

Boise Project Board of Control

# New York Canal Lining:

## Phase 10 Funding Group III



*Application for:*

WaterSMART: Water and Energy Efficiency Grants for FY2023

Funding Opportunity No. R23AS00008

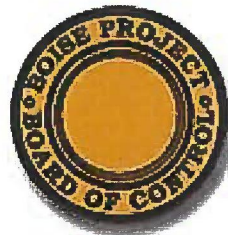
July 28, 2022

*Submitted by:*

**Boise Project Board of Control**  
**2465 Overland Road**  
**Boise, Idaho 83705-3155**

Robert Carter, Project Manager  
[bcarter@boiseproject.org](mailto:bcarter@boiseproject.org)

Phone: 208-344-1141  
Fax: 208-344-1437



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July 28, 2022

Boise Project Board of Control

Boise, Idaho

Ada County

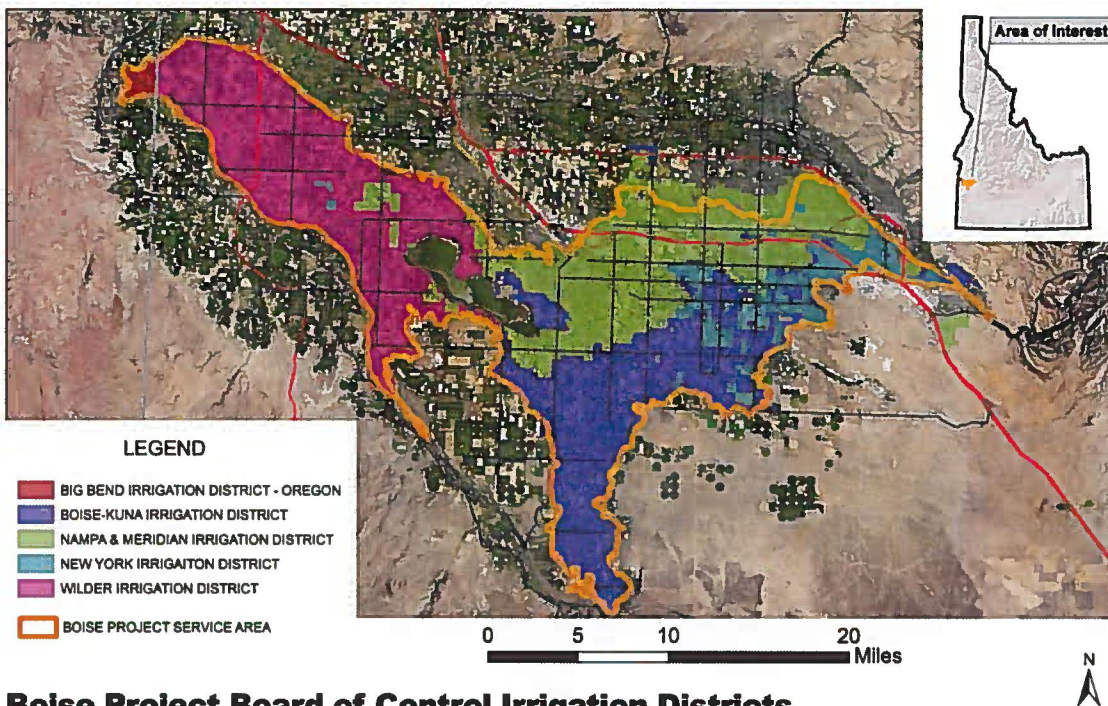
New York Canal Lining – Phase 10 (Funding Group III)

### **Executive Summary**

The Boise Project Board of Control (Category A applicant), located in southwestern Idaho and a portion of eastern Oregon, will replace 5,230 linear feet (1 mile) of canal lining in the New York Canal (NYC) to increase water conservation and water-use efficiency and reliability by reducing seepage losses, meeting the goal of the Funding Opportunity Announcement. Relining the canal is a top priority for Boise Project Board of Control (BPBC) and is expected to result in annual water savings of 4,047 acre-feet per year within the project site, which will remain in the canal and/or in the Arrowrock Division System. This project will result in better management of approximately 600,000 acre-feet of water which flows through the New York Canal annually. The proposed project is to be completed over three years with an estimated construction start date of October 2023 and a completion date of February 2026. The New York Canal is a United States Bureau of Reclamation federal facility operated and maintained by the Boise Project Board of Control.



## Background Data



### Boise Project Board of Control Irrigation Districts

#### *Boise Project Board of Control*

The New York Canal (NYC) and the irrigation system it feeds is operated by the Boise Project Board of Control, on behalf of five (5) irrigation districts established in the early 20<sup>th</sup> 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:

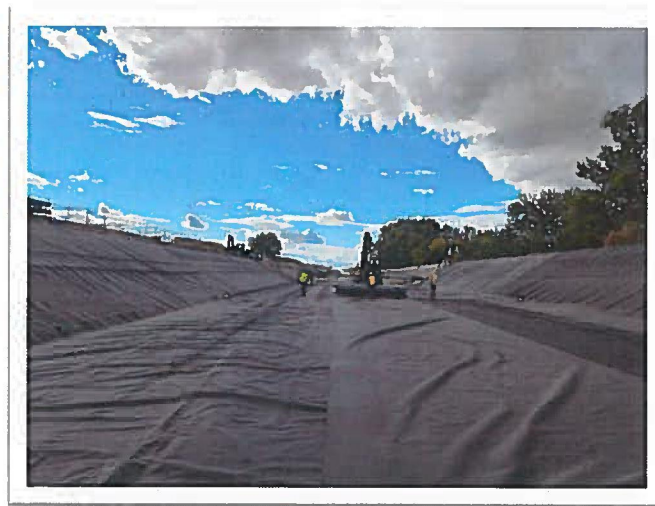
- Big Bend Irrigation District (Malheur County, OR)
- Boise-Kuna Irrigation District (Ada and Canyon Counties, ID)
- Nampa-Meridian Irrigation District (Ada and Canyon Counties, ID)
- New York Irrigation District (Ada County, ID)
- Wilder Irrigation District (Canyon County, ID)

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 New York Canal is the main delivery canal. The delivery system comprises of over 1,400 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. 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's primary water supply is from both natural flow (Boise River) and storage (Arrowrock and Anderson Ranch Reservoirs) surface water. At the beginning of the irrigation season, water is diverted at the Boise River Diversion Dam into the New York Canal. The New York Canal carries water 40 miles through highly populated areas of Boise, Meridian and Kuna, south of Nampa and into Lake Lowell, an off-storage reservoir. Lake Lowell supplies irrigation water for western Idaho and a portion of eastern Oregon. The NYC diverts on average 2,450 cfs a day during the irrigation season with daily changes to the amount of water diverted in the canal based on requested water deliveries from its patrons.

As the New York Canal was designated as an Urban Canal of Concern by the Bureau of Reclamation, the BPBC has been proactively working on upgrading the lining, and has used Huesker's Canal<sup>3</sup> 12-30-12 in eight other projects in the New York Canal:

- Station 142+00 to Station 146+00, winter 2014, 400 linear feet (Phase 1)
- Station 393+00 to Station 396+00, winter 2015, 300 linear feet (Phase 2)
- Station 396+00 to Station 426+00, winter 2016, 400 linear feet (Phase 3)
- Station 146+00 to Station 150+00, winter 2017, 400 linear feet (Phase 4)
- Station 150+00 to Station 154+00, winter 2018, 400 linear feet (Phase 5)
- Station 154+00 to Station 160+00, winter 2019, 600 linear feet (Phase 6)
- Station 160+00 to Station 166+00, winter 2020, 600 linear feet (Phase 7)
- Station 166+00 to Station 169+00, winter 2021, 300 linear feet (Phase 8)
- Station 169+00 to Station 175+00, to be completed in winter 2022, 600 linear feet (Phase 9)



Approximately 30,000 users are served by BPBC. The major crops irrigated by the New York Canal 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

