Boise Project Board of Control

Automation of the Deer Flat Low Line #3

Application for:

WaterSmart Grants: Small-Scale Water Efficiency Projects for FY2018

Funding Opportunity No. BOR-DO-18-F009

July 31, 2018

Submitted by:

Boise Project Board of Control
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Executive Summary

The Boise Project Board of Control (BPBC) submits this application for Funding Opportunity Announcement No. BOR-DO-18-F009 through the WaterSMART Grants: Small-Scale Water Efficiency Projects for Fiscal Year 2018 from the Bureau of Reclamation (USBR). Through this application, the Boise Project Board of Control is seeking $37,602.00 in federal funding assistance. The funding will be used to install two automated slide gates and a walkway with a safety rail on the Deer Flat Low Line #3 Reregulation point, located on the Deer Flat Low Line Canal. The new equipment will be connected to the existing Supervisory Control and Data Acquisition system to provide remote sensing and control of the gate operations. The goal of the project is to stabilize and more precisely control flows in the Deer Flat Low Line and at the headwaters of the Golden Gate Canal, to improve efficiency of use of the water in the irrigation system and to prevent loss from spills and over deliveries. The proposed project is expected to begin in September 2018 and continue through to April 2019. The Deer Flat Low Line Canal and Golden Gate Canal are USBR federal facilities, operated and maintained by the Boise Project Board of Control.

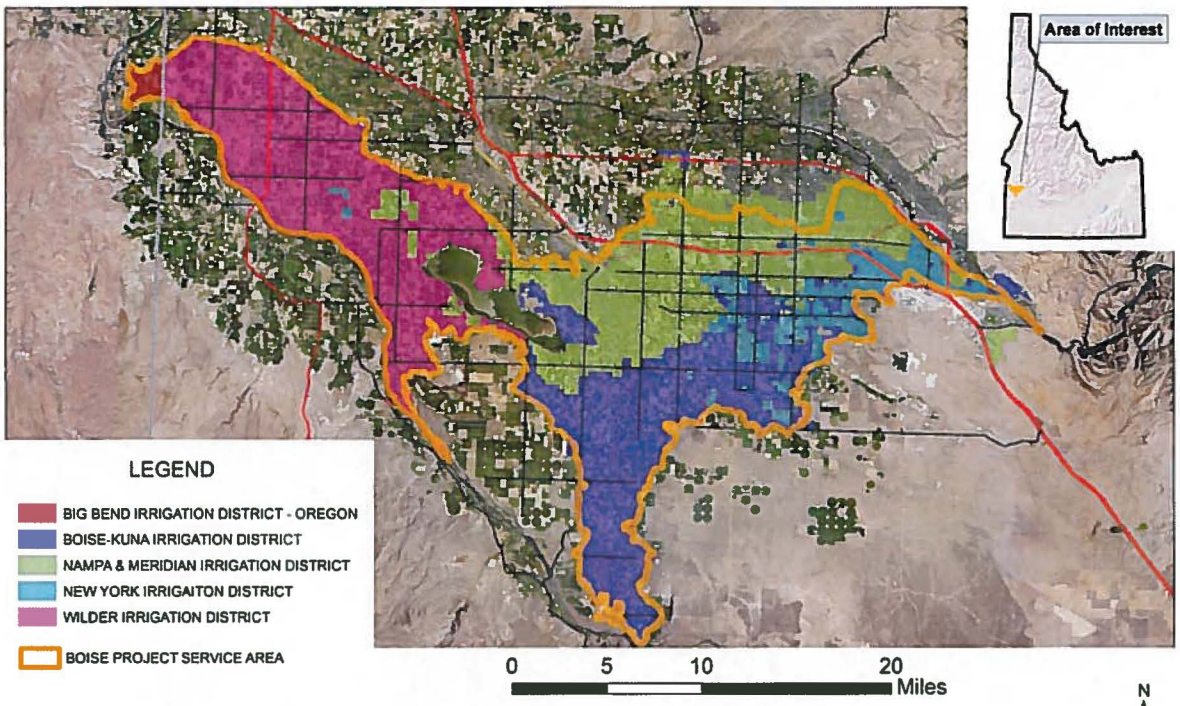
Background Data

Boise Project Board of Control

The Boise Project Board of Control delivers irrigation water on behalf of five (5) irrigation districts established in the early 20th Century to serve irrigators with waters made possible by the development of the Arrowrock Division of the Boise Project by the United States Department of Interior, Bureau of Reclamation (USBR). The five districts consist of:

