April 2020, Utah State requires all new secondary water connections have meters by 2030. All secondary water providers were required to submit a secondary metering plan to Division of Water Resources by December 2019.

Evaluation Criterion C: Project Implementation

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.

Improving Water Management through measurement in Ivins Irrigation Company System. Currently, this system is lacking end user meters. No construction is needed for this project, only meter installation is involved to an existing valve. The system has end user valves that will be replaced with AMR/AMI. WCWCD and IIC is ready to go on this project and has the ability to complete this project within two (2) years of award. Here are the performance measures listed below indicates the project's readiness to proceed with the project as soon as approval is received from Bureau of Reclamation.

July 1 to October 1, 2023

- Create a coordination team between WCWCD, Ivins City and ICC to complete the process of the work with all performance measures. Verify meter count again and order meters and other pertinent equipment. This preliminary work is critical in detailing the system and identifying connections, but funds of the grant will not be used in this preliminary work.
- Firm up project budget and schedule with coordination team. Request bids for meter installation.
- Develop a procedure for leak detection/management policy and guidelines with the coordination team.
- Begin developing a public relation/outreach campaign with events and materials.

- Develop database with coordination team and start integrating a monthly statement process.

October 1, 2023 to January 31, 2024

- As soon as a bid has been accepted install meters.
- Launch public relation/outreach campaign and arrange for an IIC water users open house.
- As meters are installed provide customer with information to track use and estimated landscape/crop need. This will be implementation of the education component of the grant to help understand plant water needs with irrigation habits.

January 31, 2025

- Host a community event with community and IIC water users, reporting on project completion.
- Begin the process of closing out grant. Draft results, success stories and lessons learned.

June 30, 2025

- Submit final report to Bureau of Reclamation.

Describe permits that will be required, along with the process for obtaining such permits

This project will have minimal permits and approval requirements. The only needed one will be an encroachment permit from Ivins City. In the past these permit costs have been waived.

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

No engineering or design work will be needed to complete this project

Describe new policies or administrative actions required to implement the project

The development of a procedure for leak detection/management policy will be established and guidelines sets with the coordination team. A public relation/outreach campaign for the project will be developed to promote and identify the benefits of this project to the water users. A database with be developed among the coordination team and to provide quarterly progress of the project and eventually morph into a water use report for water user.

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?

There was an CEC completed in Phase I of this project. After speaking with the Lower Basin Reclamation office, it's anticipated the environmental and cultural resource compliance will be completed within a few weeks.

Evaluation Criterion D: Nexus to Reclamation

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

This project is in the lower Colorado River basin and addresses the issue raised with the BOR Colorado River Basin Study which identifies a 9 percent decrease in the Colorado River basin flows in the next 50 years due to climate change. This report identifies an imbalance of water supply and demand. Of the four category options to resolve the demand and supply issue, one option was to reduce demand. This project would meter users on the IIC system. Meters have been installed to put the accountability of water use should be shared by all users on the system. Utility companies have also used meters to aid in the reduction of water use. From the user's perspective, information on water use can help change watering habits and assist in understanding irrigation needs of landscapes. From a utility perspective, the information collected from the meters can create a bigger picture of water use and assist in making needed and wise policy decisions. Meters can be used to maintain water allotments among the users. Meters can show water use reduction which can allow the utility to provide financial incentives when conserving water. Meters can help compare watering habits; hourly data provides education to homeowner in dispute of water use and watering habits. Meters can also identify high water users to help educate them on their use and if necessary, penalize them for irresponsible use pay for future water supply that is driven by the demand of irresponsible users. Meters can justify changes in rates for high users as well as the need for future water supply. Overall, meters allow for equitable use on the system.

Is the project on Reclamation project lands or involving Reclamation facilities

No

Is the project in the same basin as a Reclamation project or activity

WCWCD has been innovative in water conservation and is featured as part of the Case Study 4 located in Appendix 3B of the Innovative M&I Water Conservation and Reuse Programs Case Studies found in the final report of the Colorado River Basin Study. (Case study is found on page 135 of the 452-page report.)