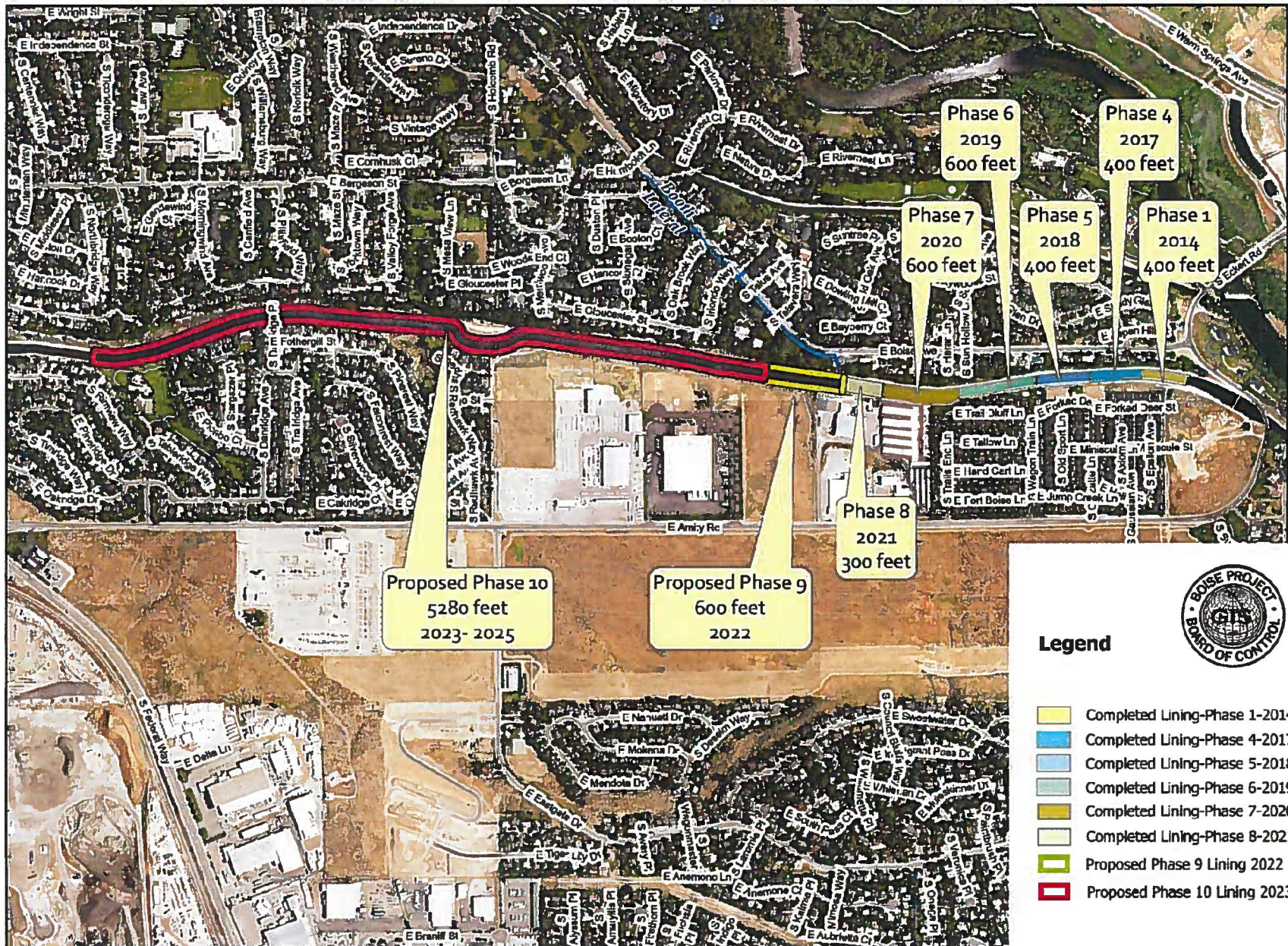
irrigated grains to feed their animals. Along with the agricultural use, residents in the urbanized areas use water for lawn and garden irrigation. Though the majority of the main canals and laterals are open channels, there is a diverse mix of ditches, gravity irrigation pipelines, pressurized pipelines and pressurized sprinkler systems throughout the Project. As an Urban Canal of Concern, the New York Canal flows past thousands of homes and businesses and in many instances lays 30 or more feet above them.

## **Project Location**

The New York Canal Lining – Phase 10 project is located in southeast Boise, Ada County. The project latitude is 43°33'53" N, and longitude -116°09'18" W.



# Boise Project Board of Control - Proposed Canal Lining - Phase 10 (2023-2025)





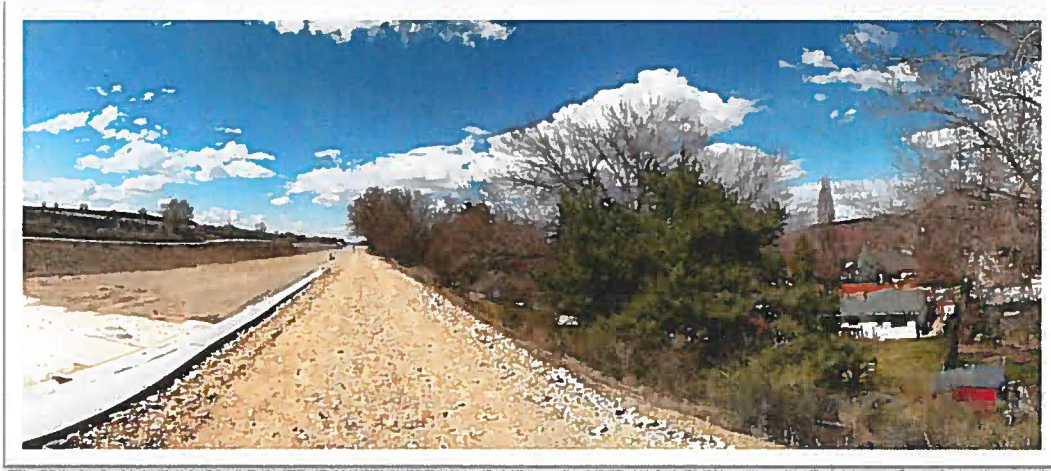


Photo of New York Canal on the north bank at the proposed site

## Technical Project Description

The project area was selected based on water conservation and public safety due to the significant change in elevation from the canal and its embankment to the home properties immediately adjacent to the canal.

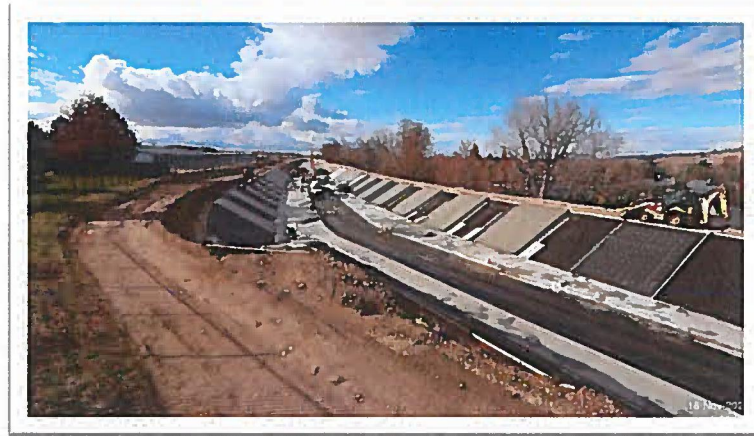
The project proposes to replace approximately 5,230 linear feet of the existing concrete and asphalt lining with a prefabricated multi-layer geocomposite membrane and concrete cap during the fall/winter of 2023. Huesker's Canal<sup>3</sup> 12-30-12 is a geocomposite that consists of polyester nonwovens bonded to a polyethylene geomembrane. The liner is inert to biological degradation and naturally encountered chemicals, alkalis and acids. Huesker's Canal<sup>3</sup> 12-30-12 has superior puncture resistance and increased interface friction properties that allows the liner to be deployed directly in contact with existing soils and steepened side slopes. This material has an expected lifespan of 50 years.

