

**WaterSMART Small-Scale Water Efficiency Projects**

**Weber Basin's  
"Smart Irrigation Controller  
Rebate Program"**

**BOR-DO-17-F011**

**Small-Scale Water Efficiency Projects**

**Weber Basin Water Conservancy District  
Layton, Utah**

**Weber Basin Water Conservancy District  
2837 E. Highway 193  
Layton, UT 84040-8406**

**Mr. Darren Hess  
Assistant General Manager  
Phone: 801-771-1677  
Fax: 801-544-0103  
[dhess@weberbasin.com](mailto:dhess@weberbasin.com)**

**April 6, 2017**

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Smart Irrigation Controller Rebate Program”**

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# Executive Summary

## Applicant Info

*The date, applicant name, city, county, and state*

**Date:** January 15, 2017

**Applicant Name:** Weber Basin Water Conservancy District

**City, County, State:** Layton, Davis, Utah

**Project Manager:**

*Name:* David Rice, Conservation Programs, Weber Basin Water Conservancy District

*Address:* 2837 E. Highway 193, Layton, Utah 84040

*Phone:* 801-771-1677

*Email:* [drice@weberbasin.com](mailto:drice@weberbasin.com)

**Project Funding Request:** Small Scale Water Efficiency Projects- Total Cost \$135,260

## Project Summary

*A one paragraph project summary that specifies the work proposed, including how project funds will be used to accomplish specific project activities and briefly identifies how the proposed project contributes to accomplishing the goals of this FOA*

Weber Basin Water Conservancy District (WBWCD or District) Smart Irrigation Controllers Rebate Program will provide rebate incentives for homeowners to purchase smart controllers that are designed to reduce water use and make landscape irrigation more efficient by tracking weather or soil moisture. The project objective is to get new irrigation technology used by more homeowners resulting in more water savings by better landscape irrigation practices. The project specifically addresses the goals of WaterSMART for this funding opportunity fitting the eligibility under Landscape Irrigation Measures. The funding will allow the District to stretch its funding to get twice as many smart irrigation controllers into use than it would otherwise be able to do in the same time period. This program is part of the District's conservation plan to reduce per capita use and to stretch current water supply for future growth. Without this incentive, the price point is still too high for most residential users. This rebate provides more users with this technology resulting in thousands of gallons per parcel being saved by proper irrigation management.

## Schedule

*The length of time and estimated completion date for the proposed project*

This project will begin in February of 2018 and will continue through Oct. 2019. All components of the program are in place for project success during those years.

## Federal Facility

*Whether or not the project is located on a Federal Facility*

In 1949, the United States Congress authorized the Weber Basin Project (Project), which was a U.S. Bureau of Reclamation (Reclamation) project aimed at developing and effectively

utilizing the available water resources within the Weber River Basin Drainage. The Weber Basin Water Conservancy District was subsequently created in June of 1950 by a decree of the Second District Court of Utah and under the guidelines of the Utah Water Conservancy Act. The District is the operating agency for the Weber Basin Project and is responsible for the sale and delivery of project water, operation and maintenance of project facilities and is contracted with the U.S. Government for repayment of reimbursable costs of the Project.

## Background Data

### Map

WBWCD is one of Utah’s largest secondary water retailers and provides wholesale water to many retail water agencies across the Wasatch Front in Davis and Weber counties. WBWCD secondary service areas include Centerville, Farmington, Layton, Uintah Bench (which includes parts of South Ogden, Ogden, and Washington Terrace), West Bountiful, West Haven, and Woods Cross.