Appendix 3B – Innovative M&I Water Conservation and Reuse Programs Case Studies

Case Study 4

Water Conservation Easement

Washington County Water Conservancy District, Utah

Program Overview

Washington County Water Conservancy District (WCWCD) assesses impact fees for new development based on meter and lot size. If the lot is more than 10,000 square feet, the applicant can qualify for a minimum impact fee by signing a water conservation easement. This easement generally restricts the lot to 5,000 square feet of irrigated landscape. By assessing impact fees and requiring users to pay based on irrigated landscape area, incentives are provided for water conservation. Impact fees and water conservation easements apply to all culinary (potable) water users in the District's wholesale and retail systems, including residential and commercial users, so the incentives to reduce outdoor water use by limiting irrigated landscape are widespread.

The water conservation easement program is part of WCWCD's Regional Water Supply Agreement with its seven major municipal customers. This Agreement also encourages conservation by eliminating the "take-or-pay" contract incentive for municipal customers to sell water because they must pay for it whether or not it is used. Municipal customers pay only for water as it is delivered from the WCWCD system, allowing them to actively promote conservation without creating budget issues. Additional provisions call for water conservation rate structures, time of day water use and landscape ordinances, and maximum use of secondary irrigation and water reuse systems.

Main Program Elements

Costs

The Agreement provides that impact fees will be paid at the time of platting or building permit issuance. Impact fees are paid by developers or lot owners and must be segregated to pay for system costs as set forth in WCWCD's Regional Water Capital Facilities Plan and Impact Fee Analysis. Accordingly, WCWCD does not budget separately for this program, but rather absorbs the costs of its operation into general staffing allocations.

Agency

Washington County Water Conservancy District

Project Status

2006 – Ongoing

Targeted Use Sector

Residential/Commercial, Industrial irrigated landscape

Estimated Annual Savings


2,000 acre-feet per year

Estimated Annual Cost

Budget included in general staffing allocations

Key Program Elements

- Increased awareness of developers and lot owners of the costs of irrigated landscape
- Limits outdoor watering with every new connection
- Financial incentives to reduce irrigated landscape and consequently outdoor water use.
- WCWCD and municipal customers partner under terms of the Regional Water Supply Agreement with its seven municipal customers to eliminate the "take or pay" contract



Impact Fees in New Developments
Source: Washington County Water Conservancy District

Implementation Resources

The water conservation easement, which limits landscape area, is a benefit offered to avoid additional impact fee charges. This option is part of the processing of impact fees and is explained in published materials and on WCWCD's website (wcwcd.org). Because many unique circumstances are presented at the time impact fees are processed, WCWCD staff works with developers and lot owners to find ways to make the water conservation easement work in varying

May 2015 3B-13

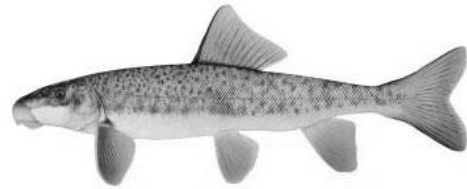
<https://www.usbr.gov/lc/region/programs/crbstudy/MovingForward/Phase1Report/fullreport.pdf>.

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

Part of the BOR's mission is to develop partnerships with local agencies "to address the competing needs of our limited water resources". This grant will allow our agency to implement better water management practices to meet water demand in the area. Without funding from these grants, these system upgrades will be curtailed or even eliminated.

Washington County is upstream of a major hot spot area. This project will maximize our water resources by minimizing water waste benefitting this "hot spot" area identified by BOR as having a high potential in experiencing a water crisis by the year 2025.

In the recent study published by the BOR: Colorado River Basin Water Supply and Demand Study, it identifies this area as one to experience a 9 percent decrease in the Colorado River basin flows in the next 50 years due to climate change. This report considers four options to resolve the imbalance of water supply and demand. One of those options is to reduce demand in water and energy. This project would work toward utilizing that option. The water conserved from the project will improve the ability of water users to ensure base flows in the Santa Clara River per the agreements that have previously been established.



