# Southeast Idaho Canal Company Crosscut Canal Check Structure Automation Project

WaterSMART Small-Scale Efficiency Projects-January 2024 Funding Opportunity No. R24AS00059



Check Structure to be automated

## APPLICANT: Southeast Idaho Canal Company 350 North 6<sup>th</sup> West PO BOX 15

Saint Anthony, Idaho 83445

#### PROJECT MANAGER:

Aaron Dalling aaron.fmid@myidahomail.com (208) 624-3381

# Table of Contents

1.	Executive Summary	1
	Applicant Info	1
	Project Summary	1
	Schedule	1
2.	Project Location	2
3.	Technical Project Description	2
4.	Evaluation Criteria	4
	Evaluation Criterion A- Project Benefits	4
	Evaluation Criterion B- Planning Efforts Supporting the Project	8
	Evaluation Criterion C- Implementation and Results	g
	Evaluation Criterion D- Nexus to Reclamation	12
	Evaluation Criterion E- Presidential and Department of the Interior Priorities	13
5.		
6.	Environmental and Cultural Considerations	16
7.	Letter of project support	17
R	Official Resolution	10

## Attachments:

Attachment A-Location Map
Attachment B-Project Map

## Small-Scale Water Efficiency Projects FY 2024

## Technical Proposal and Evaluation Criteria

**Executive Summary** 

**Applicant Info** 

Date: January 4, 2024

**Applicant Name:** Southeast Idaho Canal Company-Category A Applicant

City, County, State: Saint Anthony, Fremont, Idaho

**Project Manager:** *Name:* Aaron Dalling *Phone:* 208-624-3381

Email: aaron.fmid@myidahomail.com

**Project Funding Request**: Small Scale Water Efficiency Projects- Total Cost \$80,850.00. Southeast Idaho Canal Company is requesting 50% funding from Reclamation or \$40,425.00.

#### **Project Summary**

Southeast Idaho Canal Company (SICC) proposes to automate a check structure on the Crosscut Canal. The structure will be automated to allow for more precise management of water deliveries. The Crosscut Canal serves two purposes, first to supply water to three branches of the Fall River Canal which is a part of SICC's delivery system and finally to deliver storage water from the Henry's Fork River to the Teton River for Fremont-Madison Irrigation District (FMID). This results in wide fluctuations in flow in the Crosscut Canal. This structure is currently operated with boards which has proven difficult and inefficient. Often needed flow changes are delayed until boards can be pulled from or placed in the structure. Once the automation equipment is installed, we will be able to set the level needed in the canal remotely from our existing SCADA system; the new steel gates will then adjust automatically when flow changes occur. This will allow us to make flow changes right when they are needed, instead of waiting until the number of boards in the structure can be adjusted.

The Henry's Fork Basin study specifies canal automation as one of the most cost-effective ways of conserving water in the Henry's Fork Basin.

This will also result in better relationships with our partners. Each of these benefits is described in further detail below.

The proposed start date for the project will be October of 2025 with a completion date of December of 2025.

This project is not located on a federal facility.

#### **Project Location**

Attachment A provides the geographic location on a map.

Table 1. Locations of Automation/Remote Operations Equipment

Location Name	Latitude	Longitude	County/State
Crosscut Canal	43°56'21 "N	111°37'13 "W	Fremont/Idaho

#### Nearest Towns

This Location is located roughly 5 miles Southeast if St. Anthony, Idaho.

#### Technical Project Description

Provide a comprehensive description of the technical aspects of your project, including the scope of work to be accomplished and the approach for the on-the-ground project. This description should provide detailed information about the project materials and equipment including what is currently installed and a description of the upgrade being made. Include in your description the necessary site preparation, removal of materials, motorized and rotating equipment required for installation, site laydown and mobilization areas, and areas impacted by construction. This section provides an opportunity for the applicant to provide a clear description of the technical nature and installation process of the project and to address any aspect of the project that reviewers may need additional information to understand.

Please do not include your project schedule and milestones here; that information is requested in response to the Evaluation Criterion C—Implementation and Results. In addition, please avoid discussion of the benefits of the project, which are also requested in response to evaluation criteria. This section is solely intended to provide an understanding of the technical aspects of the project.

Please note, if the work for which you are requesting funding is a phase of a larger project, please only describe the work that is reflected in the budget and exclude description of other activities or components of the overall project.