### Phase 10

From Station 175+00 to Station 228+00 the cross-sectional width of the New York Canal is approximately 60 feet wide. The existing flooring is concrete that transitions into unlined, earthen flooring. The north and south walls of the canal consist of a mix of concrete and/or asphalt. The asphalt and concrete on the flooring will be removed along with two feet of dirt. One foot of fill material will be compacted into the floor and sides. The geocomposite membrane canal liner will be installed and laterally seamed every 25 feet, and adhered together with a specialized adhesive

made especially by the makers of the lining. Six inches of concrete with ranch panels on the sides and #4 rebar on the flooring is then layered on top of the membrane.

Within the proposed project, there are ~ 9 delivery points, each structure may be modified, replaced and/or left in its current condition to allow for the installation of the liner



### E.1.1 Evaluation Criterion A: Quantifiable Water Savings

- 1) **Describe the amount of estimated water savings.** For projects that conserve water, please state the estimated amount of water expected to be conserved (in acre-feet per year) as a direct result of this project.

The amount of water conserved is estimated to be 4,047-acre feet per year. Water is seeping through the canal lining (concrete, asphalt and/or earthen) and into the ground.

- 2) **Describe current losses:** Please explain where the water that will be conserved is currently going and how it is being used.
  - a. Explain where current losses are going (e.g., back to the stream, spilled at the end of the ditch, seeping into the ground)?

The current losses are seeping into the ground through the sides and bottom of the canal.

- b. If known, please explain how current losses are being used. For example, are current losses returning to the system for use by others? Are current losses entering an impaired groundwater table becoming unsuitable for future use?

The current losses are not being used and are seeping into the ground.

- c. Are there any known benefits associated with where the current losses are going? For example, is seepage water providing additional habitat for fish or animal species?

There are no known benefits for the current losses, as it is seeping into the ground.

- 3) **Describe the support/documentation of estimated water savings:** Please provide sufficient detail supporting how the estimate was determined, including all supporting calculations.

A study was performed by Charles Berenbrock with the US Geological Survey in 1997 titled "Streamflow Gains and Losses in the Lower Boise River Basin, Idaho, 1996-1997" (see Attachment A). This study was held during flood control and before the irrigation season began, therefore no deliveries were being made at the time of the study. The study recorded a loss of 2.6 cubic foot per second per mile on March 20, 1997 and another loss of 8.9 ft<sup>3</sup>/s/mi on March 27, 1997. (The discharge recorded for those dates was 429cfs and 828cfs, respectfully.) Based upon this study, approximately 8.9 cfs of water a day is loss to seepage within the proposed project site. With water in the canal for on average 230 days, the water savings is 4,047-acre feet per year.

- 4) **Please address the following questions according to the type of project you propose for funding.**

(1) **Canal Lining/Piping:** Canal lining/piping projects can provide water savings when irrigation delivery systems experience significant losses due to canal seepage. Applicants proposing lining/piping projects should address the following:

(a) How has the estimated average annual water savings that will result from the project been determined? Please provide all relevant calculations, assumptions, and supporting data.

According to the study held in 1997, a loss of 2.6 cfs and 8.9 cfs per mile was recorded. Using the 8.9 ft<sup>3</sup>/s/m loss as a basis, .00168 cfs is lost per mile. Water is in the canal for an average of 230 days, the annual water savings is 4,047 acre-feet per year.

$$\frac{8.9cfs}{5280} * \frac{60sec}{min} * \frac{60min}{hr} * \frac{24hr}{day} * \frac{230}{day} * \frac{1ac}{43560ft^2}$$

\*Note: The measurement of 8.9 ft<sup>3</sup>/s/m loss is being used as the basis of our calculations as the discharge on March 27, 1997 at 828 cfs is a closer representation of the canal conditions during the irrigation season versus the 429 cfs discharge recorded on March 20, 1997.

(b) How have average annual canal seepage losses been determined? Have ponding and/or inflow/outflow tests been conducted to determine seepage rates under varying conditions? If so, please provide detailed descriptions of testing methods and all results. If not, please provide an explanation of the method(s) used to calculate seepage losses. All estimates should be supported with multiple sets of data/measurements from representative sections of canals.



A study was performed by Charles Berenbrock with the US Geological Survey in 1997 entitled *Streamflow Gains and Losses in the Lower Boise River Basin, Idaho, 1996-1997* (see Attachment A). This study was held during flood control and before the irrigation season began, therefore no deliveries were being made at the time of the study. The study recorded a loss of 2.6 cubic foot per second per mile on March 20, 1997 and another loss of 8.9 ft<sup>3</sup>/s/mi on March 27, 1997. (The discharge recorded for those dates was 429cfs and 828cfs, respectfully.) Based upon this study, approximately 8.9 cfs of water a day is loss to seepage within the proposed project site. With water in the canal for on average 230 days, the water savings is 4,047-acre feet per year.

(c) What are the expected post-project seepage/leakage losses and how were these estimates determined (e.g., can data specific to the type of material being used in the project be provided)?

Post-project seepage losses are expected to be minimal. The geocomposite liner is inert to biological degradation and has a superior puncture resistance rating. According to the study performed by the Bureau of Reclamation and their report titled *Canal-Lining Demonstration Project, Year 10 Final Report*<sup>1</sup>, geomembrane with concrete cover has an effectiveness of seepage reduction of 95%.

(d) What are the anticipated annual transit loss reductions in terms of acre-feet per mile for the overall project and for each section of canal included in the project?

The total estimated water savings is 4,047 acre-feet per year per mile, with 460-acre feet in the project area.

(e) How will actual canal loss seepage reductions be verified?

Inflow/Outflow tests will be performed with a SonTek River Surveyor at different times of the irrigation season. This information will be evaluated and documented for comparison.

(f) Include a detailed description of the materials being used.

The materials needed to complete the proposed project include the geocomposite liner, an adhesive to seal the seams, fill material and steel reinforced concrete. Huesker's Canal<sup>3</sup> 12-30-12 is a geocomposite that consists of polyester nonwovens bonded to a polyethylene geomembrane. The liner is inert to biological degradation and naturally encountered chemicals, alkalis and acids. Huesker's Canal<sup>3</sup> 12-30-12 has superior puncture resistance and increased interface friction properties that allow the liner to be deployed directly in contact with existing soils and steepened side slopes. The life expectance of the liner is 50 years. Table 1 below provides the properties on the Canal<sup>3</sup> lining. Six inches of steel re-enforced concrete is poured on top of the geocomposite liner.

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<sup>1</sup> Jay Swihart and Jack Haynes, Bureau of Reclamation *Canal-Lining Demonstration Project, Year 10 Final Report*, November 2002, page ES-1

Table 1: Huesker's Canal<sup>3</sup>

PROPERTY	TEST METHOD	VALUES
Mass per Unit Area	ASTM D-5261	44 oz/yd <sup>2</sup>
Membrane Thickness	ASTM D-5199	30 mils
Grab Tensile Strength (MD)	ASTM D-4632	400 lbs
Grab Elongation (MD)	ASTM D-4632	>50%
Trapezoid Tear Strength (MD)	ASTM D-4533	150 lbs
Puncture Strength, (5/16)	ASTM D-4833	250 lbs
Permeability	ASTM D-4491	Non-measureable

#### E.1.2.2. Subcriterion No. B.2: Increasing Energy Efficiency in Water Management

**Subcriterion No. B.2: Increasing Energy Efficiency in Water Management** Up to 10 points may be awarded for projects that address energy demands and reduce greenhouse gas emissions by retrofitting equipment to increase energy efficiency and/or through water conservation improvements that result in reduced pumping or diversions.

**Describe any energy efficiencies that are expected to result from implementation of the water conservation or water efficiency project (e.g., reduced pumping).**

- If quantifiable energy savings is expected to result from the project, please provide sufficient details and supporting calculations. If quantifying energy savings, please state the estimated amount in kilowatt hours per year.

Boise Project has 5 low – hydro power plants, two which are within the New York Canal (MC6 and Mora Drop) which operate only during the irrigation season, and Arrowrock Power Plant located at the Arrowrock Dam with operations throughout the year depending on level of Arrowrock reservoir. The chart below shows each power plant and number of megawatts generated per year. The conserved water will assist in the generation of this no carbon footprint hydro power, and will still remain available to water users.