The county's major river, Virgin River, is home to some of the rarest fish species on earth. A contributory river to the Virgin and one that the IIC receives its water from is the Santa Clara River. This river has two endangered fish in its reaches. Water users on this river system have also entered into an agreement, known as the Santa Clara Project. The agreement can be found here: <https://www.wcwcd.org/wp-content/themes/wcwcd/pdf/municipal/Shivwits-Band-Water-Right-Agr.pdf>

The agreement provides a pooling of water rights of both surface and ground water in the Santa Clara River system. This river system has erratic flows and most years does not supply sufficient water to satisfy all existing water rights. This agreement settles the water right claims of the Shivwits Band of Paiute Indians, conserves water and provides for a more dependable supply for users and establishes certain instream flows in the Santa Clara River below Gunlock Reservoir for the Virgin River Spinedace. Signers of this agreement are: Bloomington Canal Company; Lower Gunlock Reservoir Corporation; New Clara Field Canal Company; Gunlock Irrigation Company; Shivwits Band of the Paiute Indian Tribe of Utah; Southgate Irrigation Company; City of St. George, Utah; St. George Clara Field Canal Company; the United States of America; State of Utah; Ivins Irrigation Company; and WCWCD.

This project will help deal with the rations of IIC's river allotment that are shared by all users on the river and meet the obligations found in the Shivwits Water Settlement Act and The Virgin Spinedace Conservation Agreement and Strategy. (Agreement can be found here: <http://www.wcwcd.org/wp-content/themes/wcwcd/pdf/enviormental/VRP-MOU.pdf>.) Measuring water delivery and reducing water use on IIC system will minimize losses and improve these water delivery obligations.

The Washington County area has been consistently growing at a rate higher than the rest of the State of Utah. Water resources are always under pressure in this desert environment regardless of pressures from community growth. It is critical that this project proceed so that the

resource can be used most efficiently. The extra water that is generated from this project but not needed to sustain the minimum flows needed in the Santa Clara River will be available for growth of the irrigation system and reduce the demand on the culinary system.

It is the responsibility of the District to find all possible ways to conserve and improve the efficiency of use of local water resources in addition to planning future water projects to meet the county's water needs. This proposed water efficiency project is part of the district's efforts to balance the water needs for residents while preserving the threatened and endangered species, critical habitat, and other fish and wildlife impingements.

Evaluation Criterion E: Presidential and Department of the Interior Priorities

Up to 10 points may be awarded based on the extent that the project demonstrates support for the Biden-Harris Administration's priorities

Presidential

1. Tackling the Climate Crisis at Home and Abroad
2. Advancing Racial Equity and Support for Underserved Communities Through the Federal Government
3. Tribal Consultation and Strengthening Nation-to-Nation Relationships

Department of Interior Priorities

1. Creating a conservation stewardship legacy second only to Teddy Roosevelt
2. Utilizing our natural resources
3. Restoring trust with local communities.
4. Striking a regulatory balance
5. Modernizing our infrastructure

Sub-criterion 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.

This project will increase resilience to the impacts of climate change by tracking and managing water use better. The continued drought this area has seen has brought system drastic system shortages. Ivins Irrigation will only be able to deliver 35 percent of the 1,500 AF allotment. With this understanding, meters will help in providing equity in the system as climate change and prolonged drought continues. In addition, this project will also protect public health by minimizing culinary water use on outside landscapes.

Sub-criterion 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.

In 2020, Ivins population was 10,065. This project is in a rural area adjacent to the Shivwits Band of the Paiute Tribe.

Sub-criterion E3. Tribal Benefits

Points will be awarded based on the extent to which the Project will honor the Federal government's commitments to Tribal Nations.

This project is adjacent to the Shivwits Band of the Paiute Tribe Reservation. As such, the better managed water, which is on the Santa Clara River and shared with the reservation, will benefit the Shivwits Band as well.



REQUIRED PERMITS AND APPROVALS

This project will have minimal permits and approval requirements. The only needed one will be an encroachment permit from Ivins City. In the past these permit costs have been waived.