SICC proposes to upgrade and modernize a check structure on the Crosscut Canal. The Crosscut Canal serves two purposes, first to supply water to three branches of the Fall River Canal which is a part of SICC's delivery system and to deliver FMID storage water from the reservoirs in the Upper Henry's Fork to the Teton River (See Map Attachment A). Under agreement with FMID, SICC is responsible for operation and maintenance of the check structures in the Crosscut Canal. The structure proposed for improvements is the last of three check structures on the Crosscut Canal. Its purpose is to increase the elevation of the water so that a portion of it can be diverted into the East Branch of the Fall River Canal. Early in the season, there is not a need to deliver water to the Teton River through the Crosscut Canal, in this scenario all the boards are placed in the structure and all of the water in the Crosscut Canal at this structure is diverted down the East Branch of the Fall River Canal. There is so much pressure on the boards at high flows that when the time comes for delivery to the Teton River the boards must be cut out with a chainsaw or broken out with a backhoe.

To facilitate the automation of this structure, two pillars will be removed and replaced with one pillar and two automated gates fabricated from steel will be installed. These gates will automatically control the water level of the canal based on a pre-set level. This can be adjusted remotely from our in-office SCADA system or from a cell phone.

Figure 1. Existing Structure

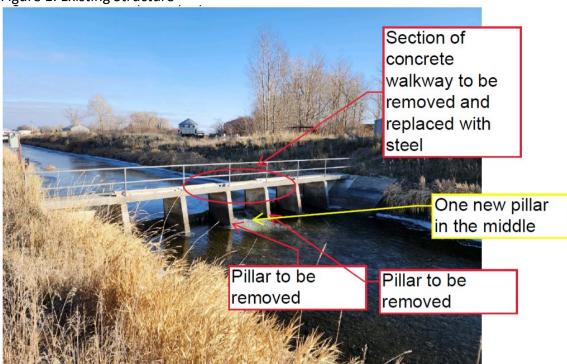


Figure 2-Example of planned automated gates



## **Technical Proposal: Evaluation Criteria**

The evaluation criteria portion should be addressed in the technical proposal section of the application. Applications should thoroughly address each criterion and any sub-criterion in the order presented below. Applications will be evaluated against the evaluation criteria listed below.

### **Evaluation Criterion A. Project Benefits (35 points)**

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

If the work described in your application is a phase of a larger project, only discuss the benefits that will result directly from the work discussed in the technical project description and that is reflected in the budget, not the larger project.

Benefits to the Category A Applicant's Water Delivery System: Describe the expected benefits to the Category A applicant's water delivery system. Address the following:

Clearly explain the anticipated water management benefits to the Category A applicant's water supply delivery system and water customers. Consider:

• Will the project result in more efficient management of the water supply?

Throughout the season significant flow changes are needed at this check structure resulting in the need to adjust the number of boards placed in the structure (See Chart 1).

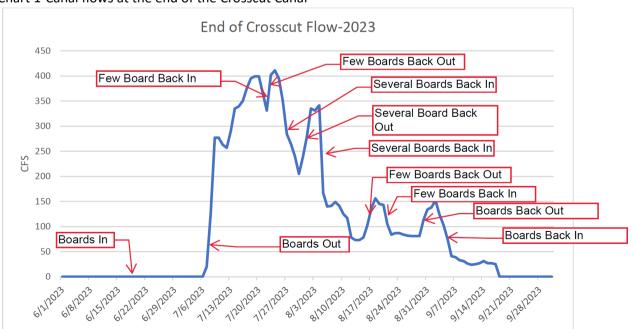


Chart 1-Canal flows at the end of the Crosscut Canal

Due to the difficulty of modifying the number of boards in the structure, flow changes are often delayed. Minor flow changes that could result in water savings are often ignored because of the difficulty of making the changes and the potential inaccuracy of such changes.

The Crosscut Canal flow is determined based on a flow target of 50-60cfs on the South Fork of the Teton River @ Rexburg gauge. Chart 2 illustrates the wide range in flow at that gauge during the peak of the irrigation season in 2023. This is similar in most years based on diversion changes and rainstorms. If we could better respond to these changes in flow we could have easily saved several thousand-acre feet in Island Park Reservoir during the 2023 irrigation season.

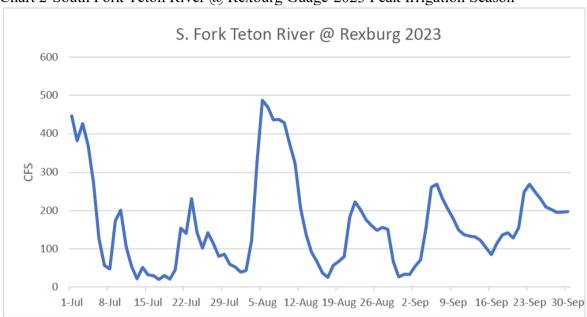


Chart 2-South Fork Teton River @ Rexburg Guage-2023 Peak Irrigation Season

• Where any conserved water as a result of the project will go and how it will be used?