- Big Bend Irrigation District (Malheur County, OR)
- Boise-Kuna Irrigation District (Ada and Canyon Counties, ID)
- Nampa-Meridian Irrigation District (Ada and Canyon Counties, ID)
- New York Irrigation District (Ada County, ID)
- Wilder Irrigation District (Canyon County, ID)

BPBC delivers irrigation water to approximately 167,000 acres from both Boise River rights and reservoir storage rights in Anderson and Arrowrock Reservoirs held by the USBR in trust for the Districts. The delivery system comprises of over 1,500 miles of canals, laterals and sub-laterals, more than 10,000 individual structures including headgates and check structures, and is operated by a full time staff of approximately 100 dedicated employees. BPBC currently has 11 automated headworks and 3 automated check structures. Improvements on the canals and laterals are done on a yearly basis and including but not limited to piping, lining and recleaning.



Boise Project Board of Control Irrigation Districts

Approximately 30,000 users are served by BPBC. The major crops irrigated by the Boise Project Board of Control consists of alfalfa hay, wheat, sugar beets, hops, corn, onion, mint, lavender, apples, grapes and pasture. There are also many dairy farms and livestock facilities in the area that use the irrigated grains to feed their animals. Along with the agricultural use, residents in the urbanized areas use water for lawn and garden irrigation. Though the main canals and laterals are open channels, there is a diverse mix of ditches, gravity irrigation pipelines, pressurized pipelines and pressurized sprinkler systems throughout the project.

With the exception of 2017, which followed a high precipitation winter, the water supply does not meet the demand, especially following a low snowpack and precipitation year. With a high agricultural acreage, water conservation is an extreme necessity. When storage water is used for irrigation instead of the natural flow of the Boise River, BPBC sets an allotted amount of water per acre. The following table shows the water allotment for the 2012 to 2018 irrigation seasons:

Table 1: Allotment

YEAR	ALLOTMENT (acre feet per acre)	DATE
2012	1.90	August 1
2013	1.00 1.40	April 22 June 5
2014	2.25	June 18
2015	1.65 2.35 2.95	April 16 June 3 June 12
2016	2.60	June 15
2017	2.45 2.60	July 14 July 26
2018	2.65	June 15

The Boise Project Board of Control delivery system begins with the New York Canal, approximately 7 miles southeast of Boise, is over 40 miles long and was designed to deliver a capacity of approximately 2800 cfs of surface irrigation water, with a large portion delivered to Lake Lowell, an offstream reservoir. Lake Lowell has a usable storage capacity of 144,346 acre feet of water and is located 4 miles southwest of Nampa, Idaho. The Deer Flat Low Line Canal (DFLL) headworks is located at the northwest corner of Lake Lowell and is approximately 37 miles long. DFLL carries up to 1200 cfs of water to irrigate 47,000 acres, including the laterals and canals that divert off of the DFLL. Approximately 3,000 water users are serviced by the DFLL alone. Automation was installed on the Weeks Check Structure the Spring of 2017, which is 1.43 miles from the headworks of the Deer Flat Low Line Canal. The Platt and Miller Check Structures were automated in Spring of 2018 and are approximately 2.46 and 3.46 miles respectfully from the headworks. The Deer Flat Low Line #3 is approximately 7.45 miles downstream from the headworks, and is a reregulation point as the Golden Gate Canal begins at this point.

BPBC was formed to operate and maintain federally financed and owned facilities built under the Reclamation Act of August 30, 1890 and would not exist apart from the efforts of the Federal Government. Its entire history is closely intertwined with the USBR. It was created by the forerunner of the USBR to operate and maintain the federal facilities constructed as part of the Boise Project on behalf of the five irrigation districts established as part of the Boise Project. Irrigation of the lands that BPBC serves would not be possible without the reservoir storage made possible by the Arrowrock and Anderson Ranch reclamation projects.