FUNDING PLAN

WCWCD is a local government entity with a property tax base and revenues from hydroelectric power and wholesale water sales. **Appendix A** explains the financial sovereignty of WCWCD and provides the General Fund Budget to show the revenues anticipated for 2022.

PROJECT BUDGET PROPOSAL

Summary of non-Federal and Federal Funding sources

Funding Sources		Funding Amount
Non-Federal Entities		
Ivins Irrigation Company	\$108,353	
Washington County Water Conservancy District	\$15,000	
		\$123,353
Non-Federal Entities Subtotal:		
Other Federal Entities		
Other Federal Entities Subtotal:		\$0
Requested Reclamation Funding	\$100,000	
		\$100,000
Total Project Funding		\$223,353

Funding Sources

Funding Sources	Percent of Total Project Cost	Total Cost by Source
Recipient Funding	55%	\$123,353
Reclamation Funding	45%	\$100,000
Other Federal Funding		\$0

2022-2024 Budget					
	Computation		Recipient	Reclamation	Total Cost
	\$/Unit & Unit	Quantity			
SALARIES, WAGES, FRINGE BENEFITS					\$0
					\$0
TRAVEL					
					\$0
EQUIPMENT					
					\$0
SUPPLIES/MATERIALS					
					\$0
OTHER COSTS					
					\$0
CONSTRUCTION					
					\$0
CONTRACTUAL/CONSULTANTS					
Meters with installation (includes 15% Contingency)		1	\$123,353	\$100,000	
					\$223,353
Environmental & Regulatory Compliance		2%			\$4,467.06
Total Direct Costs					\$227,820.06
Total Indirect Costs _____%					\$0
Total Project/Activity Costs					\$227,820.06

Budget Narrative

Salaries and Wages/Personnel. — No grant funds will be used towards salaries or wages

Fringe Benefits. — Not any grant funding will be used for personnel fringe benefits.

Travel. — No travel will be paid for by this grant.

Equipment. — Under contracts.

Supplies/Materials. — Under contracts

Consultants/Contracts. — The project will be put out for bid on the installation of the meters. This will involve a labor contract to install the meters. Ivins City will set up the automatic read system and WCWCD will set up the customer database and monthly water use statements.

Construction. — This project will not involve any construction. It will simply be switching out valves to meters.

Environmental and Regulatory Compliance Costs. — It is anticipated there will be no environmental and regulatory compliance cost with this project, however, a minimal 2 percent of the budget has been added.

Other Costs. — No other cost needed for this project.

Indirect Costs. — No indirect costs will be funded by this grant.

Total Project Costs. — \$227,820.06

**Washington County Water Conservancy District
2022 Budget**

	2020 <u>Actual as of 10/31</u>	2021 <u>Year End Estimates</u>	2022 <u>Budget Amounts</u>
Fund 10 General			
Total Revenue	\$ 4,622,234	\$ 15,195,431	\$ 13,987,000
Property Taxes	2,837,488	13,047,237	12,707,000
In Lieu of Fees	668,136	1,010,308	500,000
Prior Years Taxes	413,237	566,585	500,000
Interest Income	603,017	216,576	200,000
Other Income	53,851	69,182	50,000
Coronavirus Relief Funds		280,544	-
Redevelopment St. George City - Property Taxes	46,505	-	-
SITLA Water Reservation Fee	-	5,000	30,000
Total Expenses	\$ 4,622,234	\$ 15,195,431	\$ 13,987,000
Expenses	2,148,126	2,388,566	4,061,750
Contributions and Transfers	2,474,108	12,806,865	9,925,250
Transfers to Conservation Fund 15	321,211	641,524	1,329,819
Transfers to Regional Water Fund 20		-	960,263
Transfers to Unincorporated County Fund 23	-	-	1,396,389
Transfers to Toquerville Secondary Water System	105,358	130,738	196,003
Transfers to Capital Projects Fund 60	1,230,443	10,779,107	325,457
Transfers to Capital Projects (Non-Impact Fee) Fun	817,096	1,255,496	5,717,319
Fund 15 Conservation			
Total Revenue	\$ 321,211	\$ 764,648	\$ 1,584,965
Other Income	-	-	1,000
Grants	-	123,124	254,146
Transfers from General Fund 10	321,211	641,524	1,329,819
Total Expenses	\$ 321,211	\$ 764,648	\$ 1,584,965