Conserved water will remain in Island Park Reservoir and can be stored until needed the following year. If the conserved water is not needed to help fill the reservoir in the subsequent year it can be released during the winter and stored downstream in American Falls Reservoir. This increased release during the winter is extremely beneficial for trout survival in the reach just below the reservoir.

Explain the significance of the anticipated water management benefits for the Category A applicant's water delivery system and customers. Consider:

• Are customers not currently getting their full water right at certain times of year?

At certain points almost every year there is not enough water to go around on the Teton River. Referring back to chart 2, the river was at 0 at certain points on several days during 2023 even though we never had a daily average of 0. On these days someone is being shorted despite having a remaining balance in their storage water account.

• Does this project have the potential to prevent lawsuits or water calls?

Yes, the most contentious water issues in our area are on the Teton River. At some points in almost every irrigation season there is just not enough water to go around on the Teton River.

• What are the consequences of not making the improvement?

Continued inefficient delivery of storage water to the Teton River. And at times pushing more water

down the East Teton Canal then is needed.

• Are customer water restrictions currently required?

At times yes, when the Crosscut Canal is delivering its full capacity to the Teton River and there is still not enough water to go around, temporary restrictions are put in place.

• Other significant concerns that support the need for the project.

Winter trout survival in the reach directly below Island Park Dam is critically important to the local fly-fishing industry. This project will help us keep more water in the reservoir during the irrigation season which can then be released during the winter for the benefit of trout.

**Broader Benefits:** Describe the broader benefits that are expected to occur as a result of the project. Consider:

#### Will the project improve broader water supply reliability at sub-basin or basin scale?

Yes, by managing our water high in the Upper Snake watershed more efficiently it benefits the entire Upper Snake Reservoir System. Water can be held in Island Park until it is needed downstream. This reduces the risk of spilling water out of the system at Milner Dam, while there is still space in upstream reservoirs.

• Will the proposed project increase collaboration and information sharing among water managers in the region? Please explain.

Yes, this project will increase collaboration and available information to SICC, FMID and the Teton River water users.

• Is the project in an area that is experiencing, or recently experienced, drought or water scarcity? Will the project help address drought conditions at the sub-basin or basin scale? Please explain.

The Teton River has continued to see diminishing irrigation season flows. Even in good water years, flows in July and August have been near record low levels. The year 2023 is a good example, see chart 3 below. We had a pretty good snowpack. This resulted in high spring runoff, but then flows diminished to well below average for the critical part of the irrigation season. We believe this is a result of development in the Teton Basin or the upper watershed. Historically, those areas which have junior water rights would flood irrigate when the river was high and their water rights were in priority. That water would then move through the rocky, porous soils back into the river later in that same summer. Now those lands have been developed, resulting in larger flows during the spring because they are not diverting for irrigation, then diminished flows late in the season because there is no water returning to the river.

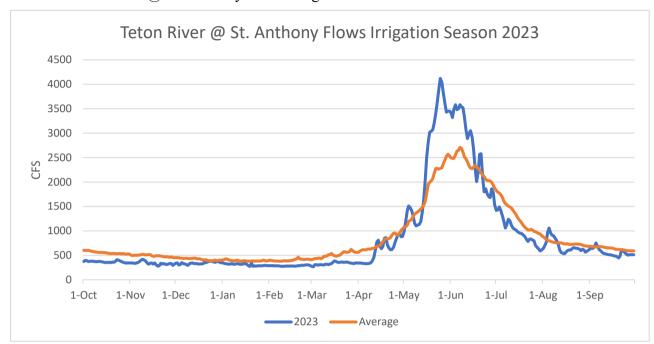


Chart 3. Teton River @ St. Anthony Flows-Irrigation Season 2023

• 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 explain.

This project will result in more constant releases from the reservoir and thereby improve the conditions for fish and wildlife.

The Henrys Fork Watershed including the Teton River is a world-renowned fly-fishing destination. The annual local economic impact of the fishing industry is 50 million.

• Will the proposed project positively impacts/benefit various sectors and economies within the applicable geographic area (e.g., impacts to agriculture, environment, recreation, and tourism)? Please explain.

This project will increase the water reliability for an irrigated agriculture economy that averages over 150 million dollars in crop sales in Fremont County each year. SICC delivers water to over 14,000 acres.

In addition to providing the water for our local agriculture economy, the Henry's Fork is a world-famous fly-fishing destination which contributes 50 million dollars to our local economy. This is in addition to 14 million in property tax revenue from second homes owned by anglers in Fremont County.

This project will help us maintain a more constant level in the reservoir and consistent releases into the river. This will improve recreation, benefiting recreation on the reservoirs themselves including, boating, fishing, camping, etc. also benefiting the local economy.