Table 2: Power Plants

Name of Power Plant	Megawatts generated
Arrowrock	18
MC 6	2*
Mora Drop	1.7

\*Please note that MC 6 began operations in April 2021

- How will the energy efficiency improvement combat/offset the impacts of climate change, including an expected reduction in greenhouse gas emissions.

Hydropower produces no carbon emissions which contributes to the reducing of the total carbon footprint in producing energy, especially during the hottest time of the year, is non-consumptive and still remains available for water users.

- If the project will result in reduced pumping, please describe the current pumping requirements and the types of pumps (e.g., size) currently being used. How would the proposed project impact the current pumping requirements and energy usage?

Not applicable

- Please indicate whether your energy savings estimate originates from the point of diversion, or whether the estimate is based upon an alternate site of origin.

MC6 power plant is approximately 20 miles and Mora Drop is approximately 25 miles downstream from the point of diversion of the New York Canal.

- Does the calculation include any energy required to treat the water, if applicable?

Not applicable

- Will the project result in reduced vehicle miles driven, in turn reducing greenhouse gas emissions? Please provide supporting details and calculations.

The project will not result in reduced vehicle miles driven.

- Describe any renewable energy components that will result in minimal energy savings/production (e.g. installing small-scale solar as part of a SCADA system)

Not applicable

### **E.1.3 Criterion C – Sustainability Benefits**

#### **Enhancing drought resiliency.**

- Does the project seek to improve ecological resiliency to climate change?

The proposed project will not directly improve ecological resiliency to climate change, however by allowing the water to remain in the reservoir system instead of seeping into the ground while the water is in the canal, it will play a part in keeping the levels of the reservoirs at a higher-level aiding in vegetation, wildlife, stream and river flows and preventing wild fires.

- Will water remain in the system for longer periods of time? If so, provide details on current/future durations and any expected resulting benefits (e.g., maintaining water temperatures or water levels).

Boise Project Board of Control's has two water rights, natural flow on the Boise River and storage water held in Arrowrock Reservoir and Anderson Ranch Reservoir. The natural flow water right is used first and when more irrigation water is being used from the Boise River water system than what is going into the system, the day of allocation is set by the Idaho Department of Water Resources. Once the day of allocation is set, Boise Project managers

assess the amount water available in the reservoirs and the allotment is set, determining the amount of water available to the waterusers for the remainder of the irrigation season. This date is a moving target, as evident in Table 3: Allotment listed below. Storage water from Arrowrock Reservoir is consumed first, as Anderson Ranch is located further upstream. With the water savings, the water stays in the reservoirs as less water is diverted into the New York Canal. The elevation of the reservoirs also plays a key part, as a higher elevation of water allows the Arrowrock Power Plant to produce power.

Due to the drought, very little precipitation was received during the winter of 2021-2022. February 2022 was the second driest February in 145 years according to the National Weather Service.

In an effort to conserve water during the upcoming hot, dry summer months, water deliveries began on April 22, 2022, two weeks later than normal. The Boise River experienced low natural river flow due to the low snow pack; therefore, storage water was tapped on the first day of deliveries on April 22, 2022 and the allotment was set at 1.2 acre-feet of water per acre. Late spring storms brought enough precipitation and snow to allow an increase in the allotted water to 1.5 acre-feet per acre on May 5, 2022. Warmer than normal temperatures occurred in May which provided the much-needed runoff of the high mountain snow to allow an increase in the allotment to 2.0 acre-feet per acre on May 26, 2022. The Boise Basin continued to receive unusually late precipitation allowing for an additional .5 acre feet of water allotted to our patrons, for a total of 2.5 acre feet per acre.

Table 3: Allotment

YEAR	ALLOTMENT (acre-feet per acre)	DATE
2012	1.90	August 1
2013	1.00	April 22
	1.40	June 5
2014	2.25	June 18
2015	1.65	April 16
	2.35	June 3
	2.95	June 12
2016	2.60	June 15
2017	2.45	July 14
	2.60	July 26
2018	2.65	June 15
2019	2.70	July 3
2020	2.75	June 25
2021	1.60	June 10
2022	1.2	April 22
	1.5	May 5
	2.0	May 26
	2.5	June 17

- Will the project benefit species (e.g., federally threatened or endangered, a federally recognized candidate species, a state listed species, or a species of particular recreational, or

economic importance)? Please describe the relationship of the species to the water supply, and whether the species is adversely affected by a Reclamation project or is subject to a recovery plan or conservation plan under the Endangered Species Act (ESA).



The conserved water will remain in the reservoir systems longer which will help keep the reservoir temperatures cooler and water deeper for the fish, especially the Bull Trout. The Bull Trout is listed as a “Threatened” species under the Endangered Species Act and is part of State of Idaho Bull Trout Conservation Plan 1996. The water savings received from the reduction in seepage will directly benefit the bull trout in the Boise River system i.e., Lucky Peak, Arrowrock and Anderson Ranch reservoirs.

- Please describe any other ecosystem benefits as a direct result of the project.

With the water savings staying in reservoirs until diverted into the canal for irrigation and power generation, the water will benefit the wildlife, fish, and vegetation in and around the reservoirs.

- Will the project directly result in more efficient management of the water supply? For example, will the project provide greater flexibility to water managers, resulting in a more efficient use of water supplies?

Yes, this project will directly result in more efficient management of the water supply, with less diversions from the reservoirs. Diversions into the New York Canal and all the canals and laterals which receive its water from the New York Canal are adjusted daily depending on the water orders. Boise Project has automated over 42 headgates and/or checks in an effort to stabilize and more precisely control flows, prevent loss from spills and over deliveries and in an effort to conserve water.

#### **Addressing a specific water and/or energy sustainability concern(s).**

Will the project address a specific sustainability concern? Please address the following:

- Explain and provide detail of the specific issue(s) in the area that is impacting water sustainability, such as shortages due to drought and/or climate change, increased demand, or reduced deliveries.

National Oceanic and Atmospheric Administration report the temperatures during the fall and winter of 2021 were above normal with precipitation below normal. The winter was drier than normal primarily due to the driest Februarys on record, and was the coldest since 1993.

According to the US Drought Monitor, Boise Project's service area (Ada and Canyon Counties) are experiencing a Moderate Drought (D1), which indicates dryland hay and grain crop yields are low; reservoir levels are low and water shortages are occurring. On May 19, 2022, the National Oceanic and Atmospheric Administration forecasted for the drought to persist at least through August 31, 2022.

The *Drought Impact Reporter* posted on August 28, 2021 "Water supplies in the upper basin reservoirs are rapidly being depleted and the valley's irrigation supply will be shut off weeks early (mid-September) this year. Lucky Peak, Arrowrock and Anderson Ranch reservoirs are at 29%, 26% and 40% of capacity."

Idaho's water year runs from October to September and 2021 was the fifth driest water year on record according to David Hoekema, a hydrologist with the Idaho Department of Water Resources as reported in the *Idaho Press-Tribune* on September 3, 2021.

Drought conditions seem to be the "new normal" for the western states including Idaho, as evident from the reports listed above. This drought has been in effect since the early 2000s. Conserved water will be available to agricultural producers more reliably during times of drought which will allow them to plan farming practices in a more economically beneficial way.

- Explain and provide detail of the specific issue(s) in the area that is impacting energy sustainability, such as reliance on fossil fuels, pollution, or interruptions in service.

With the ability to produce 23.3 megawatts during the irrigation season with 2 low-hydro power plants, and Arrowrock Power Plant during the year, the water conserved is providing power especially during the time of high-power demand and preventing interruptions in service.

- Please describe how the project will directly address the concern(s) stated above. For example, if experiencing shortages due to drought or climate change, how will the project directly address and confront the shortages?

This project will address and confront any shortages by conserving this precious natural resource, to be used as it was intended for irrigation, and to generate power, or stored in the reservoirs for future use especially if this drought continues, as forecasted`.

- Please address where any conserved water as a result of the project will go and how it will be used, including whether the conserved water will be used to offset groundwater pumping, used to reduce diversions, used to address shortages that impact diversions or reduce deliveries, made available for transfer, left in the river system, or used to meet another intended use.