**See Attachment A for a Map of District Service Area which is the Project area.**

### Water Supply

*Describe the source of water supply, 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. If water is primarily used for irrigation, describe major crops and total acres served.*

» *Source of water supply and water rights involved*

Source	Maximum Yield (AF)	Reliable Yield (AF)
Project Stored Water	377,278	206,914
District Stored Water	7,848	7,848
Wells (both District and Project)	70,990	35,495
Stock Water	20,601	16,481
Decreed Water Rights	3,960	3,168
<b>Totals:</b>	<b>480,677</b>	<b>269,906</b>

Water resources of the area were extensively developed before initiation of the Weber Basin Project. Numerous private developments antedate the Federal projects. Prior federal Reclamation developments include the Weber River Project on the main stem of the Weber River, and the Ogden River Project on the Ogden River. Also, as part of the Weber River and Ogden River Projects, water is diverted from the high reaches of the Weber River for multiple uses on the Provo River. The Weber Basin Project supplements all of the earlier undertakings, and its operation is correlated with users in approaching full practicable development of the area's water resources. Water is delivered from the Weber River to the District via two aqueducts.

The Weber Aqueduct conveys irrigation water to lands on the Uintah Bench as well as municipal and industrial water to Ogden and adjacent communities in Weber County. Part of the irrigation water is pumped to parcels above the aqueduct and the remainder is delivered by a gravity pressure distribution system. At the terminal of the aqueduct, water is delivered to the District's Weber South Water Treatment Plant (WTP) from which it is treated then distributed to Ogden City and surrounding communities. The Davis Aqueduct extends to the south from the

Weber Canyon along the foot of the Wasatch Mountains to North Salt Lake City. Part of the water is pumped for irrigation of lands above the aqueduct; the remainder of the water is sold by the District to irrigation companies, Improvement Districts, Sub-conservancy Districts and individual landowners. The remaining water is processed through the District's Davis North WTP for distribution to communities in North Davis County, and through the Davis South WTP for communities in the south end of Davis County (Combined communities of approximately 300,000 people). A large block of treated and untreated industrial water is also delivered to the several oil refineries in the extreme south end of Davis County.

In addition to surface water distribution, nineteen deep wells relieve water shortages in dry periods and to meet peak water demands. Streams flowing from the face of the Wasatch Mountains toward the Great Salt Lake contribute small quantities of water for project use. The Ogden Valley Canal distributes Ogden River water to mountain valley lands near Huntsville and Eden.

Within the District's service area may exist the largest number of retail secondary water connections in the United States. The District has approximately 18,000 individual connections that are operated and maintained by the District, with many other irrigation companies having tens of thousands of residential connections in their own retail areas throughout Davis and Weber Counties. These secondary connections are a great asset to the residents they serve, however, there is little incentive to conserve because secondary water has been primarily unmetered, resulting in users not having known how much water they actually use. The use of smart controllers will help secondary water users to manage water more effectively when there is little other incentive to do so. However, it should be mentioned that the District is has begun to meter secondary connections and will aggressively pursue that undertaking until all connections have a meter.

#### » *Current water uses and number of water users served*

Currently District-administered water contracts totaled 224,195 acre-feet, with 85,126 acre feet categorized as municipal and industrial (M&I) water, and the remaining 139,069 acre feet categorized as irrigation. WBWCD serves a geographic area over 2,500 square miles, serving a population of about 600,000 people, with five principle water uses:

- 1. Wholesale Irrigation:** wholesale water is supplied to a number of irrigation suppliers along the Wasatch Front. These organizations then retail water to customers in their respective service areas. This use accounts for approximately 35% of the District's water contracts.
- 2. Groundwater Replacement:** is accomplished by various drinking water purveyors and individuals (either residential or agricultural) with a water contract which is used in an exchange application to obtain approval from the State Engineer to drill a groundwater well to meet water supply needs. This use accounts for nearly 11% of WBWCD contracts currently.
- 3. Retail Secondary Irrigation:** WBWCD provides residential customers with irrigation water in Davis and Weber counties via 211 miles of pipelines. This use accounts for roughly 26% of water contracts. They also deliver irrigation water to many irrigators and farmers in Box Elder, Davis, Morgan, Summit and Weber Counties.

4. **Treated Municipal Water:** The District wholesales culinary water to nearly 50 cities and water improvement districts in Davis and Weber Counties via 69 miles of transmission lines. This use accounts for approximately 22% of the District’s contracts.

5. **Untreated Industrial Water:** This use accounts for about 5% of the District’s Contracts.