Tourism will benefit as a result of the environmental and recreational improvements. Full reservoirs are also aesthetically pleasing which will benefit tourism and its economic impacts.

• Will the project complement work being done in coordination with NRCS in the area (e.g., the area with a direct connection to the districts water supply)? Please explain.

This project is not directly related to any one NRCS on-farm projects but will generally benefit the water supply for many NRCS on farm projects.

**Evaluation Criterion B. Planning Efforts Supporting the Project (25 points)** Up to **25 points** may be awarded based on the extent to which the proposed on-the-ground project is supported by an applicant's existing water management plan, water conservation plan, System Optimization Review, or identified as part of another planning effort led by the Category A applicant. This criterion prioritizes projects that are identified through local planning efforts and meet local needs. Note: Project specific planning and design for the project or other phases of the project are considered in Criteria C – Implementation.

**Plan Description and Objectives:** Is your project supported by a specific planning document or effort? If so, describe the existing plan. When was the plan developed? What is the purpose and objective of the plan?

Automation and flow measurement in our area is specifically identified in several planning efforts including the Henry's Fork Basin Study, Fremont-Madison Irrigation District Conservation Plan and in the Henry's Fork Drought Management Plan.

**Plan Development:** Who developed the planning effort? What is the geographic scope of the plan? If the planning effort was not developed by the Category A applicant, describe the Category A applicant's involvement in developing the planning effort.

#### Henry's Fork Basin Study-2015

Canal automation was identified as one of the most economical alternatives for conserving water on a per acre foot basis within Fremont-Madison in the 2015 Henry's Fork Basin Study.

#### Fremont-Madison Irrigation District Water Conservation Plan-2009

One of the specific recommendations of the plan was to increase water use data. This project helps us accomplish that recommendation.

#### Henry's Fork Drought Management Plan

In 2018 the committee revised the Drought Management Plan and included canal automation as one of the most effective means of conserving water in the Henry's Fork Watershed, which will improve the management of the reservoirs benefiting the fishery and agriculture.

The Drought Management Planning Committee has also developed water management and availability models that have significantly improved management of Island Park Reservoir and increased carryover by roughly 20% in each of the last five years. However, further gains are limited by the current irrigation infrastructure and the time and resources necessary to operate it. Installing this automation equipment will provide a means to conserve additional water in the reservoirs for all to benefit from.

**Support for the Project:** Describe to what extent the proposed project is supported by the identified plan. Consider:

• Is the project identified specifically by name and location in the planning effort?

No, however automation/SCADA within our systems is called out.

• Is this type of project identified in the planning effort?

Yes, automation /SCADA is identified as one of the most economic means of conserving water in these planning efforts.

• Explain whether the proposed project implement a goal, objective, or address a need or problem identified in the existing planning effort?

The primary goal of each of the planning effects was to more precisely manage water in the Henry's Fork watershed. This project helps us do that.

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

We have discussed this project at length in several board meetings and in our annual meeting with our shareholders and identified this as a priority need.

### **E.1.1. Evaluation Criterion C. Implementation and Results (20 points)**

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

 Describe the implementation plan for the proposed project. Please include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.

This is a straightforward, simple project. If all goes as planned, we will be awarded this grant, complete the contracting and environmental work during the winter of 2024-2025. Construction would then be commended after the irrigation season of 2025. The work will take less than 90 days once commenced.

Table 2. Project Timeline

Crosscut Check Structure Automation Project			202	24							20	25					
Activity	1	Sept	Oct	Nov	Dec	Jan	Feb	March	April	Мау	June	July	Aug	Sept	Oct	Nov	Dec
Award of WaterSMART Grant																	
Develop and sign WaterSMART Contract																	
Environmental Evaluation																	
Installation of Automation Equipment																	

 Proposals with a budget and budget narrative that provide a reasonable explanation of project costs will be prioritized under this criterion.

#### **Budget Narrative**

#### **Personnel**

SICC has staff in place that will manage this project. SICC will not claim cost associated with personnel as a part of this grant application. We are willing to dedicate staff at our own expense to get the project done if Reclamation can help with the cost of the equipment and construction.

#### Fridge Benefits

SICC will not claim costs associated with fringe benefits as a part of this grant application (see above).

**Travel** 

None

**Supplies** 

None

**Equipment** 

None

**Supplies** 

None

**Contractual** 

None

Construction

#### **Construction Materials**

In budget table 1 below it details the construction materials needed to complete the project. Historically we have installed Campbell equipment, which is common in our area. This makes it easier to share information with our partners. There are several suppliers of Campbell equipment. If the project is funded through WaterSMART, we will find the most cost-effective supplier to purchase from.