There are two beneficial factors with less seepage; 1) water that is diverted into the canals for irrigation is our first priority. With the water in the canals and not seeped into the ground,



BPBC is able to deliver irrigation water to our users and generate 4 kilowatts of power with the two low-hydro power plants; and 2) less water needs to be diverted into the New York Canal and allows this precious commodity to stay in the reservoirs longer which will benefit the production of power through Arrowrock Power Plant and the water will be stored for future use especially if the drought continues as forecasted by NOAA; and contribute to the survival of the threatened bull trout, along with the other species of fish in the reservoirs.

- Provide a description of the mechanism that will be used, if necessary, to put the conserved water to the intended use.

The mechanism that will be used to put the conserved water to the intended use is by installing a new technological lining material which will prevent the seepage of 4,047 acre-feet per year which allows the water to be available to our water users and generate power.

- Indicate the quantity of conserved water that will be used for the intended purpose(s).

After the installation of the geocomposite lining and covering of 6 inches of steel reinforced concrete, seepage will be minimal allowing for the 4047 acre-feet per year will remain in the reservoir system until it is to be used for its intended purpose, irrigation of crops and landscaping, with the ability to generate power.

**Other project benefits.** Please provide a detailed explanation of the project benefits and their significance. These benefits may include, but are not limited to, the following:

- **Combating the Climate Crisis:** E.O. 14008: *Tackling the Climate Crisis at Home and Abroad*, focuses on increasing resilience to climate change and supporting climate-resilient development.
- Please provide specific details and examples on how the project will address the impacts of climate change and help combat the climate crisis.

The impacts of climate change are many; the temperatures are rising, creating a longer growing season, increases in demand for irrigation water, the temperature of the water in rivers and reservoirs are also increasing which decreases the oxygen and lead to fish die-offs; wildfires are more frequent and rampant, which leads to decrease in snowpacks and spring run-off.

This project will help combat the climate crisis by conserving the water which remains in the system longer and/or is delivered to our water users instead of being lost to seepage, therefore meeting the demand for a longer irrigation season, and continues to generate hydropower during high power demands due to warmer temperatures.

- Does this proposed project strengthen water supply sustainability to increase resilience to climate change?

This project will play a small part in strengthening the water supply sustainability by allowing the conserved water to be used instead of seeping into the ground which keep the diversions down and the water remaining in the reservoirs. As mentioned above, Boise Project only diverts water from Anderson Ranch Dam when the water users' allotment has been consumed.



- Will the proposed project establish and utilize a renewable energy source?

As long as there is water available, the proposed project will impact water availability to generate hydropower.

- Will the project result in lower greenhouse gas emissions?

No, the project will not result in lower greenhouse gas emissions.

- **Disadvantaged or Underserved Communities:** E.O. 14008 and E.O. 13985 support environmental and economic justice by investing in underserved and disadvantaged communities and addressing the climate-related impacts to these communities, including impacts to public health, safety, and economic opportunities. Please describe how the project supports these Executive Orders, including:

- a) Does the proposed project directly serve and/or benefit a disadvantaged or historically underserved community? Benefits can include, but are not limited to, public health and safety through water quality improvements, new water supplies, new renewable energy sources, or economic growth opportunities.

Reliable water is paramount to sustained agricultural production that keeps the communities in this area vibrant and productive. Through the 5 irrigation districts that are served by the New York Canal, close to 50% of irrigated lands in Ada and Canyon counties is affected by this canal and the water savings that will be realized.

According to the 2020 Census, the percent of families with income below the poverty level is estimated to be 10.6% in Canyon County and 7.7% in Ada County, versus 10.1% for the entire State of Idaho. Agriculture is a major employer in Canyon County. Canyon County consists of 387,000 acres and according the 2017 Census of Agriculture census 219,414 acres is crop land; 213,410 acres is irrigated. Ada County is 678,400 acres in size, with 62,860 acres in crop land and 27,263 acres irrigated.

Ada County provides 2% of the state of Idaho's agricultural sales and Canyon provides 8%. Total cash receipts for Idaho in 2020 is estimated at \$8.5 million according to the University of Idaho<sup>2</sup>.

- b) If the proposed project is providing benefits to a disadvantaged community, provide sufficient information to demonstrate that the community meets the disadvantaged community definition in Section 1015 of the Cooperative Watershed Act, which is defined as a community with an annual median household income that is less than 100 percent of the statewide annual median household income for the State, or the applicable state criteria for determining disadvantaged status.

No, the proposed project will not provide benefits to a disadvantaged community.

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<sup>2</sup> Ben Eborn and Garth Taylor, *The Financial Condition of Idaho Agriculture: 2020*, University of Idaho Extension, Moscow, Idaho

- c) If the proposed project is providing benefits to an underserved community, provide sufficient information to demonstrate that the community meets the underserved definition in E.O. 13985, which includes populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life.

N/A

- (3) **Tribal Benefits:** The Department of the Interior is committed to strengthening tribal sovereignty and the fulfillment of Federal Tribal trust responsibilities. The President's memorandum "Tribal Consultation and Strengthening Nation-to-Nation Relationships" asserts the importance of honoring the Federal government's commitments to Tribal Nations. Please address the following, if applicable:

- a) Does the proposed project directly serve and/or benefit a Tribe? Will the project increase water supply sustainability for an Indian Tribe? Will the project provide renewable energy for an Indian Tribe?

No, the project does not directly serve and/or benefit a Tribe.

- b) Does the proposed project directly support tribal resilience to climate change and drought impacts or provide other tribal benefits such as improved public health and safety through water quality improvements, new water supplies, or economic growth opportunities?

No.

- (4) **Other Benefits:** Will the project address water and/or energy sustainability in other ways not described above? For example:

- a) Will the project assist States and water users in complying with interstate compacts?

No.

- b) Will the project benefit multiple sectors and/or users (e.g., agriculture, municipal and industrial, environmental, recreation, or others)?

The proposed project will benefit many users. The main purpose of the irrigation water is for agricultural and residential irrigation. Instead of seeping into the ground, the water will either be delivered to agriculture and resident users, and/or stay in the reservoir until needed which will benefit the threatened bull trout, produce power, and at the same time be available for recreation users.

- c) Will the project benefit a larger initiative to address sustainability?

No.

- d) Will the project help to prevent a water-related crisis or conflict? Is there frequently tension or litigation over water in the basin?

Yes, this project will assist in preventing a water-related crisis or conflict. There is always a concern in the lack of water available for crops. The BPBC has been involved in several litigations regarding water availability.

## **E.1.5. Evaluation Criterion E—Planning and Implementation**

### **E.1.5.1. Subcriterion E.1— Project Planning**

**Does the applicant have a Water Conservation Plan and/or System Optimization Review (SOR) in place? Does the project address an adaptation strategy identified in a completed WaterSMART Basin Study?** Please self-certify, or provide copies of these plans where appropriate to verify that such a plan is in place. Including a specific excerpt or a link to the planning document may also be considered where appropriate.

Provide the following information regarding project planning:

- (1) Identify any district-wide, or system-wide, planning that provides support for the proposed project. This could include a Water Conservation Plan, SOR, Drought Contingency Plan or other planning efforts done to determine the priority of this project in relation to other potential projects.

The BPBC adopted a Water Conservation Plan in 2010. This plan addresses the maintenance on canals and laterals to conserve water and prevent sediment deposits. The project implements Objective #1 of the Project's Water Conservation Plan.

In addition, improving and replacing the lining in the high populated areas along the NYC has been a top priority with BPBC and the Columbia-Pacific Northwest Bureau of Reclamation as evidenced of replacing the lining over 4,000 linear feet of lining during the previous nine phases.

- (2) Describe how the project conforms to and meets the goals of any applicable planning efforts, and identify any aspect of the project that implements a feature of an existing water plan(s).

The project relates to Objective #1 of the Water Conservation Plan on maintenance of the New York Canal by replacing a section of the lining after each irrigation season.