» *Current and projected water demand/ Potential shortfalls in water supply*

As of 2016, existing contracts obligated 83% of the District’s reliable yield supply. Current population projections for the District’s service area show the population nearly doubling between 2010 and 2060 from 575,500 to 1,099,100 people. As this growth takes place, additional water supply will be necessary to meet anticipated demands even by meeting the conservation goals of 25% reduction in per capita use by 2025 and 35% conservation by 2050 when compared with year 2000 per capita use. Increased conservation will be critical with all types of programs and incentives such as rebates playing a role in water efficiency and water savings.

## **Water Delivery System**

*Describe the applicant’s water delivery system as appropriate. For agricultural systems, please include the types and appropriate lengths canals and laterals, the number irrigation turnouts and other existing irrigation improvements. For municipal systems, please include the length of distribution lines, number and size of storage tanks, number of pump stations and capacities, and number of connections and/or number of water users served and any other relevant information describing the system.*

### **Delivery System:**

In addition to the summary below, WBWCD receives 5,000 acre-feet from Echo Reservoir that was acquired as part of the Weber Basin Project. They have also acquired 1,357 acre-feet of Weber River Stock in Echo.

**See Attachment B “WBWCD Delivery System Information”**

### **Pressurized Secondary System:**

The District has approximately 18,000 individual connections that are operated and maintained by the WBWCD. There are many other irrigation companies having tens of thousands of residential connections that are serviced by WBWCD wholesale water throughout Davis and Weber Counties. Within the District’s service area there are over 100,000 secondary irrigation connections.

## **Relationship with Reclamation**

*Identify any past working relationships with Reclamation. This should include the date(s), description of prior relationships with Reclamation, and a description of the projects(s).*

WBWCD has collaborated with Reclamation on a number of recently completed and ongoing cooperative projects, including:

- Irrigation product rebate program through Conservation Field Services Program. Funding to assist in administering rebates to end users that improve irrigation efficiency 2012-2016.
- Phase 3 Upper Willard Canal Lining and Water Marketing Project: This project, which received partial funding through the 2013 WaterSMART program has been completed.
- Phase 2 Upper Willard Canal Lining and Water Marketing Project: This project, which received partial funding through the 2012 WaterSMART program, has been completed.
- Phase 1 Upper Willard Canal Lining and Water Marketing Project: This project, which received partial funding through the 2011 WaterSMART program, is currently underway and is being constructed. Construction is completed.
- The Layton Canal Lining and Water Marketing Project: This project, which received partial funding through the 2010 WaterSMART program, has been completed.
- The first Secondary Water Meter Project: This project, which received partial funding through the 2010 WaterSMART program, has been completed with the installation of 1000 meters.
- System Trunk-line Meter Project: Completed in 2009, this project involved installation of large meters and provides information for the water deliveries through the many of the large lines that service portions of the District's retail secondary water system.
- System Optimization Review (SOR): Completed in 2008, this project evaluated the efficiencies of the District's entire water storage and distribution system.
- Weber River Basin Aquifer Recharge Water Bank: This project, which was completed in 2009, received partial funding through the 2007 Water 2025 program.
- Gateway Canal Landslide Stabilization Projects: This is an ongoing collaboration.

## Technical Project Description

*Describe the work in detail, including project milestones and specific activities that will be accomplished as a result of this project.*

WBWCD is proposing the Smart Irrigation Controller Rebate Program which will allow approximately 1,000 (plus or minus depending on the costs of products purchased) homeowners each year to purchase and begin using this smart irrigation technology to eliminate unnecessary irrigation events and to adjust total irrigation run times based on real time weather or soil moisture information. The District is requesting funding of \$50,000 (\$25,000 each year for 2 years).

This project originated out of the need to get better products to more users whereby beginning the process of eliminating unneeded irrigation which happens on fixed scheduling irrigation controllers. There was a need to do something more, and with the technology now in place the time was right to begin to rebate and provide financial incentive for users to acquire this technology and put it to use.