Budget Table 1. Construction Materials

Item	Quantity	<b>Unit Cost</b>	Total Cost
CR-lO00X	1	\$2,540	\$2,540
CR-Cell 210	1	\$1,000	\$1,000
Act-5000-4'	4	\$1,900	\$7,600
MOA-2	2	\$1,100	\$2,200

Enclosure	1	\$1,200	\$1,200
Nemastand	1	\$275	\$275
Transducer-Well	1	\$825	\$825
MOA-1	1	\$395	\$395
SP100W	1	\$150	\$150
Batt-31	2	\$145	\$290
Charge Reg	1	\$145	\$145
misc.	1	\$400	\$400
Wire	200	\$1.25	\$250
Concrete	8.33	180	\$1,499
Metal for Gates	1	\$39,500	\$39,500
		Subtotal	\$58,269

### **Contractual Services**

We have had multiple companies bid on this project specific to the automation equipment. Metcom was the lowest bidder. Metcom charges \$75/hr while many of the other companies charge double that.

We have one bid for the concrete and one bid to build the gates to establish a project cost. If this project is funded will put this out for a competitive bid process and select the lowest qualified bidder.

Budget Table 2. Contractor Construction Services

Contractor Name	Description of services	<b>Total Cost</b>
Metcom (Shayne Young)	Install Automation Equipment on the updated gates	\$3,000
Metcom (Shayne Young)	Program Automation Equipment	\$2,400
TBD	Remove two existing concrete pillars and replace with one pillar	\$3,501
TBD	Build & Install Metal Gates	\$13,500
	Subtotal	\$22,401

#### Other

Freight of the automation equipment at \$180.

#### **Indirect Cost**

None

#### **Budget Narrative Summary**

A summary of the total cost of the project and proposed funding source is below in budget table 3.

Budget Table 3. Summary of Federal and Non-Federal Funding Sources

Funding Source	Funding	Percentage
SICC	\$40,425.00	50%
WaterSMART	\$40,425.00	50%
Totals	\$80,850.00	100%

• Describe any permits and agency approvals that will be required along with the process and timeframe for obtaining such permits or approvals.

No Permits are required for this project.

• Identify and describe any engineering or design work performed specifically in support of the proposed project. What level of engineering design is the project currently? If additional design is required, describe the planned process and timeline for completing the design.

This project does not require any engineering.

• Does the applicant have access to the land or water source where the project is located? Has the applicant obtained any easements that are required for the project? If the applicant does not yet have permission to access the project location, describe the process and timeframe for obtaining such permission.

Yes, we have access to the land.

• Identify whether the applicant has contacted the local Reclamation office to discuss the potential environmental and cultural resource compliance requirements for the project and the associated costs. Has a line item been included in the budget for costs associated with compliance? If a contractor will need to complete some of the compliance activities, separate line items should be included in the budget for Reclamation's costs and the contractor's costs.

Yes, we did contract Reclamation, however we did not get a response in time for submission of this application. This project will be simple in this regard. We are willing to cover any cost associated with cultural and environmental compliance if needed.

#### **E.1.2. Evaluation Criterion D. Nexus to Reclamation (5 Points)**

Up to **5 points** may be awarded based on the extent that the proposal demonstrates a nexus between the proposed project and a Reclamation project or activity. Describe the nexus between the proposed project and a Reclamation project or activity, including:

Is the proposed project connected to a Reclamation project or activity? If so, how? Please consider the following:

• Does the applicant have a water service, repayment, or operations and maintenance (O&M) contract with Reclamation?

Yes, SICC holds storage water through FMID who is contracted with Reclamation for the storage water in Island Park and Grassy Lake Reservoirs. FMID is also contracted with Reclamation for the operations and maintenance of Island Park and Grassy Lake Reservoirs.

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

SICC receives storage water from FMID who is a Reclamation contractor.

• Will the proposed work benefit a Reclamation Project area or activity?

Yes, the reservoirs that will benefit from this project are a Reclamation project.

# E.1.3. Evaluation Criteria E. Presidential and Department of the Interior Priorities (15 points)

Up to **15 points** may be awarded based on the extent that the project demonstrates support for the Biden-Harris Administration's priorities, including E.O. 14008: *Tackling the Climate Crisis at Home and Abroad* and E.O. 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, and the President's memorandum, *Tribal Consultation and Strengthening Nation-to Nation Relationships*. Points will be allocated based on the degree to which the project supports the priorities listed, and whether the connection to the priority(ies) is well supported in the application. Only address the sub-criterion that are relevant to your project.

#### E.1.3.1. Sub-criterion No. E1. Climate Change

Points will be awarded based on the extent the project will reduce climate pollution; increase resilience to the impacts of climate change; protect public health; and conserve our lands, waters, oceans, and biodiversity. Address the following as relevant to your project.