BPBC has been the recipient of several grants from the Bureau of Reclamation including most recently a grant in 2016 to replace 300 lineal feet of lining in the New York Canal near Roosevelt Street, and in 2017 for Automation of the Platt & Miller Checks on the Deer Flat Low Line Canal.

Project Location

Deer Flat Low Line #3 is located in Canyon County, Idaho approximately 2 miles south of Greenleaf, Idaho and 6.5 miles west of Caldwell, Idaho. The project latitude is 43°38"31"N and longitude is -116°48'55"W.

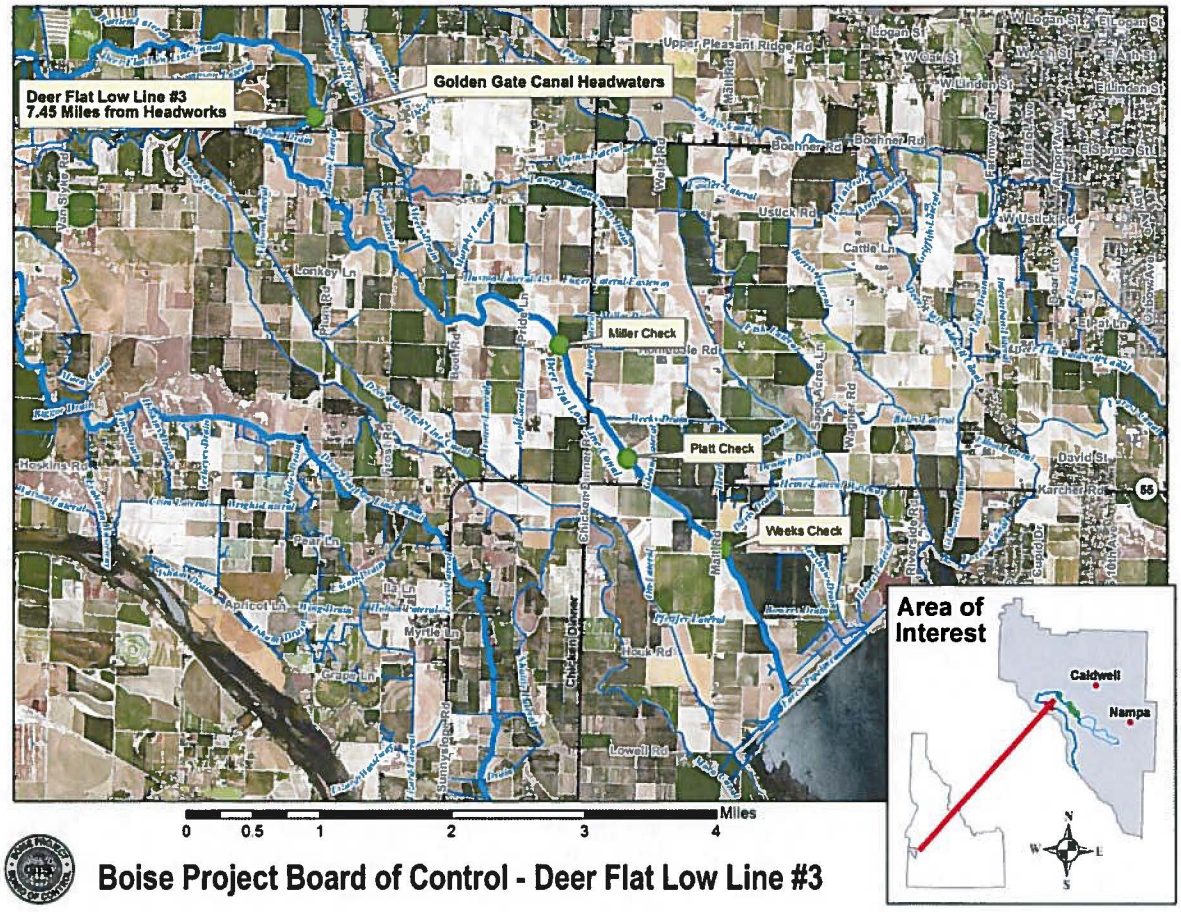
Technical Project Description

As a reregulation point, it is necessary to maintain a constant water level and head pressure to allow water to flow into the headwaters of the Golden Gate Canal and to continue on in the Deer Flat Low Line Canal. The proposed project consists of installing automation on the Deer Flat Low Line #3 (DFLL#3). The DFLL#3 structure currently consists of five 6 foot manually operated roll gates. The project proposes to install two automated control gates in front of two of the existing manual roll gates, fabricate and install a walkway with a handrail for safety. The new gates will be connected to the existing Supervisory Control and Data Acquisition system which provides around the clock remote sensing of the reregulation point. The existing roll gates will remain in place to be used in unison and as a contingency if the automated gates fail to function and for historical preservation.