Providing rebates for smart controllers provides homeowners the funds to be able to afford the product which is more expensive than conventional fixed schedule controllers. It addresses water efficiency and water conservation by taking the guess work out of scheduling and allowing the device to dictate the schedule based on landscape needs that fluctuate with seasonal weather variations.

The program began as a pilot project in 2012 with some small success because it began as a small test project. The program and the technology has improved such that there is now a high demand for smart controllers and the message is spreading on the ease of set up and use. The program went from under 50 rebates given in 2012 to 862 given in 2016. It is anticipated to continue to grow as more people see the benefit of reduced water while still maintaining the quality of landscape they are used to having.

The three main goals of this project:

- (1) Provide tools and incentives for the public to become more efficient with their outdoor water use and to become more educated water users in general especially pertaining to landscape irrigation scheduling;
- (2) Help incentivize people to begin using new technologies and products that they may otherwise not use because of the initial higher investment cost to purchase those products; and,
- (3) Provide the District with an opportunity to increase its positive public relations with all water users within its service area while providing solutions when reductions are asked for by the District. A sprinkler system audit is required for a rebate check to be sent, which provides one additional layer of education to help users know about their sprinkler systems and ways to improve overall efficiency.

## **Project Approaches**

The project's goals and objectives will be pursued using the following guiding approaches. First, the project rules, dollar amounts and products that qualify for rebates will be posted and publicized through existing networks of the cities and other water providers that work with the District, on the District's website, and at local sprinkler supply vendors. They will also be made available for download on the District's websites. Limitations that exist will also be noted to ensure that there is clarity and minimal confusion for the public regarding the brands of products, and the models or types within those brands that qualify for rebates. The application process will be made available on the internet at [www.weberbasin.com/conservation](http://www.weberbasin.com/conservation), or hard copy instructions will be available at the WBWCD administrative office. It is the desire of the District to continue the existing program effective for calendar years 2018 and 2019. The District is committed to continue to fund and promote wise irrigation practices by helping users use new technology and new products to become water efficient.

## **Project Benefits or outcomes**

The direct benefits from the proposed rebate program project will be a decrease in water use with increased user efficiency due to the use of "smart" and better irrigation technology and products. Within the District's service area, and the availability of pressurized secondary water for the majority of users, the motivation for customers to become educated and reduce their landscape water usage is limited. With the combination of programs including metering the secondary water, this program will begin to achieve some level of education and behavior change with irrigation practices due to the increased use of the technology and better irrigation products. Customers will be able to see that the landscape quality stays the same or improves, while their water consumption decreases. This program will assist the District as future programs are

implemented because of the positive impact and public outlook gained through these types of incentive programs.

## Evaluation Criteria

### **Evaluation Criteria A- Planning Efforts Supporting the Project**

*Describe how your project is supported by and existing planning effort.*

The proposed project will allow for approximately 1,000 smart controllers to be purchased and installed on properties within District boundaries. The proposed project supports Section 7.7 of the Weber Basin Water Conservancy District's Water Conservation Plan, which was updated and submitted to the Utah State Division of Water Resources and the Bureau of Reclamation in 2013. The District's plan is updated and resubmitted every 5 years. The Utah State Division of Water Resources has a statewide water plan, also updated every five years. The state plan recognizes that: "Outdoor reductions will be realized primarily through public education and emphasizing more efficient application of water on landscapes" (Utah State Water Plan 2013). The proposed project of providing rebate incentives to residential water users helps the District to more fully implement its plan to achieve conservation goals through a broad, multifaceted approach of education, accountability, and the increased use of technology with new, better products. The District has a high priority to educate users and drive down water use and to maintain and build positive public relationships with water users as we all work toward a long term sustainable water supply.

Because of the lack of metering for most of these users, it is difficult to quantify the savings but based on evaluations from water checks over the last several years and other work done on precipitation rates from sprinklers and run times, we can make the assumptions that as a minimum, there will be 3 irrigation cycles per month eliminated per parcel with a conservative savings of 3,000 gallons per cycle. That equates to a minimum of 9,000 gallons per month or 54,000 gallons (0.17 AF) per year (April-October). With 1,000 rebates given that amounts to 165.7 AF per year potential savings.