**Washington County Water Conservancy District
2022 Budget**

	2020 <u>Actual as of 10/31</u>	2021 <u>Year End Estimates</u>	2022 <u>Budget Amounts</u>
Fund 20 Regional Water			
Total Revenue	\$ 11,376,617	\$ 13,809,450	\$ 10,705,263
Water Sales	62,282	64,292	50,000
Hurricane Water Sales		521,376	450,000
Kayenta Water Sales	78,962	88,611	70,000
La Verkin Water Sales	73,790	83,441	70,000
St. George Water Sales	8,454,840	10,101,434	7,250,000
Toquerville Water Sales	1,479	1,819	1,500
Virgin Water Sales	172,827	218,999	160,000
Washington Water Sales	2,026,913	1,901,441	1,500,000
Ivins Water Sales	40,421	6,227	6,000
Power Surcharge	12,792	14,107	12,000
Sand Hollow State Park SS Fee	607	810	500
Interest Income	426,557	180,535	150,000
Other Income		626,359	25,000
Transfers from General Fund 10	25,147	-	960,263
Total Expenses	\$ 11,376,617	\$ 13,809,450	\$ 10,705,263
Expenses	4,556,422	5,737,542	10,705,263
Contributions and Transfers	6,820,195	8,071,908	-
Transfers to Capital Projects Fund 60	6,820,195	8,071,908	-

Fund 23 Unincorporated County

Total Revenue	\$ 258,161	\$ 1,985,514	\$ 1,701,389
HVWS Water Sales	176,158	1,788,595	170,000
Casa De Oro Water Sales	25,670	36,267	25,000
Kolob Retail Water Sales	24,686	20,407	20,000
Kolob Campground		58,378	40,000
Septic Service Fee	30,988	55,000	40,000
Other Income	659	26,867	10,000
Transfers from General Fund 10	-	-	1,396,389
Total Expenses	\$ 183,187	\$ 687,641	\$ 1,701,389

**Washington County Water Conservancy District
2022 Budget**

	2020 <u>Actual as of 10/31</u>	2021 <u>Year End Estimates</u>	2022 <u>Budget Amounts</u>
Fund 30 Secondary Water			
Total Revenue	\$ 804,330	\$ 1,019,397	\$ 817,000
Dixie Springs Phase 2 Park Water Sales	13,768	17,476	12,000
Hurricane Sky Mountain Course Water Sales	521,643	171,033	150,000
Hurricane Sand Hollow Resort & Park, 4 meters W	268,919	349,751	250,000
Hurricane Fairgrounds Water Sales	-	8,000	5,000
Washington City Water Sales	-	473,137	400,000
Total Expenses	\$ 804,330	\$ 1,019,397	\$ 817,000
Expenses	58,035	151,440	431,766
Contributions and Transfers	746,295	867,957	385,235
Transfers to Capital Projects Fund 60	746,295	867,957	385,235

Fund 31 Toquerville Secondary Water System (TSWS)

Total Revenue	\$ 130,839	\$ 193,073	\$ 276,003
TSWS Water Sales	19,531	20,455	70,000
TSWS Connection Fee	5,950	41,880	10,000
Transfers from General Fund 10	105,358	130,738	196,003
Total Expenses	\$ 130,839	\$ 193,073	\$ 276,003

Fund 50 Hydro Power

Total Revenue	\$ 551,217	\$ 505,994	\$ 423,053
Hurricane Hydro (Pah Tempe)	172,531	110,772	120,000
Quail Creek Hydro (Wayne Wilson)	378,686	395,223	303,053
Total Expenses	\$ 120,346	\$ 368,679	\$ 423,053