- (3) If applicable, provide a detailed description of how a project is addressing an adaptation strategy specifically identified in a completed WaterSMART Basin Study or Water Management Options Pilot (e.g., a strategy to mitigate the impacts of water shortages resulting from climate change, drought, increased demands, or other causes)

Not applicable.

### **E.1.5.2. Subcriterion E.2 – Readiness to Proceed**

Applications that include a detailed project implementation plan (e.g., estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates) will receive the most points under this criterion.

- Identify and provide a summary description of the major tasks necessary to complete the project.

Upon receiving the notice of award and a signed agreement in place by July 2023, Boise Project will contact the local Bureau of Reclamation office to begin the environmental compliance process. At the same, publishing and bidding will take place in July/August 2023. Construction will take place after the irrigation season October to March for the next three years, with completion of the project in March 2026.

Notice of Award and Signed Agreement in place	July 2023
Publishing and Bidding	July/August 2023
Environmental & Cultural Compliance	September 2023
End of Irrigation Season & dewater canal	October 2023
Construction/Installation 33% completed (year 1)	March 2024
Construction/Installation 66% completed (year 2)	March 2025
Construction/Installation 100% complete (year 3)	March 2026

- 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.

No engineering or design work is anticipated.

- Describe any new policies or administrative actions required to implement the project.

No new policies or administrative actions are required to implement the project, as Boise Project already has well established procedures in place.

#### **E.1.6 Evaluation Criterion F – Collaboration (6 points)**

Up to 6 points may be awarded for projects that promote and encourage collaboration among parties in a way that helps increase the sustainability of the water supply.

- Is there widespread support for the project? Please provide specific details regarding any support and/or partners involved in the project. What is the extent of their involvement in the process?

As previously noted, Boise Project Board of Control delivers water for five irrigation districts and each district has at least one member on the Board of Directors. Each district has provided Letters of Support for the project. (See Attachments B).

- What is the significance of the collaboration/support?

The significance of collaboration is all five of the irrigation districts have come together to show their strong support for water conservation.

- Will this project increase the possibility/likelihood of future water conservation improvements by other water users?

Yes, Boise Project managers meet with other managers from other irrigations districts in the area to discuss the water situation and possible solutions. Boise Project's Manager gave a presentation on the New York Canal and the lining projects. Many other districts were very interested and have stated they are now researching the grant and lining processes.

#### **E.1.7 Evaluation Criterion G – Additional Non-Federal Funding**

$$\frac{\$ 3,665,000 \text{ Non-Federal}}{\$ 7,330,000 \text{ Total Project Costs}} = 50\%$$

#### **E.1.8. Evaluation Criterion H – Nexus to Reclamation.**

- Does the applicant have a water service, repayment, or O&M contract with Reclamation?

Boise Project Board of Control is the operating agent for five irrigations districts. Its purpose is to manage the irrigation facilities and other works transferred by the USBR to these five irrigation districts and to deliver water to their landowners. These facilities are referred to as "transferred works". The irrigation districts are parties to repayment agreements pursuant to the Water Supply Act of 1958.

- If the applicant is not a Reclamation contractor, does the applicant receive Reclamation water through a Reclamation contractor or by any other contractual means?

As noted above, BPBC receives its water through the five districts which holds the water rights for its patrons, and the New York Canal and over 1,500 miles of laterals and canals are federal facilities.

- Will the proposed work benefit a Reclamation project area of activity?

Yes, the proposed project will benefit a Reclamation project area as the New York Canal and the Arrowrock Reservoir system are federal facilities.

- Is the applicant a tribe?

No, Boise Project Board of Control is not a tribe.

#### **D.2.2.4.5 Performance Measures**

To prepare for the upcoming irrigation season, water is diverted beginning in March, into the New York Canal to increase storage in Lake Lowell, an off-storage reservoir that supplies water for western Idaho and eastern Oregon. During this time, Boise Project will perform inflow/outflow tests before any deliveries are being made. Additional tests will be performed in early irrigation season and again in late irrigation season.

#### **D.2.2.3 Project Budget**

Table 4 – Funding Sources

<b>FUNDING SOURCES</b>	<b>AMOUNT</b>
<b>Non-Federal Entities</b>	
1. Boise Project Board of Control	\$3,665,000
<b>Non-Federal Subtotal</b>	\$3,665,000
<b>REQUESTED RECLAMATION FUNDING</b>	<b>\$3,665,000</b>

Table 5 – Total Project Cost Table

<b>Source</b>	<b>Funding amount</b>
Costs to be reimbursed with the requested funding	\$3,665,000
Costs to be paid by the applicant	\$3,665,000
Value of third-party contributions	\$ 0
<b>TOTAL PROJECT COST</b>	<b>\$7,330,000</b>



Table 6 – Budget Proposal

Budget Item Description	Computation		Quantity Type	Total Cost
	\$/Unit	Unit		
Salaries and Wages				\$0.00
Fringe Benefits				\$0.00
Travel				\$0.00
Equipment				\$0.00
Materials and Supplies				\$0.00
Construction				\$7,260,000.00
<b>TOTAL DIRECT COSTS</b>				<b>\$7,260,000.00</b>
Environmental Compliance				\$70,000.00
<b>Total Project Costs - Phase 10</b>				<b><u>\$7,330,000.00</u></b>

### Budget Narrative

The budget was established by a quote received from a local contractor in June 2022 for \$6,600,000 with a 10% increase anticipated during the three-year timeframe.

### Salaries and Wages

No salaries and wages for Boise Project Board of Control's will be included in the cost of the project.

### Fringe Benefits

No fringe benefits are requested for reimbursement.

### Equipment

All equipment will be included in the contracted portion of the proposed project.

### Material and Supplies

All materials and supplies will be provided by the contractor and is included in the cost provided by the contractor.

### Environmental and Regulatory Compliance Costs

Boise Project has contacted the local Bureau of Reclamation and was quoted a cost of \$70,000.00 for the Environmental Compliance Costs.

### Other Expenses

None.

### Indirect Costs

No indirect costs are requested.



## **H.1. Environmental and Cultural Resources Considerations**

- (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.

During the project, no environmental impacts or costs are anticipated. The project will take place after the completion of each irrigation season when temperatures are lower and increased precipitation levels reduce the potential of dust associated with the type of construction activities needed to replace the lining.

- (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?

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

- (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.

The project site is within a high-density residential area with no impact to any wetlands.

- (4) When was the water delivery system constructed?

The original canal was constructed in the 1880’s. Construction to enlarge the canal began in 1906 with completion in 1909.

- (5) Will the 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.

The proposed project will modify the lining which is currently a mix of earth, concrete and/or asphalt on the sides and flooring. There are no headgates and/or delivery points within the project area.

- (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.

There are no buildings, structures or features listed or eligible for listing on the National Register of Historic Places in the project site.

(7) Are there any known archeological sites in the proposed project area?

There are no archeological sites within the project area.

(8) Will the 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.

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

The project site is not within tribal lands.

(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?

Removing current vegetation has the potential to introduce or spread noxious weeds or non-native invasive species. Industry standards practices will be employed to prevent the spread of noxious weeds.

#### **D.2.2.6. Required Permits or Approvals**

Because all of the construction work for the project is on USBR owned facilities, (Transferred Works to BPBC as the operating agency for the five Irrigation Districts) and the nature of the work involved, no construction, planning or environmental permits will be required for the project.

#### **D. 2.2.7. Overlap or Duplication of Effort Statement**

There is no overlap between the proposed project and any other active or anticipated proposals or projects in terms of activities, costs or commitment of key personnel.

However, Boise Project Board of Control will submit another proposal under this NOFO – Funding Group III, to line 600 feet beginning at the same station number 175+00.

#### **D.2.2.8. Conflict of Interest Disclosure Statement**

No actual or potential conflicts of interest exist at the time of submission.

#### **D.2.2.9. Uniform Audit Reporting Statement**

Boise Project Board of Control was not required to submit a Single Audit report in our last fiscal year.

#### **D.2.2.10. Letters of Support**

Included in the appendix are letters of support from five irrigation districts showing their support for this project.

#### **D. 2.2.12. Official Resolution**

The Board of Directors of the Boise Project Board of Control met on June 8, 2022 at which time the Official Resolution was approved and signed by the Chairman of the Board. See Attachment B.