The goal of the project is to allow BPBC to maintain a constant water level between the Deer Flat Low Line and Golden Gate Canal, assisting in accurate deliveries both above and below the

structures therefore eliminating over deliveries, the need for carrying water, losses from spills with an improvement to response time if the water levels change unexpectedly.

Project planning, procurement and coordination efforts are scheduled to begin in September, 2018. The current antenna will be relocated, two concrete pads poured and an 800 foot trench for electrical wiring will be dug in October 2018 after the end of irrigation season. Shop fabrication of mounting frames, supports, walkways and gates will take place in November and December. Field installation of the motors, stems, mounting frames, supports and walkway will begin in March 2019. Programming, calibration of the communications, and final testing will be completed after the start of the 2019 irrigation season, approximately April 1, 2019.



E.1.1. Evaluation Criterion A—Project Benefits

Describe the expected benefits and outcomes of implementing the proposed project. With the installation of automation of the DFLL#3, it allows BPBC management to make necessary changes to the water elevations due to increase/decrease in water deliveries, obstructions or problems, increase head pressure which requires less water to provide deliveries above the DFLL #3 and at the headwaters of the Golden Gate Canal which requires less water to carry water downstream for deliveries. Therefore conserving water and making the conserved water available to waterusers for irrigation. Safety is also a benefit with the installation of a new walkway and handrail.

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

There are many benefits to the water supply delivery system: supplies irrigation water to farmers for crop production and to the urbanized areas for lawns and gardens; provides water recreation at Lake Lowell.

- **Extent to which the proposed project improves overall water supply reliability**
  With the installation of automation, this project allows BPBC management to monitor water elevations, prevent over deliveries, and be notified immediately when conditions change, i.e. high flow condition, low flow condition, obstruction or problem, loss of line power, which will allow water conserved to be used as intended, irrigation.

- **The expected geographic scope benefits from the proposed project (e.g., local, sub-basin, basin)**
  The expected geographic scope benefits from the proposed project will affect the entire Boise Project Board of Control service area. As water levels in the Deer Flat Low Line Canal are maintained at appropriate levels for deliveries downstream and for the headwaters of the Golden Gate Canal, the proposed project will assist in preventing over deliveries, allowing for an increase in water conservation and water to remain in the reservoirs until needed.

- **Extent to which the proposed project will increase collaboration and information sharing among water managers in the region**
  This project does increase collaboration and information sharing among the five irrigation districts the BPBC delivers water for on their behalf. Each district has at least one member on the Board of Directors. The support by all districts is evident in the Official Resolution which was approved by the Board of Directors.

- **Any anticipated positive impacts/benefits to local sectors and economies (e.g., agriculture, environment, recreation, tourism)**
  Water conservation has a positive impact and benefits everyone within the Boise Project service area. The local farmers will receive the benefit of having more water available for irrigation. With boating and fishing on Lake Lowell, the recreationists will receive the benefits of conserved water remaining in the Lake which also benefits the local economy and tourism.

E.1.2 Evaluation Criterion B – Planning Efforts Supporting the Project

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

- **Does the proposed project implement a goal or address a need or problem identified in the existing planning effort?**
  The BPBC adopted a Water Conservation Plan in 2010. This plan addresses installation of appropriate water measurement devices to assure water is not being lost to excess deliveries. This project implements a portion of the Project's Water Conservation Plan, Objective #4.

- **Explain how the proposed project has been determined as a priority in the existing planning effort as opposed to other potential projects/measures**
  The Deer Flat Low Line is the largest canal off of Lake Lowell with a capacity of 1,200 cfs and delivers irrigation water for over 47,000 irrigated acres, including laterals and canals which are diverted off of the DFLL. In the Spring of 2017, BPBC began automation of

check structures on the Deer Flat Low Line. To date, three check structures have been automated: Weeks, Platt and Miller, in an effort to conserve water and protect the lands and property in and around the Deer Flat Low Line.