Fund 60 Capital Projects

Total Revenue	\$ 35,264,379	\$ 54,334,770	\$ 98,531,732
Building Construction Impact Fees	25,371,432	34,035,434	25,000,000
Interest Income	1,096,014	580,364	500,000
Contribution From Fund Balance	-	-	72,321,040
Transfers from General Fund 10	1,230,443	10,779,107	325,457
Transfers from Regional Water Fund 20	6,820,195	8,071,908	-
Transfers from Secondary Water Fund 30	746,295	867,957	385,235
Total Expenses	\$ 19,506,314	\$ 24,714,241	\$ 98,531,732
Expenses	14,809,096	20,805,119	95,781,552
Contributions and Transfers	4,697,218	3,909,122	2,750,180
Transfers to Debt Service Fund 70	4,697,218	3,909,122	2,750,180

**Washington County Water Conservancy District
2022 Budget**

	2020 Actual as of 10/31	2021 Year End Estimates	2022 Budget Amounts
Fund 65 Capital Projects (Non-Impact Fee Qualifying)			
Total Revenue	\$ 817,096	\$ 1,255,496	\$ 5,717,319
Transfers from General Fund 10	817,096	1,255,496	5,717,319
Total Expenses	\$ 817,096	\$ 1,255,496	\$ 5,717,319

Fund 70 Debt Service

Total Revenue	\$ 7,050,871	\$ 6,748,280	\$ 5,706,580
Hurricane City Water Development Surcharge	166,384	213,685	190,000
Ivins City Water Development Surcharge	71,208	90,461	80,000
La Verkin Water Development Surcharge	29,496	37,089	35,000
Santa Clara City Water Development Surcharge	51,739	65,253	62,000
St. George City Water Development Surcharge	748,850	925,640	870,000
Toquerville City Water Development Surcharge	11,604	14,466	14,000
Washington City Water Development Surcharge	244,777	316,367	280,000
HVWS	9,394	10,843	10,000
Casa de Oro	464	924	400
Regional Pipeline Payments	809,644	1,073,306	1,215,000
Interest Income	210,093	91,123	200,000
Transfers from Capital Projects Fund 60	4,697,218	3,909,122	2,750,180
Total Expenses	\$ 7,050,871	\$ 6,748,280	\$ 5,706,580

Fund 90 Virgin River Recovery Program

Total Revenue	\$ 2,069,169	\$ 2,114,947	\$ 2,797,287
WCWCD	1,145,875	805,101	1,700,000
Interest Income	2,589	774	1,000
Utah Department of Natural Resources	560,705	559,071	560,000
U.S. Fish and Wildlife Service	360,000	750,000	360,000
Contribution From Fund Balance	-	-	176,287
Total Expenses	\$ 1,258,502	\$ 1,675,343	\$ 2,797,287



April 27, 2022

Bureau of Reclamation
Financial Assistance Operations
Attn: Ms. Robin Graber
Mail Code: 86-6300
PO Box 25007
Denver, CO 80225

This letter explains the financial ability of Washington County Water Conservancy District (WCWCD). WCWCD was established to conserve, develop, manage and stabilize water supplies within the county. WCWCD is a political subdivision of the State of Utah organized and existing under the Water Conservancy District Act.

WCWCD is a local government entity with a property tax base and revenues from hydroelectric power and water sales. This provides adequate monies for the cost share of the grant proposal. Therefore, WCWCD is able to fulfill the obligation of the costs identified in this funding request in this proposal.

WCWCD is committed to conserving the limited and unpredictable water resources of this county. Grant opportunities like these allow projects, such as these, to be implemented in this area. The partnership with Bureau of Reclamation has proved beneficial to this local community in the past and WCWCD looks forward to future opportunities.

Respectfully,

A handwritten signature in black ink that reads "Zachary Renstrom".