#### **D. 3. Unique Entity Identifier and System for Award Management**

The BPBC is registered with System for Award Management (SAM). The Unique Entity Identifier is SWMGTWB1U2C3. Registration in SAM will remain active.

# Attachment A

## “Streamflow Gains and Losses in the Lower Boise River Basin, Idaho, 1996-1997” Excerpt

# **Streamflow Gains and Losses in the Lower Boise River Basin, Idaho, 1996–97**

*By* Charles Berenbrock

Water-Resources Investigations Report 99–4105

In cooperation with the  
Idaho Department of Water Resources

Boise, Idaho  
1999

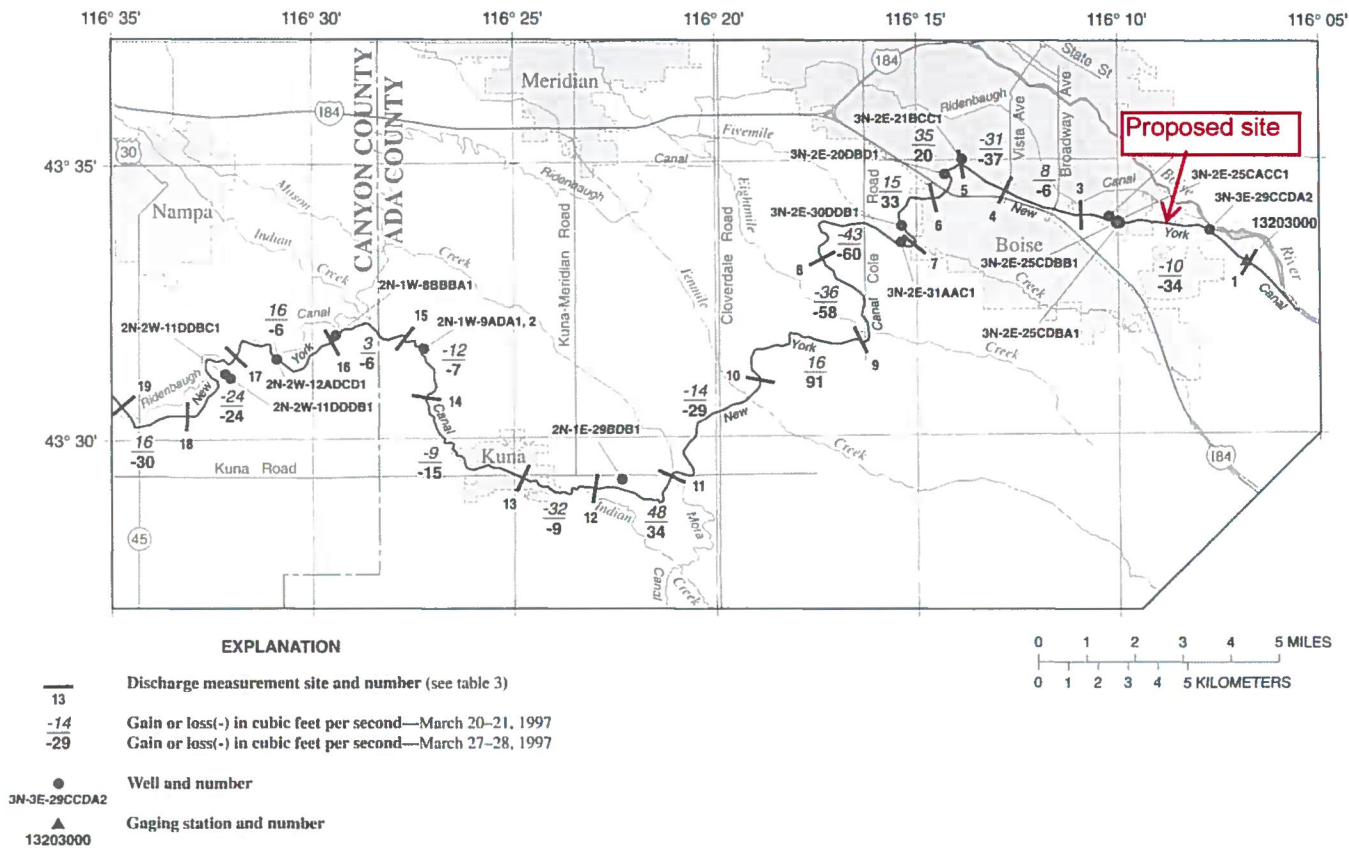


Figure 9. Location of measurement sites and gains and losses(-) along the New York Canal in the lower Boise River Basin, Idaho, March 1997.

**Table 3. Flow gains and losses (-) along the New York Canal in the lower Boise River Basin, Idaho, March 1997**

[Site locations shown in figure 9; No., number; mi, miles; ft<sup>3</sup>/s, cubic feet per second, ft<sup>3</sup>/s/mi, cubic feet per second per mile]

Site No.	Distance from Lake Lowell (mi)	Bridge site name	County	Latitude	Longitude	Measurement date	Discharge (ft <sup>3</sup> /s)	Measured gain or loss (-) along subreaches		Measurement date	Discharge (ft <sup>3</sup> /s)	Measured gain or loss (-) along subreaches	
								(ft <sup>3</sup> /s)	(ft <sup>3</sup> /s/mi)			(ft <sup>3</sup> /s)	(ft <sup>3</sup> /s/mi)
1	39.5	13203000 New York Canal downstream from Diversion Dam . near Boise .....	Ada	43°33'08"	116°06'44"	20	439			27	862		
3	35.7	Gekeler Road .....	Ada	43°34'01"	116°10'55"	20	429	-10	-2.6	27	828	-34	-8.9
4	34.0	Vista Avenue .....	Ada	43°34'27"	116°12'48"	20	437	8	4.8	27	822	-6	-3.6
5	32.9	Roosevelt Street .....	Ada	43°34'58"	116°13'58"	20	406	-31	-26.5	27	785	-37	-31.6
6	31.8	Orchard Street .....	Ada	43°34'21"	116°14'35"	21	441	35	31.8	28	805	20	18.2
7	30.1	Gowen Road .....	Ada	43°33'29"	116°15'03"	21	456	15	9.1	28	838	33	19.9
8	27.0	Desert Street .....	Ada	43°33'15"	116°17'20"	21	413	-43	-13.7	28	778	-60	-19.2
9	24.6	Cole Road .....	Ada	43°31'47"	116°16'25"	21	377	-36	-15.5	28	720	-58	-24.9
10	21.4	Hubbard Road .....	Ada	43°31'03"	116°18'55"	21	393	16	4.9	28	811	91	27.8
11	17.9	Kuna Road .....	Ada	43°29'18"	116°21'08"	20	379	-14	-4.1	28	782	-29	-8.4
12	15.8	Strobel Road .....	Ada	43°29'05"	116°23'00"	20	427	48	22.8	28	816	34	16.1
13	14.0	Swan Falls Road .....	Ada	43°29'15"	116°24'47"	20	395	-32	-17.6	28	807	-9	-5.0
14	10.7	Black Cat Road .....	Ada	43°30'46"	116°27'11"	20	386	-9	-2.7	28	792	-15	-4.5
15	8.8	Ridgewood Road .....	Ada	43°31'51"	116°27'42"	21	374	-12	-6.5	28	785	-7	-3.8
16	6.9	Robinson Road .....	Ada	43°31'48"	116°29'32"	21	377	3	1.5	28	779	-6	-3.1
17	4.0	South Side Boulevard .....	Canyon	43°31'32"	116°31'56"	20	393	16	5.6	28	773	-6	-2.1
18	1.6	Power Line Road .....	Canyon	43°30'28"	116°33'07"	20	369	-24	-10.1	28	749	-24	-10.1
19	0.0	Lake Shore Drive .....	Canyon	43°30'37"	116°34'45"	20	385	16	9.8	28	719	-30	-18.4
Total gain or loss (-) =								-54				-143	