E.1.3. 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.**

  The preparation for the project will begin in September 2018 before the end of the irrigation, with planning, environmental study, and procurement of materials by October 2018. At the end of irrigation season in October, BPBC employees will trench the easement roadway, 800 feet upstream to an existing power source for the actuators, and to keep the backup batteries charged. Two new concrete pads on either side of the structure will be poured. A new antenna will be installed on an existing pole near the structure. Fabrication of the mounting frames, gates and walkway will be done off-site during the winter in November-December. Once fabrication is complete, the actuators, walkway, gates and electrical mechanics, will be installed, along with a new stilling well in early Spring 2019. Integration into the existing SCADA program will begin by March 2019 with final testing to be completed after the start of the 2019 irrigation season.

Table 2: Estimated Project Schedule

Planning and coordination	September 2018
Environmental Study & Clearance	September 2018
Procurement	October 2018
End of Irrigation Season	Mid-October 2018
Relocate antenna	Mid-October 2018
Trench to install power cable/wiring	Mid-October 2018 – November 2019
Concrete pads	October 2018
Fabrication of mounting frames, supports, walkways and gates	November – December 2018
Field installation of gates, walkway and electrical work	February 2019 – March 2019
Install stilling well & transducer	March 2019
SCADA integration	March 2019
Final Testing & Site Operational	April 2019
Beginning of Irrigation Season	April 2019

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

With the project site entirely within BPBC and USBR facilities and easements, no permits are required.

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

BPBC will design and fabricate the new gates along with installing a walkway with a handrail for safety.

• **Describe any new policies or administrative actions required to implement the project.**
There are no new policies or administrative actions required to implement the project.

• **Describe how the environmental compliance estimate was developed. Have the compliance costs been discussed with the local Reclamation office?**
The environmental compliance estimate was based on actual costs for the Automation of Platt and Miller Check Structures grant received from the Bureau of Reclamation in the fall of 2017. At this time, we have not discussed this cost with the local Reclamation office.

E.1.4. Evaluation Criterion D—Nexus to Reclamation

• **How is the proposed project connected to a Reclamation project or activity?**
The irrigation districts served by the BPBC are parties to repayment agreements pursuant to the Water Supply Act of 1958 and thus are obligated under Section 210 to the Reclamation Reform Act of 1982 to plan and implement water conservation measures.

• **Does the applicant receive Reclamation project water?**
Yes, BPBC receives the majority of its water from the reservoir storages in Arrowrock and Anderson Ranch reservoirs and Boise River water rights.

• **Is the project on Reclamation project lands or involving Reclamation facilities?**
Yes, the DFLL is a Reclamation facility.

• **Is the project in the same basin as a Reclamation project or activity?**
Yes, the DFLL is located in the Boise River Basin, a Reclamation project.

• **Will the proposed work contribute water to a basin where a Reclamation project is located?**
Yes, the conserved water will remain in the Boise River Basin.

• **Will the project help Reclamation meet trust responsibilities to any tribe(s)?**
No, there are no Indian tribes in this area.

E.1.5 Evaluation Criterion E – Department of Interior Priorities

1. Creating a conservation stewardship legacy second only to Teddy Roosevelt
    a. **Utilize science to identify best practices to manage land and water resources and adapt to changes in the environment.**

The proposed project will utilize science by installing automation to the existing SCADA program to operate the gates. This state of the art automation will allow management to control the water levels at the structure, conserve water from over deliveries, and conserve in vehicle fuel and manpower by eliminating the need to travel to the structure to manually make adjustments. The SCADA system will immediately notify management of any sudden or unexpected changes in the water and/or gate levels, allowing for a quick response time to prevent flooding and property damage.

Funding Plan

Describe any donations or in-kind costs incurred before the anticipated Project start date that you seek to include as project costs.
The BPBC is not relying on any other funding sources for this project. Authorization for this funding is made by the Board of Directors of BPBC, which endorses and supports this grant proposal as evidenced by the Official Resolution included in this application. As taxing authorities, the irrigation districts are legally enabled to assess the users in their districts for the costs of operations, maintenance and improvements. Idaho State Code grants, in considerable

details, the ways in which districts may make such assessments and the ramifications for taxpayers who become delinquent. There are no in-kind contributions. The BPBC is not expecting any donations or in-kind costs incurred before the anticipated project start date.