### **Evaluation Criteria B- Project Benefits**

*Describe the expected benefits and outcomes of implementing the proposed project.*

*What are the benefits to the applicant's water supply delivery system?*

Benefits of this project are varied, but the primary benefit to the District is a reduction in outdoor water and a more educated public on what constituted the right amount of water needed. More smart controllers being used results in more water savings. It has also been determined through surveys that the majority of smart controller users are more involved with irrigation behavior because they can see what is happening and make minor changes from their mobile device app. The benefit to the District's delivery system is simply reduction in water use means less water being pushed through the pipes at a given time resulting in better overall system management and life. Everything from pressure issues to capacity issues are helped with a reduction in water use because of better irrigation management for landscapes. The system as a whole basin benefits from an increased water supply because there is less depletion. Benefits to local environment, recreation and agriculture will result because more water stays in reservoirs,

the environment is less impacted and there is a more secure water supply, which includes agricultural uses to provide economic life to continue with the local agricultural operations.

## **Evaluation Criteria C- Project Implementation**

*Describe the implementation plan, any permits required, any engineering or design work to be performed, and new policies or administrative actions that are required for the project.*

Upon completion of a financial assistance agreement, the proposed rebate program can be immediately implemented. The proposed timeline for the project will begin in February of 2018 and extending through October of 2019 or until funding is depleted. There is no significant staging or phasing of the project. Once the rebate application is available on the District's website, the program will continue until October 31<sup>st</sup> 2019 or depletion of funds. Each rebate application will be submitted online through the District's online application process, followed by District staff scheduling and conducting a water audit on their parcel to provide the rebate applicants with valuable sprinkler system information and to verify that the controller is installed.

No permits are required for this project.

No engineering or design work is needed for this project.

No new policies or new administrative actions are needed to successfully implement and manage this project. All administrative and staff actions for successful implementation of this project have already been accomplished with the rebate program that is currently in place.

## **Evaluation Criteria D- Nexus to Reclamation**

*Describe the nexus between the proposed project and a Reclamation project or activity.*

- *How is the proposed project connected to a Reclamation project or activity?*  
The proposed project will offer the rebate to residents living within the Weber Basin Project, which is a Reclamation project. It will therefore benefit the District and Reclamation through better management of water resources and reduce overall demand that is increasing with a growing population throughout the entire Reclamation project.
- *Will the project help Reclamation meet trust responsibilities to any tribe(s)?*  
N/A
- *Does the applicant receive Reclamation project water?*  
All the water received in the project is original Weber Basin Project water. Weber Basin is the central entity for Reclamation Project water for the entire region.
- *Is the project on Reclamation project lands or involving Reclamation facilities?*  
The project will involve homeowners that live within the Weber Basin Project service area. The Reclamation facilities are not directly involved in the project, but facilities

benefit from any conservation efforts that will reduce the demand of water and stretch the resource and the life of the facility for a longer duration.

- *Is the project in the same basin as a Reclamation project or activity?*  
Yes, the proposed project is in the Weber Basin service area or project boundaries.
- *Will the proposed work contribute water to a basin where a Reclamation project is located?*  
Yes, the improved efficiency that smart controllers can provide will extend water supply and essentially add additional water to the Weber Basin Project. The proposed project is part of the larger effort in conservation to provide an additional 25% from savings, back into the project to meet the future growth needed and continue to provide the water supply that is needed.

## Environmental and Cultural Resources Compliance

*1. Will the 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 project will not impact the surrounding environment. There is no excavation, earthwork, or other physical impacts. No animal habitats will be negatively impacted. If anything, this project benefits the environment and animal habitat within the larger regional watershed and surrounding areas by reducing the amount of water taken out of those areas and from reservoirs.

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

No endangered species are impacted by this project.

*3. 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 project may have.*

There are wetlands in the District's boundaries, however, this project will not affect or have any impact on any wetland areas.