Zachary Renstrom
General Manager

**RESOLUTION AUTHORIZING SUBMISSION OF A WATERSMART GRANT PROPOSAL
TO THE U.S. BUREAU OF RECLAMATION AND AUTHORIZING A COOPERATIVE
AGREEMENT WITH RECLAMATION AND GRANT MATCH FUNDS**

WHEREAS, Washington County Water Conservancy District (District) delivers water to Ivins Irrigation Company (IIC), which owns and operates a pressurized irrigation system.

WHEREAS, a goal of the District and IIC is to efficiently manage and conserve the use of the available water resources of Ivins City area.

WHEREAS, IIC desires to work with the District to install meters that will allow improved water management and promote water efficiency by users throughout the system.

WHEREAS, a WaterSMART grant for Small-scale Water Efficient Projects for FY 2022 is available through the United States Bureau of Reclamation (Reclamation) for entities that will provide matching funds and that will work with Reclamation to meet the established deadlines for entering into a cooperative agreement.

WHEREAS, IIC desires to partner with the District and apply for the grant to help offset some of the cost for the improvement to its water system.

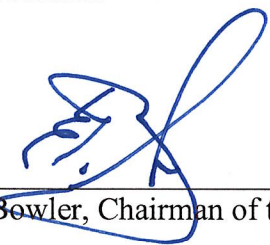
WHEREAS, IIC can provide the amount of funding and/or in-kind contributions, specified in the funding plan, not to exceed \$100,000.

WHEREAS, the District is authorized by law, including but not limited to the Utah Interlocal Cooperation Act (Utah Code Sections 11-13-101 *et seq.*), to enter into a cooperative agreement with Reclamation.

NOW THEREFORE, be it resolved that the Board of Trustees agrees and authorizes:

- A. If selected for the WaterSMART grant, the District will enter into a cooperative agreement with Reclamation regarding the attached grant proposal.
- B. The attached grant proposal that will be submitted to Reclamation has been reviewed and is approved.
- C. If selected for this WaterSMART grant, the District will work with IIC and Reclamation to meet established deadlines for entering into a cooperative agreement.

DATED: 4/4/22



Ed Bowler, Chairman of the Board

ATTEST:

Roberta McMullin, Secretary

VOTING:

Ed Bowler	Yea	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Adam Bowler	Yea	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Chris Hart	Yea	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Victor Iverson	Yea	<input type="checkbox"/>	No	<input type="checkbox"/>
Michelle Randall	Yea	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Kress Staheli	Yea	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Kevin Tervort	Yea	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>

RESOLUTION

WHEREAS, a goal of Ivins Irrigation Company (hereinafter referred to as IIC), is to efficiently manage and conserve the use of the available water resources of Ivins City area.

WHEREAS, IIC who owns and operates a pressurized irrigation system using water delivered by Washington County Water Conservancy District (hereinafter referred to as District).

WHEREAS, IIC desires to work with the District to install meters that will allow improved water management and promote water efficiency by users and throughout the system.

WHEREAS, meters will aid in the reduction of water use through the ability to audit the system, maintain water allotments among the users and determine high water users. In addition, meters will allow for better management of system by tracking demand habits.


WHEREAS, meters provide all water users on the system accountability for their water use. Use of meters can provide information on irrigation use which can then be used to help educate to promote change in watering habits and assist in understanding irrigation needs for landscapes and agriculture.

WHEREAS, IIC desires to partner with the District and apply for WaterSMART: Small-scale Water Efficiency Projects to help offset some of the cost for this improvement to this water system in a management and efficiency project.

NOW THEREFORE, BE IT RESOLVED that the Board of Trustees agrees and authorizes:

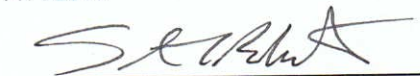
- A. The Board or governing body of IIC has reviewed and supports the proposal submitted;
- B. The Board has legal authority to enter into an agreement with the Bureau of Reclamation;
- C. IIC can provide the amount of funding and/or in-kind contributions, specified in the funding plan; and
- D. If selected for this WaterSMART grant, IIC will work with the District and Reclamation to meet established deadlines for entering into a cooperative agreement.