Describe any funding requested or received from other Federal partners.
No assistance from any other funding partners, Federal or non-Federal is being sought.

Describe any pending funding requests that have not yet been approved, and explain how the project will be affected if such funding is denied.
No other funding requests have or will be requested for this project.

Table 3: Funding Sources

Funding Sources	Funding amount
Non-Federal Entities	
BPBC	$37,602
Non-Federal subtotal:	
Requested Reclamation funding:	$37,602
Total project funding	$75,204

Budget Proposal

The proposed budget for this project is presented in Attachment A. The budget established for this project is based on quotes obtained in the Spring of 2018. Quotes are valid for 3 months.

Budget Narrative

Salaries & Wages

The following key personnel from BPBC will be charging time on this project:

- Rick Martin, Hydromaster – will oversee, procure materials, program and test the automation and manage the project
- Jeremy Strecker, Foreman – will assist the Hydromaster and supervise the laborers and equipment operators.
- BPBC full time laborers (2) will provide the bulk of the labor for this project. Extra labor will be necessary to assist with the pouring of the concrete pads and trench work. A truck driver and special operator will provide the labor to transport and operate the heavy equipment to lift and move the i-beam support, gates and motors onto the structure and relocate the antenna. As the hourly wages for the extra labor differ, an average is taken.
- Reporting requirements: 20 hours
- A 2% pay increase is effective January 1, 2019.
- As required by the FOA, this certifies the labor rates include in the budget proposal represent the actual labor rates as of June 2018.

Fringe Benefits

Fringe benefits include payroll taxes, health insurance and retirement.
Payroll taxes – Social Security/Medicare: 7.65%
Retirement: 11.32%

Health Insurance: $674.47 a month

Equipment
The following equipment owned and operated by BPBC, will be required for this project:
2013 International 5yd Dump Truck
2000 Platform Trailer
2001 Caterpillar 420E Backhoe
2015 Caterpillar Excavator with Long Boom attachment
2001 Mack Semi Truck
2001 Caterpillar Mini-Wheeled Excavator
Trailmax trailer

Materials and Supplies
Procurement of materials will begin in September 2018. Prices used in this proposal are based on quotes received in late Spring 2018 and are valid for three months. An itemized list is provided in the proposed budget in Attachment A.

Contractual
The following equipment will be rented and the amount of time of rental:
Boom lift – 1 day
Trencher – 3 days
Quotes were received in late Spring 2018, and are valid for three months.

Environmental and Regulatory Compliance Costs
As the proposed project is entirely in the existing canal and its easements, and with minor ground disturbance, environmental costs are expected to be very minimal. Based upon prior grants received from the WaterSMART Grants, $6500 will be budgeted to cover Environmental and Regulatory Compliance Costs.

Other Expenses
None

Indirect Costs
None

Environmental and Cultural Resources Compliance

Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.
Modification of the reregulation point will have minimal earth disturbing construction and have little effect to the surrounding environment. All construction activities, including welding, will be located within the canal and/or easements. A minor trench within in the easement roadway will be required for electrical wiring. The increase in precipitation levels will help reduce the potential of dust. Should dust become an issue, BPBC will apply water applications to ensure dust abatement.

• **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?**
There are no known endangered or threatened species in the project site.

• **Are there wetlands or other surface waters inside the project boundaries that potentially fall under Clean Water Act (CWA) jurisdiction as "Waters of the United States?" If so, please describe and estimate any impacts the proposed project may have.**
Wetlands are not present within the vicinity of the proposed sites.

• **When was the water delivery system constructed?**
The water delivery system was constructed in 1908.

• **Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.**
Some minor modifications will occur to the structure, with the installation of new gates and a walkway. The current structure will remain intact.

• **Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places?**
There are no buildings, structures or features listed or eligible for listing on the National Register of Historic Places in the project site.

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

• **Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?**
No, the project will not have any effect on any population.

• **Will the proposed project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?**
The project sites are not within tribal lands.

• **Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?**
The proposed project sites will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.