Combating the Climate Crisis: E.O. 14008: *Tackling the Climate Crisis at Home and Abroad*, focuses on increasing resilience to climate change and supporting climate- resilient development. For additional information on the impacts of climate change throughout the western United States, see: <a href="www.usbr.gov/climate/secure/docs/2021secure/2021SECUREReport.pdf">www.usbr.gov/climate/secure/docs/2021secure/2021SECUREReport.pdf</a>. Please describe how the project will address climate change, including the following:

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

Climate change results in more extreme storms, which can result in quick and significant irrigation diversion demand. This equipment will allow us to respond quickly, with remote control to prevent potential flooding on the canal.

• Does this proposed project strengthen water supply sustainability to increase resilience to climate change? Does the proposed project contribute to climate change resiliency in other ways not described above?

Absolutely, this project will facilitate our ability to make timely flow changes in the Crosscut Canal. This will allow us to hold more water in the reservoirs for subsequent drought years.

#### E.1.3.2. Sub-criterion No. E2. Disadvantaged or Underserved Communities

E.O. 14008 and E.O. 13985 affirm the advancement of environmental justice and equity for all through the development and funding of programs to invest in disadvantaged or underserved communities. For the purpose of this criterion, Tribes and insular

areas (Guam, American Samoa, the Northern Mariana Islands, and the Virgin Islands) are considered disadvantaged.

• Please use the White House Council on Environmental Quality's interactive Climate and Economic Justice Screening Tool, available online at Explore the map – Climate & Economic Justice Screening Tool (https://screeningtool.geoplatform.gov) to identify any disadvantaged communities that will benefit from your project.

This area falls within a disadvantaged community as identified on the screening tool. See image below.



• If applicable, describe how the project benefits those disadvantaged or underserved communities identified using the tool. For example, does the project increase reliability of water supplies, improve water quality, provide economic growth opportunities, improve or expand public access to natural areas or recreation, or provide other benefits in a disadvantaged or underserved community?

The project will reduce potential flooding for a disadvantaged or underserved community. It will also improve water reliability. Agriculture is the economic backbone of this area. In years of the water shortage, less crops are produced, resulting in fewer jobs and support for the local economy.

#### E.1.3.3. Sub-criterion No. E3. Tribal Benefits

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

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

The project does not directly impact water management for a Tribe.

• Does the proposed project support Tribal resilience to climate change and drought impacts or provide other Tribal benefits such as improved public health and safety by addressing water quality, new water supplies, or economic growth opportunities?

This project has general benefits to water supply in the Upper Snake River Reservoir System. It could help prevent unnecessary spills at Milner Dam while reservoirs upstream still have unfilled space due to more precise management. This could improve water available for flow augmentation as a part of the Snake River Water Rights Agreement with the Nez Perce Tribe.

• Does the proposed project support Reclamation's Tribal trust responsibilities or a Reclamation activity with a Tribe?

This project could improve water available under the Snake River Water Rights Agreement with the Nez Perce Tribe for flow augmentation.

## **Section H. Other Information**

The following is a brief overview of NEPA, NHPA, and ESA. This information is only relevant to proposals that include measurement, monitoring, and field work. While these statutes are not the only environmental laws that may apply, they are the Federal laws that most frequently do apply. Compliance with all applicable environmental laws will be initiated by Reclamation concurrently, immediately following the initial recommendation to award a financial assistance agreement under this NOFO. The descriptions below are intended to provide you with information about the environmental compliance issues that may apply to your projects.

To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with each application, all applicants should consider the following list of questions focusing on the NEPA, ESA, and NHPA requirements. Please answer the following questions to the best of your knowledge. If any question is not applicable to the project, please explain why. The application should include the answers to:

• Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.

Earth Work will be extremely minimal. The extent of it will be with hand shovels to smooth out an area to install a small cement pad for the solar panels. This will all be done on land that has been previously disturbed during the building of the Crosscut Canal.

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

No, we are not aware of any species or critical habitat in the project area.

This project will have no negative impact on any species. This project will result in more constant flows in the rivers. It will also hold additional water in Island Park reservoir during the irrigation season. This will result in additional water that can be released during the winter when it is critical for trout survival.

The project will result in more consistent flows in the Teton River, benefiting wildlife.

• Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States"? If so, please describe and estimate any impacts the proposed project may have.

No, there is no impact to wetlands.

• When was the water delivery system constructed?

The Crosscut Canal was constructed in the late 1930's.

• 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.

Yes, we believe this structure was constructed 40-45 years ago. @ concrete pillars will be removed and replaced with one. The Concrete walkway will also be replaced in the middle section with a steel walkway.

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

No

### H.1. Environmental and Cultural Resource Considerations

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

No

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

No, any impact on these types of populations would be positive.