DATED: 21st April 2022



Robert Ence, President of Ivins Irrigation Company

ATTEST:



Steven Roberts, Secretary

Ivins City
55 N. Main Street
Ivins, Utah 84738
(435) 634-0689

www.ivins.com

An Equal Opportunity Employer



Mayor Chris Hart
City Council Members:
Sue Gordhammer
Derek Larsen
Jenny Johnson
Cheyne McDonald
Dennis Mehr

City Manager Dale Coulam

April 27, 2022

Re: Letter of Support for USBR WaterSMART Grant to Ivins Irrigation Company

To Whom It May Concern:

Ivins City, as the local government entity and as one of the largest shareholders of Ivins Irrigation Company strongly supports the effort to pursue funding for the installation of water meters for Ivins Irrigation Company. This project is **essential** to Ivins City as we pursue the goal of expanding the city's irrigation water infrastructure to include more residential users as well as large irrigators. The City cannot expand its system effectively without the irrigation company users being metered first.

The entire community will be benefited by the expansion of irrigation water use in Ivins City because Ivins would reduce its culinary water usage and be able to use lower quality water sources in its place, potentially delaying capital intensive projects, and improving overall efficiency of water delivery in the whole County.

We also recognize the other obvious benefits of this project such as:

- Creates a bigger picture of water use and assists in making needed and wise policy decisions.
- Aids in the reduction of water use through ability to audit the system, maintain water allotments among the users and determine high water users.
- Allows financial incentives when users conserve water.
- Provides watering habits; hourly data provides education to homeowner in dispute of water use and watering habits.
- Identifies high water users to help educate them on their use.
- Allows for equitable use on the system.

Ivins City is in strong support of this project and will work with WCWCD or Ivins Irrigation Company to complete the AMR/AMI installation and meet the goals identified for this project.

Sincerely,

Chris Hart
Ivins City Mayor



State of Utah

DEIDRE M. HENDERSON
Lieutenant Governor

Department of Natural Resources

BRIAN C. STEED
Executive Director

Division of Water Resources

CANDICE A. HASENYAGER
Division Director

April 7, 2022

Bureau of Reclamation
Small-scale Water Efficient Programs
Application Review Committee Members

Subject: Letter of support for Washington County Water Conservancy District/Ivins Irrigation Company Meter Project Phase II

The Division of Water Resources supports Ivins Irrigation Company's effort to install AMI/AMR meters at the end-user level of the system. Overall, the information collected on water use will improve the understanding of irrigation needs of residential and agriculture users and assist in better management of the water resource.

Specifically, the information collected from meters can:

- Create a bigger picture of water use and assist in making needed and wise policy decisions
- Aid in the reduction of water use through the ability to audit the system, maintain water allotments among the users and determine high water users
- Identify high water users to help educate them on their use
- Allow for equitable use of the system

We look forward to this project and its benefit for better management of our water resources. Thank you for your consideration of the proposal.

Respectfully,

Candice Hasenyager
Director





SPENCER J. COX
Governor
DEIDRE M. HENDERSON
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

Division of Water Rights

BRIAN C. STEED
Executive Director

TERESA WILHELMOSEN
State Engineer/Division Director

March 17, 2022

Bureau of Reclamation
Small-scale Water Efficient Programs
Application Review Committee Members

Subject: Letter of support for Washington County Water Conservancy District/Ivins Irrigation Company Meter Project Phase II

In this project, the Division of Water Rights is in support of Ivins Irrigation Company to install AMI/AMR meters at the end users of this system. Overall, the benefits that can be received from this project can provide information on water use which can assist in understanding irrigation needs of residential and agriculture users and assist in better management of the water resource.

Specifically, the information collected from the meters can:

- Create a bigger picture of water use and assist in making needed and wise policy decisions
- Aid in the reduction of water use through ability to audit the system, maintain water allotments among the users and determine high water users
- Identify high water users to help educate them on their use
- Allow for equitable use on the system

We look forward to this project and the benefit it provides for better management of our water resources. Thank you for consideration of the proposal.

Respectfully,

Nathan Moses, P.E.
Regional Engineer
Southwestern Region