Official Resolution

The Board of Directors of the Boise Project Board of Control met on July 5, 2018 at which the Official Resolution was approved and signed by the Chairman of the Board. See Attachment B.

Unique Entity Identifier and System for Award Management

The BPBC is registered with System for Award Management (SAM). The Unique Entity Identifier is 085321768. Registration in SAM will remain active.

Attachment A

BUDGET PROPOSAL - DEER FLAT LOW LINE #3 AUTOMATION - Boise Project Board of Control

Budget Item Description	Computation $/Unit	Computation Unit	Quantity	Total Cost
SALARIES AND WAGES				
Relocate Antenna				
Program Manager - Rick Martin	$ 28.17	hr	1	$ 28.17
Foreman - Jeremy Strecker	$ 23.28	hr	1	$ 23.28
Laborer (2 employees)	$ 19.18	hr	2	$ 38.36
Special Operator/Dragline Operator	$ 18.09	hr	8	$ 144.72
Trench & Install Cable/Wiring				
Program Manager - Rick Martin	$ 28.17	hr	12	$ 338.04
Foreman - Jeremy Strecker	$ 23.28	hr	16	$ 372.48
Laborer (2 employees)	$ 19.18	hr	10	$ 191.80
Special Laborer (2 employees)	$ 14.65	hr	48	$ 703.20
Concrete Pads				
Special Operator/Dragline Operator	$ 18.09	hr	2	$ 36.18
Special Laborer (2 employees)	$ 14.65	hr	16	$ 234.40
Fabricate Frames, Supports, Walkways, Gates				
Laborer (2 employees)	$ 19.18	hr	78	$ 1,496.04
Field Installation Gates, Supports, Walkway and Electrical Work				
Program Manager - Rick Martin	$ 28.73	hr	5.5	$ 158.02
Foreman - Jeremy Strecker	$ 23.75	hr	14.5	$ 344.38
Laborer (2 employees)	$ 19.56	hr	203	$ 3,970.68
Special Operator/Dragline Operator	$ 18.45	hr	6	$ 110.70
Special Laborers (2 employees	$ 14.94	hr	80	$ 1,195.20
Install Stilling Well & Transducer				
Laborer (2 employees)	$ 19.58	hr	4	$ 78.32
SCADA Integration & Testing				
Program Manager - Rick Martin	$ 28.73	hr	6.5	$ 186.75
Foreman - Jeremy Strecker	$ 23.75	hr	2.5	$ 59.38
Reporting Requirements	$ 19.36	hr	20	$ 387.20
Subtotal - Salaries & Wages			536	$ 10,097.28
FRINGE BENEFITS				
2018				
Program Manager - Rick Martin	$ 9.56	hr	13	$ 124.28
Foreman - Jeremy Strecker	$ 8.63	hr	17	$ 146.71
Laborer (2 employees)	$ 7.85	hr	90	$ 706.50
Special Operator/Dragline Operator	$ 7.65	hr	10	$ 76.50
Special Laborer (2 employees)	$ 6.99	hr	64	$ 447.36
2019				
Program Manager - Rick Martin	$ 9.67	hr	12	$ 116.04
Foreman - Jeremy Strecker	$ 9.19	hr	17	$ 156.23
Laborer (2 employees)	$ 7.93	hr	207	$ 1,641.51
Special Operator/Dragline Operator	$ 7.72	hr	6	$ 46.32
Special Laborers (2 employees)	$ 7.05	hr	80	$ 564.00
Reporting Requirements	$ 7.89	hr	20	$ 157.80
Subtotal - Fringe Benefits			536	4,183.25