*4. When was the water delivery system constructed?*

The original District/Reclamation Project began in the late 1950's and continued over a several year period in the early 1960's. Since then additional infrastructure with conveyance canals and pipes have been added to meet the growing population water needs.

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

No, there will be no major modifications to the main conveyance system as a result of the project. The changes that will occur are within residential sprinkler systems but it is only in the switching of wiring from the old controller to the new controller.

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

No, WBWCD is not aware of any buildings, structures or features that would be impacted or would qualify.

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

No, WBWCD is not aware of any impacts to any archeological sites.

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

No, the project could actually make lower income and minority populations more successful and able to use the latest technology by providing rebate funds which reduce the out of pocket expenses to these populations.

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

No.

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

No.

## 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.*

There will be no required permits or approvals needed for the proposed project.

## Official Resolution

Weber Basin Water Conservancy District is submitting the official resolution with this application. It is not shown as an attachment.

## Project Budget

### Funding Plan and Letters of Commitment

*1. How you will make your contribution to the cost share requirement, such as monetary and/or in-kind contributions and source funds contributed by the applicant (e.g., reserve account, tax revenue, and/or assessments).*

The District will fund all non-Federal contributions entirely with Weber Basin Water Conservancy District operating revenues.

2. Describe any in-kind costs incurred before the anticipated project start date that you seek to include as project costs. Include:

N/A

3. Describe any funding requested or received from other Federal partners. Note: other sources of Federal funding may not be counted towards the cost share unless otherwise allowed by statute.

N/A

6. Describe any pending funding requests that have not yet been approved, and explain how the project will be affected if such funding is denied.

N/A

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

<b><i>FUNDING SOURCES</i></b>	<b><i>FUNDING AMOUNT</i></b>
<b>Non-Federal Entities (District Funding)</b>	\$85,260.00
<b>Non-Federal Subtotal</b>	\$85,260.00
<b>Other Federal Entities</b>	\$0.00
<b>Other Federal Subtotal</b>	\$0.00
<b>Requested Reclamation Funding</b>	\$50,000.00

There are no costs associated with travel for the proposed project.

*Equipment*

There are no costs associated with equipment for the proposed project.

*Materials and Supplies*

Materials and Supplies will be part of the contracted portion of the project and will be documented as required.

*Contractual*

There are no contractual costs associated with the proposed project.

*Environmental and Regulatory Compliance Costs*

There are no contractual costs associated with the proposed project.

*Other Costs*

There are no other costs associated with this project.

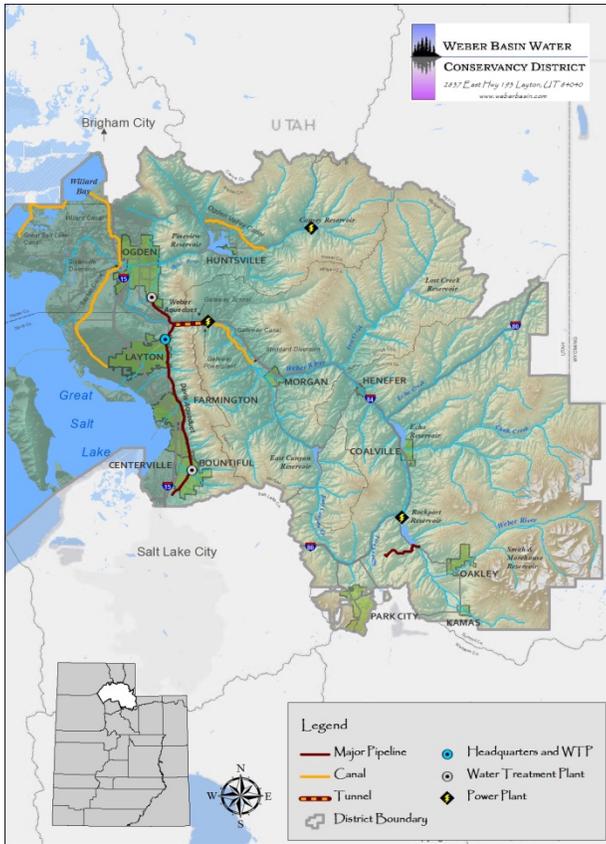
*Indirect Costs*

No indirect costs will be part of the project.