# Attachment B - Official Resolution

DAVID REYNOLDS  
CHAIRMAN OF THE BOARD

DONALD BARKSDALE  
VICE CHAIRMAN OF THE BOARD

ROBERT D. CARTER  
PROJECT MANAGER

THOMAS RITTHALER  
ASSISTANT PROJECT MANAGER

APRYL GARDNER  
SECRETARY-TREASURER

MARY SUE CHASE  
ASSISTANT SECRETARY-  
TREASURER

## BOISE PROJECT BOARD OF CONTROL

(FORMERLY BOISE U.S. RECLAMATION PROJECT)

2455 OVERLAND ROAD  
BOISE, IDAHO 83705-3155

OPERATING AGENCY FOR 167,000  
ACRES FOR THE FOLLOWING  
IRRIGATION DISTRICTS

NAMPA-MERIDIAN DISTRICT  
BOISE-KUNA DISTRICT  
WILDER DISTRICT  
NEW YORK DISTRICT  
BIG BEND DISTRICT

TEL: (208) 344-1141  
FAX: (208) 344-1437

### OFFICIAL RESOLUTION FOR WATERSMART: WATER AND ENERGY EFFICIENCY GRANTS FOR FY2023

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: Water and Energy Efficiency Grants for FY 2023 Program, whereby Reclamation will provide funding for projects focused on water conservation;

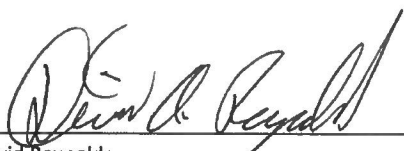
WHEREAS, the Boise Project Board of Control desires to apply for funding through Reclamation's WaterSMART Grant Program;

WHEREAS, the Boise Project Board of Control consists of Directors from five irrigation districts: Big Bend, Boise-Kuna, Nampa-Meridian, New York and Wilder Irrigation Districts

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

1. Bob Carter, Project Manager, has the legal authority to sign and enter into the agreement.
2. The Board has reviewed and supports this proposal for lining 5,280 feet of the New York Canal with a geocomposite membrane, including a concrete cap.
3. 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
4. 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.

Passed and adopted by the Board of Directors of the Boise Project Board of Control during its regular meeting on the 8th day of June, 2022.

  
\_\_\_\_\_  
David Reynolds  
Chairman of the Board

# Attachments C - Letters of Support

## Boise-Kuna Irrigation District

129 N. School Avenue  
Kuna, ID 83634

Dave Reynolds, Director  
Richard Durrant, Director  
Dan Sheirbon, Director

Telephone (208) 922-5608  
Fax (208) 922-5659

June 22, 2022

Mr. Bob Carter  
Boise Project Board of Control  
2465 Overland Road  
Boise, ID 83705

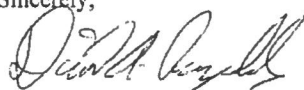
Dear Mr. Carter:

The Boise-Kuna Irrigation District fully supports the application submitted by Boise Project Board of Control to the U.S. Bureau of Reclamation for grant funding under the WaterSMART, Water and Energy Efficiency Grant. Boise Project Board of Control is the operation and maintenance entity for Boise-Kuna Irrigation District.

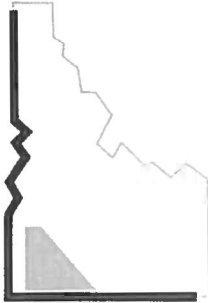
This project plays an important role in conserving water for Boise-Kuna Irrigation District and the other districts within the Boise Project Board of Control's delivery area. The project represents the continued efforts to conserve water by Boise Project Board of Control with a replacement of a section of the canal lining of the New York Canal, the main artery of the Boise Project delivery system for over 167,000 acres. The project will conserve surface water by reducing loss due to seepage and will play a significant role in the efficiency to deliver this precious resource to our patrons.

Thank you for your consideration of the Boise Project Board of Control's application and this letter of strong support.

Sincerely,



David Reynolds, Chairman  
Boise-Kuna Irrigation District



## *Nampa & Meridian Irrigation District*

1503 FIRST STREET SOUTH  
FAX #208-463-0092

NAMPA, IDAHO 83651-4395  
nmid.org

OFFICE: Nampa 208-466-7861  
SHOP: Nampa 208-466-0663

21 June 2022

Mr. Bob Carter  
Boise Project Board of Control  
2465 Overland Road  
Boise, ID 83705

Dear Mr. Carter:

The Nampa & Meridian Irrigation District fully supports the application submitted by Boise Project Board of Control to the U.S. Bureau of Reclamation for grant funding under the WaterSMART, Water and Energy Efficiency Grant. Boise Project Board of Control is the operation and maintenance entity for Nampa & Meridian Irrigation District for the District's lands that receive water through the Boise Project.

This project plays an important role in conserving water for Nampa & Meridian Irrigation District and the other districts within the Boise Project Board of Control's delivery area. The project represents the continued efforts to conserve water by Boise Project Board of Control with a replacement of a section of the canal lining of the New York Canal, the main artery of the Boise Project delivery system for over 167,000 acres. The project will conserve surface water by reducing loss due to seepage, and will play a major role in the efficiency to deliver this precious resource to our patrons.

Thank you for your consideration of the Boise Project Board of Control's application and this letter of strong support.

Sincerely,

Donald Barksdale  
President  
Nampa & Meridian Irrigation District



APPROXIMATE IRRIGABLE ACRES  
RIVER FLOW RIGHTS - 23,000  
BOISE PROJECT RIGHTS - 40,000

**NEW YORK IRRIGATION DISTRICT**  
6616 W OVERLAND ROAD; BOISE, ID 83709  
PHONE 208 378-1023 ~ FAX 208 378-1274 WEBPAGE: NYID.ORG

July 5, 2022

Mr. Bob Carter  
Boise Project Board of Control  
2465 Overland Road  
Boise, ID 83705

Dear Mr. Carter:

The New York Irrigation District fully supports the application submitted by Boise Project Board of Control to the U.S. Bureau of Reclamation for grant funding under the WaterSMART, Water and Energy Efficiency Grant. Boise Project Board of Control is the operation and maintenance entity for New York Irrigation District.

This project plays an important role in conserving water for New York Irrigation District and the other districts within the Boise Project Board of Control's delivery area. The project represents the continued efforts to conserve water by Boise Project Board of Control with a replacement of a section of the canal lining of the New York Canal, the main artery of the Boise Project delivery system for over 167,000 acres. The project will conserve surface water by reducing loss due to seepage and will play a major role in the efficiency to deliver this precious resource to our patrons.

Thank you for your consideration of the Boise Project Board of Control's application and this letter of strong support.

Sincerely,



Richard Murgoitio, Chairman  
New York Irrigation District

# WILDER IRRIGATION DISTRICT

Directors  
Brad Case  
Diane Gooding  
Douglas Norris  
Fred Butler  
Ronald Platt  
Gary Birch  
Vern Pecht

709 CLEVELAND BOULEVARD  
P.O. BOX 416  
CALDWELL, IDAHO  
83606-0416  
-----  
TELEPHONE (208) 459-3421  
FAX- (208) 459-6407

Lisa Sweet  
Secretary Treasurer  
  
Vicki Case  
Administrative Assistant

July 5, 2022

Mr. Bob Carter  
Boise Project Board of Control  
2465 Overland Road  
Boise, ID 83705

Dear Mr. Carter:

The Wilder Irrigation District fully supports the application submitted by Boise Project Board of Control to the U.S. Bureau of Reclamation for grant funding under the WaterSMART, Water and Energy Efficiency Grant. Boise Project Board of Control is the operation and maintenance entity for Wilder Irrigation District.

This project plays an important role in conserving water for Wilder Irrigation District and the four other districts within the Boise Project Board of Control's delivery area. The project represents the continued efforts to conserve water by Boise Project Board of Control with a replacement of a section of the canal lining of the New York Canal, the main artery of the Boise Project delivery system for over 167,000 acres. This project will conserve surface water by reducing loss due to seepage and will play a major role in the efficiency to deliver this precious resource to our patrons.

Thank you for your consideration of the Boise Project Board of Control's application and this letter of strong support.

Sincerely,

WILDER IRRIGATION DISTRICT



Gary Birch  
Chairman