BUDGET PROPOSAL - DEER FLAT LOW LINE #3 AUTOMATION - Boise Project Board of Control				
Budget Item Description	Computation $/Unit	Unit	Quantity	Total Cost
EQUIPMENT				
2013 International 5 YD Dump Truck	$ 33.52	hr	4	134.08
2000 Platform Trailer - Trailmax TD-40-FBR	$ 5.28	hr	4	21.12
2001 Cat Backhoe 420E	$ 31.31	hr	2	62.62
2015 Cat Excavator	$ 58.62	hr	6	351.72
2000 Mack Semi Lowboy	$ 62.74	hr	2	125.48
2011 Cat Mini Excavator	$ 14.17	hr	8	113.36
Trailmax Trailer	$ 5.28	hr	2	10.56
2008 Ford F350	$ 21.13	hr	4	84.52
Subtotal-Equipment				$ 903.46
MATERIALS				
Data Logger CR1000	$ 1,530.00	ea	1	$ 1,530.00
Pressure Transducer	$ 848.00	ea	2	$ 1,696.00
A.C Power Supply	$ 87.00	ea	1	$ 87.00
Voltage Regulator	$ 304.00	ea	1	$ 304.00
Cell Modem	$ 615.00	ea	1	$ 615.00
Antenna	$ 72.00	ea	1	$ 72.00
Lightning Arrestor	$ 38.12	ea	1	$ 38.12
Solid State Relays	$ 41.30	ea	4	$ 165.20
Display Keypad	$ 530.00	ea	1	$ 530.00
Control Wire	$ 88.50	rolls	4	$ 354.00
Modem Cable	$ 4.20	ea	1	$ 4.20
Wiring/Cable	$ 15.54	ea	1	$ 15.54
Conduit - 100 feet of 1"	$ 111.00	ea	1	$ 111.00
Power Wires	$ 176.50	rolls	2	$ 353.00
Gate Motors & Gear Boxes	$ 14,065.00	ea	2	$ 28,130.00
Stems	$ 2,313.00	ea	2	$ 4,626.00
Stem Bushings	$ 5.00	ea	2	$ 10.00
Gate Steel/Mounts	$ 1,741.33	ea	2	$ 3,482.66
Walkway/Handrail	$ 4,409.00	ea	1	$ 4,409.00
Battery Breakers	$ 52.88	ea	2	$ 105.76
Batteries	$ 111.00	ea	8	$ 888.00
Battery Cables	$ 22.00	ea	16	$ 352.00
Paint	$ 32.00	gallon	2	$ 64.00
Concrete	$ 125.00	yard	5.3	$ 662.50
Rebar	$ 6.10	stick	19	$ 115.90
Conduit/wire A.C.	$ 3.50	foot	800	$ 2,800.00
Miscelleneous materials	$ 300.00		1	$ 300.00
Subtotal-Materials				$ 51,820.88
CONTRACTUAL /CONSTRUCTION				
Boom Lift rental	$ 295.00	day	1	$ 295.00
Trencher rental	$ 468.00	day	3	$ 1,404.00
Subtotal-Contractual/Construction				$ 1,699.00
ENVIRONMENTAL AND REGULATORY COSTS	$ 6,500.00			$ 6,500.00
Subtotal-Environmental				$ 6,500.00
OTHER EXPENSES				
N/A				$ -
Subtotal-Other Expenses				$ -
Indirect Costs				$0.00
Total Project Costs				$ 75,203.87

BOISE PROJECT BOARD OF CONTROL

(FORMERLY BOISE U.S. RECLAMATION PROJECT)

2465 OVERLAND ROAD
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OFFICIAL RESOLUTION FOR WATERSMART GRANTS: SMALL-SCALE WATER EFFICIENCY PROJECTS FOR FY2018

WHEREAS, The U. S. Bureau of Reclamation is seeking proposals from irrigation districts who want to leverage their money and resources in partnership with Reclamation to conserve and use water more efficiently through the WaterSMART Grants: Small-Scale Water Efficiency Projects for FY 2018 Program, whereby Reclamation will provide funding on a 50/50 cost share basis for projects focused on water conservation;

WHEREAS, the Boise Project Board of Control desires to apply for funding through Reclamation's WaterSMART Grant Program;

NOW THEREFORE BE IT RESOLVED that the Board of Directors of the Boise Project Board of Control agree and authorize the following:

1. The Board supports this proposal for adding automation to the existing SCADA system on the Deer Flat Low Line # 3.
2. The Boise Project Board of Control is capable of providing the amount of funding and/or in-kind contributions as specified in the funding plan; and
3. If selected for the WaterSMART Grant, the Boise Project Board of Control will work with Reclamation to meet established deadlines for entering into a grant.
4. Tim Page, Project Manager, has the legal authority to sign and enter into the agreement.

Passed and adopted by the Board of Directors of the Boise Project Board of Control during its regular meeting on the 5th day of July, 2018.

Richard Durrant
Chairman of the Board