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

No

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

No



December 28, 2023

USBR WaterSMART Grants Small-Scale Water Efficiency Program FY24/25

Letter of support for application of Southeast Idaho Canal Company

#### Dear Grant Selection Committee:

As a nonprofit organization whose mission is to conserve, restore and protect the unique fish and wildlife resources of the Henry's Fork of the Snake River, the Henry's Fork Foundation (HFF) fully supports the grant proposal of Southeast Idaho Canal Company (SICC) to the US Bureau of Reclamation's Small-Scale Water Efficiency program. For 30 years, HFF has collaborated with irrigation entities in the watershed to advance the science and practice of watershed management, with particular emphasis on precise management of the watershed's extensive system of irrigation reservoirs, canals, and pumps. The centerpiece of this system is Island Park Reservoir, a Reclamation facility that has large influence over water quality and fish populations in most popular recreational reaches of the Henry's Fork. Much of the collaboration between HFF and water users has occurred through the Henry's Fork Watershed Council, which is co-facilitated by HFF and Fremont-Madison Irrigation District (FMID) and which celebrated its 30th anniversary earlier this month.

Since 2018, HFF has worked closely with irrigation entities to develop and execute precision water management projects similar to that proposed here, with the intent of saving irrigators time, money, and administrative water while also benefitting the watershed's wild trout fishery. Several of these projects have been funded by Reclamation WaterSMART grants. Analysis performed by HFF's science and technology team and presented at the Henry's Fork Watershed Council's annual conference a few weeks ago showed that these collaborative water management projects have resulted in substantial savings in both physical water and administrative water. When compared to the period 2001-2017—years of similar water supply and irrigation practices—physical reservoir carryover in the Henry's Fork watershed was 28,000 ac-ft (19%) greater in irrigation years 2018-2022, resulting in measurable improvements in fish populations, water quality, and functional hydrologic regimes in the Henry's Fork. Further, administrative carryover was 22,642 ac-ft (24%) greater in 2018-2022, saving storage-rights users money and providing greater insurance against low water supply in subsequent years. These are substantial and meaningful water savings to both irrigators and aquatic ecosystems and demonstrate the effectiveness of science-based collaboration and Reclamation's WaterSMART funding program.

This grant proposal takes another step in improving the precision of water management in the Henry's Fork watershed by replacing aging infrastructure and outdated technology on the Crosscut Canal, which delivers natural flow and storage water to the SICC service area and also delivers FMID storage water from its Reclamation reservoirs on the Henry's Fork and Fall River to the Teton River. Because of the dual purpose of the Crosscut Canal, adjustments to SICC delivery must often be made prior to adjustments in delivery of FMID's storage to the Teton River. Outdated, manually operated infrastructure can delay the SICC adjustments, hence delaying adjustments to delivery of FMID storage to the Teton

River. When demand on the Teton River is increasing, such delays can result in temporary shortages to irrigators on the Teton River. When demand is decreasing, these delays result in delivery of administrative storage that is not needed on the Teton River, excess draft of Island Park Reservoir, or both. The proposed project will install modern, automated control equipment at a critical junction between the SICC system and FMID's Teton River delivery operation. Similar equipment at other locations along the Crosscut Canal and Teton River has contributed substantially to the water savings documented above. The proposed infrastructure improvement will allow for further improvements in precise management of the Crosscut Canal, to the benefit of SICC water users, FMID storage-rights holders, and aquatic ecosystems dependent on limiting outflow from Island Park Reservoir.

We are grateful to irrigation entities throughout the watershed for continuing to expand on work that has proven to be beneficial for a broad spectrum of watershed stakeholders.

Sincerely yours,

Rob Van Kirk, Ph.D.

Robert W. Va tol

Science and Technology Director

## **Southeast Idaho Canal Company**

#### Official Resolution 2024-01

In the matter of the proposed WaterSMART application to United States Bureau of Reclamation (Reclamation) to upgrade and automate a check structure on the Crosscut Canal.

WHEREAS, Reclamation's Small-Scale Water Efficiency Grants provide funding to non-federal entities to implement actions to increase water supply reliability through investments in existing infrastructure; and

WHEREAS, Reclamation requires that Small-Scale Water Efficiency Grant applicant adopt a resolution verifying (I) the identity of the official with legal authority to enter into agreement, (2) the board of directors, governing body, or appropriate official who has reviewed and supports the application submitted, (3) the capability of the applicant to provide the amount of funding and/or in-kind contributions specified in the funding plan, and (4) that the applicant will work with Reclamation to meet established deadlines for entering into a cooperative agreement; and

WHEREAS, SICC desires to apply for a Small-Scale Water Efficiency Grant to assist the District with upgrading and automating a check structure on the Crosscut Canal, a project designed to improve water use efficiency; and