*Total Costs*

<b>WBWCD Portion</b>	<b>Reclamation Portion</b>	<b>Total</b>
<b>\$85,260</b>	<b>\$50,000</b>	<b>\$135,260</b>

**Attachment A.**  
**Map of the District's Service Area (Project Area)**



Both of these attachments can be provided in larger size upon request.

**Attachment B.**  
**Weber Basin Delivery System Information**

**Weber Basin Water Principal Infrastructure**

DAMS & RESERVOIRS						
Name	Location	Type of Dam	Height (ft)	Total Capacity (AF)	Usable District Capacity (AF)	Acquisition Dates
Causey	Eastern Weber County	Earth & Rock	200	7,870	6,870	1962-1964
East Canyon	Southern Morgan County	Concrete Arch	245	51,200	20,100	1965-1967
Leet Creek	Eastern Morgan County	Earth & Rock	220	22,500	20,010	1964-1966
Pineview	Ogden Valley, Weber County	Earth & Rock	91	110,150	66,228	1955-1957
Smith & Millhouse	South-eastern Summit County	Earth & Rock	82	6,350	6,500	1984-1988
Wanship	Summit County	Earth & Rock	156	62,120	60,860	1954-1967
Willard	Southern Box Elder County	Earth	36	227,169	202,160	1957-1963

AQUIFER STORAGE & RECOVERY			
Name	Location	Pond Area (acres)	Capacity (cfs)
ASR	Weber County	7.5	10

DIVERSIONS			
Name	Location	Pass-Through Capacity (cfs)	Acquisition Dates
Ogden Valley	South Fork of Ogden River	2,200	1962-1964
Slaterville	Weber River west of Ogden	9,000	1956-1957
Stoddard	Weber River north of Morgan	6,000	1955-1956

HYDRO GENERATION POWER PLANTS			
Name	Location	Type	Capacity (kw)
Causey	Eastern Weber County	2 unit	2,100
Gateway	Mountain Green	1 unit	4,275
Wanship	Wanship	1 unit	1,950

CANALS, TUNNELS & PIPELINES					
Name	Location	Type	Capacity (cfs)	Length (miles)	Acquisition Dates
Davis Aqueduct	Davis County	Concrete pipe	355	23.0	1954-1957
Gateway Canal	Morgan County	Concrete-lined	700	8.5	1954-1956
Gateway Tunnel	Morgan and Davis County	Concrete-lined	435	3.3	1952-1954
Layton Canal	Davis County	Earth-lined/concrete-lined/pipeline	260	18.0	1962-1964
M&I Pipelines	Davis and Weber County	Varies 6"-48"	varies	80.0	1955-2012
Ogden Valley Canal	Weber County	Part earth-lined	35	9.2	1962-1964
Secondary Pipelines	Davis and Weber County	Varies 2"-36"	varies	325.0	1955-2012
Weber Aqueduct	Weber County	Concrete pipe	80	5.0	1954-1956
Western Summit County	Summit County	Ductile iron	8.9	9.0	2013
Willard Canal	West Weber County	Earth-lined/concrete-lined	1,050	11.0	1961-1963