WHEREAS, The SICC Board of Directors have reviewed the WaterSmart Grant proposal and supports the grant application; and

NOW, THEREFOR, BE IT RESOLVED that SICC authorizes application to Reclamation for a WaterSMART grant and authorizes Judd Crapo, President to enter into an agreement with Reclamation for the WaterSMART grant; and

FURTHER IT BE RESOLVED, that SICC recognizes that Judd Crapo, president will represent SICC as its legal entity in the cooperative agreement; and

FURTHER IT BE RESOLVED, that SICC agrees to the WaterSmart funds and will work cooperative with Reclamation to meet established deadlines for entering into a cooperative agreement; and

FURTHER IT BE RESOLVED, that SICC shall provide or ensure the non-federal portion of the project costs.

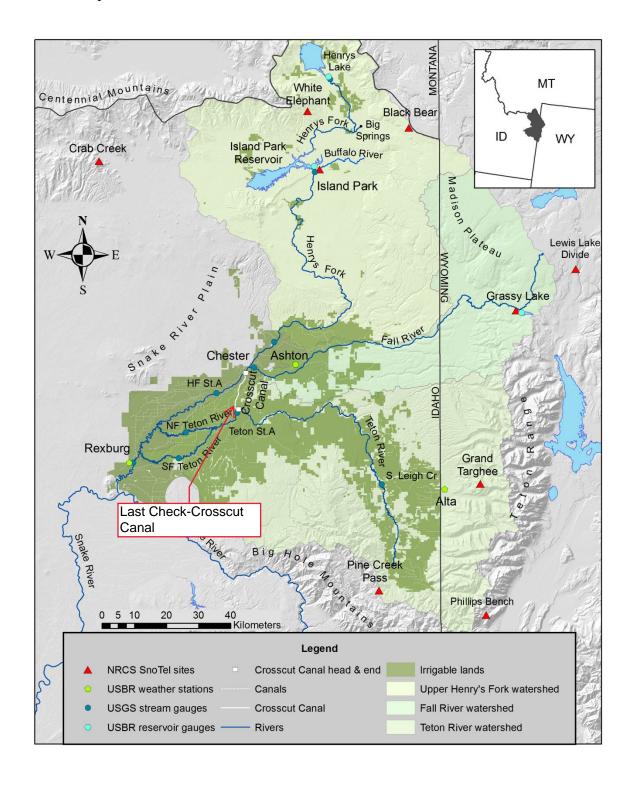
,	1th
Dated this <u>1</u>	day of January, 2024

Southeast Idaho Canal Company

y. Judd Crapo, President

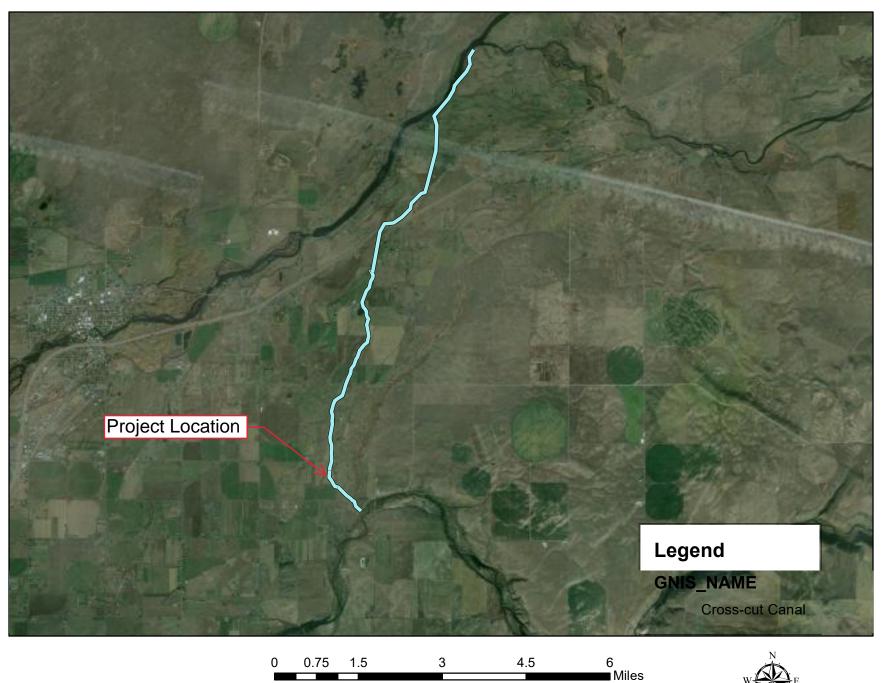
Southeast Idaho Canal Company

By: Aaron Dalling, Secretary



# Attachment B

# **Crosscut Canal**



1 inch = 2 miles