PUMPING PLANTS				UNDERGROUND WATER WELLS			
Name	Location	Capacity (cfs)	Height of Lift (ft)	Name	Location	Type	Capacity (cfs)
Arteridge Booster	Layton	22	50	Ben Lomond	Harrisville	M&I	1.8
East Bountiful	Bountiful	18	475	Bountiful	Bountiful	M&I	5.2
East Layton	Layton	9	65	Clearfield #1	Clearfield	M&I	5.0
Gateway	Mountain Green	150	150	Clearfield #2	Clearfield	M&I	5.0
Kanewille #1	West Haven	3	218	Davis Reservoir	Bountiful	M&I	2.2
Kanewille #2	West Haven	10	313	District Well #2	South Weber	M&I	11.0
Layton Canal	West Haven	260	23	District Well #3	South Weber	M&I	10.0
Old Post Rd Booster	Ogden	6	200	Layton	Layton	M&I	5.0
Rockport	Wanship	25	45	Farmington #1	Farmington	Irrigation	5.0
Roy Drought Relief	Roy	150	340	Farmington #2	Farmington	Irrigation	5.0
Sand Ridge East	Layton	9	92	Layton	Layton	M&I	10.0
Sand Ridge West	Layton	15	138	Mills Park	West Bountiful	Irrigation	2.2
South Davis	Bountiful	18	530	North Ogden	North Ogden	M&I	1.8
Utah Bench	South Ogden	18	363	Harrisville	Harrisville	M&I	1.8
Vail Verdes	Bountiful	6	240	Orchard Dr. Well	Bountiful	M&I	0.8
West Haven #1	West Haven	10	218	Riversdale	Riversdale	M&I	6.8
West Haven #2	West Haven	3	290	South Weber #1	South Weber	M&I	10.0
Willard No. 1	West Weber County	500	45	South Weber #2	South Weber	M&I	10.0
Willard No. 2	West Weber County	250	20	Washington Terrace	Washington Ter.	Irrigation	4.0
				West Bountiful 5th South	West Bountiful	Irrigation	4.0
				West Bountiful Golf	West Bountiful	Irrigation	2.0

WATER TREATMENT PLANTS		
Name	Location	Capacity (MGD)
Davis North WTP	Layton, Davis	46
Davis South WTP	Bountiful, Davis	16
East Canyon WTP	Jeremy, Summit	6.5
Weber South WTP	Ogden, Weber	32

AF=Acre Feet • CFS=Cubic Feet per Second • MGD= Million Gallons per Day

# WEBER BASIN WATER CONSERVANCY DISTRICT

2837 East Highway 193 • Layton, Utah 84040 • Phone (801) 771-1677 • (SLC) 359-4494 • Fax (801) 544-0103

## RESOLUTION OF THE BOARD OF TRUSTEES OF WEBER BASIN WATER CONSERVANCY DISTRICT

### RESOLUTION

Tage I. Flint  
General Manager/CEO

WHEREAS, the Weber Basin Water Conservancy District (District) is committed to the concept of water conservation;

Board of Trustees:

WHEREAS, the District recognizes the need to conserve water and use it more efficiently in order to provide for the needs of the growing population in the District's Boundaries;

Kyle R. Stephens  
President  
Davis County

Kym O. Buttschardt  
Weber County

Jay V. Christensen  
Weber County

Kerry W. Gibson  
Weber County

WHEREAS, the District strongly supports the Bureau of Reclamation's goals in Water Conservation Field Services Program 2016;

Marlin K. Jensen  
Weber County

NOW THEREFORE, BE IT RESOLVED that the Board of Trustees for the Weber Basin Water Conservancy District agrees and authorizes that:

John Petroff Jr.  
Davis County

1. The Board has reviewed and supports the proposal submitted;
2. The District will provide \$85,260 of the funding for the Water Smart Small-Scale Water Efficiency Project;
3. If selected for the proposed project, the District will work with Reclamation to meet established deadlines for entering into a cooperative project.

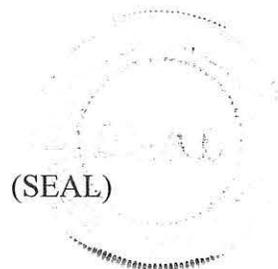
Paul C. Summers  
Davis County

Dave Ure  
Summit County

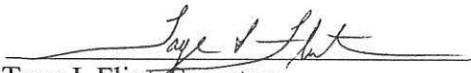
Dee Alan Waldron  
Morgan County

### CERTIFICATE

I, Tage I. Flint, President of the Weber Basin Water Conservancy District, hereby certify that the foregoing is a true and correct copy of a resolution adopted by the Board of Trustees of said District at a meeting held February 23, 2017.



(SEAL)

  
Tage I. Flint, Secretary