North Side Canal Company

Water Management, Conservation and Modernization Plan Update

Funding Opportunity Announcement R22AS00105

Old infrastructure

New infrastructure

Applicant: North Side Canal Company
921 N. Lincoln Ave.
Jerome, ID 83338-1860

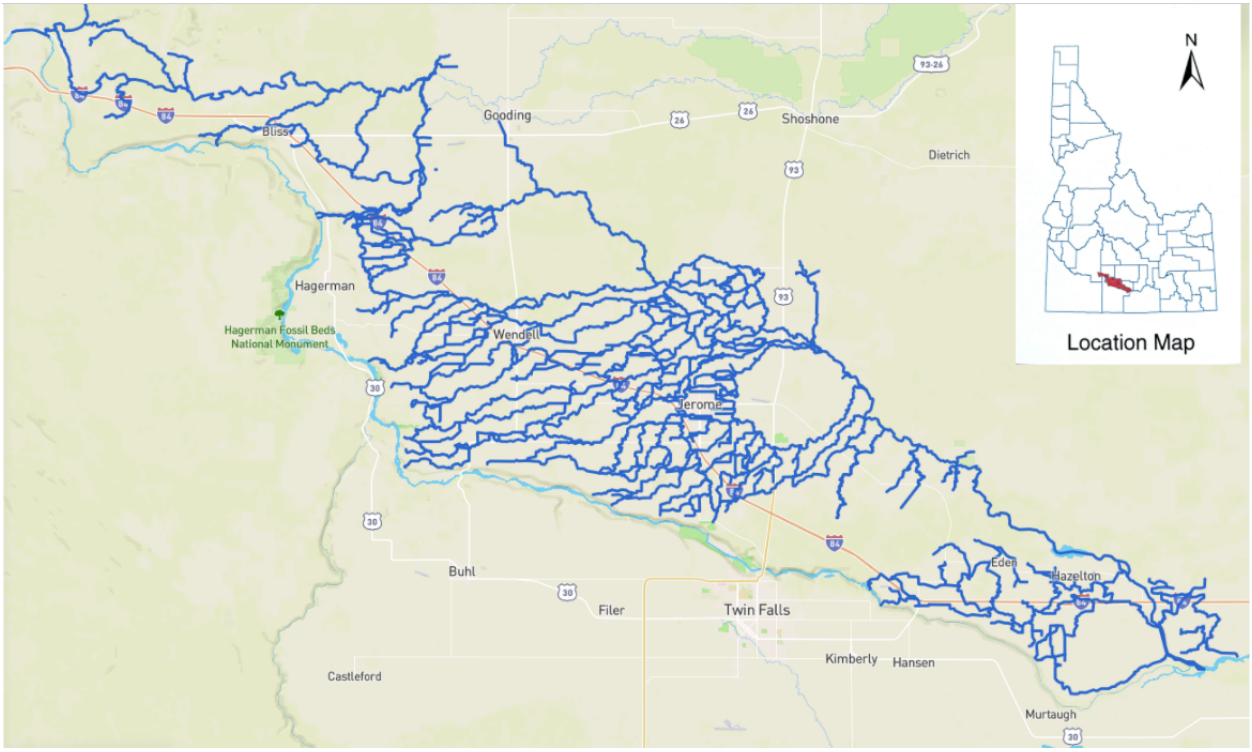
Project Manager: Alan W. Hansten
921 N. Lincoln Ave.
Jerome, ID 83338-1860
awh@northsidecanal.com
208-324-2319

Funding Category:

This request for funding is to update the company's **Water Management and Conservation Plan** which will include a roadmap of near term and long term projects to improve the infrastructure and operations of the canal company.

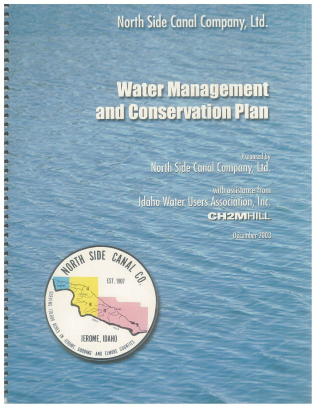
Background

North Side Canal Company (NSCC) owns and operates a network of 900 miles of canals (see Figure 1) used to convey irrigation water to 160,000 acres of farmland between Hazelton and King Hill, Idaho with the main office located in Jerome. NSCC has storage water contracts with the United States Bureau of Reclamation (USBR) in Jackson Lake (Wyoming), Palisades Reservoir (Idaho), and American Falls Reservoir (Idaho), all located on the main stem of the Snake River. This storage water along with natural flow water rights on the Snake River, are diverterted at Milner Dam, near Hazelton, Idaho. The Idaho Department of Water Resources through Water District #1 oversees the administration and accounting of NSCC's storage and natural flow water rights.



(Figure 1)

NSCC is a Carey Act private company that diverted its first water from the Snake River at Milner Dam in 1908 and owns all of the facilities, infrastructure, water rights, and easements on the canal system that will be reviewed for this project. This planning project will update the existing 2003 plan that was completed by CH2M Hill and will be used to guide NSCC in its future planning and project construction activities. With infrastructure that is over 100 years old and the effects of climate change, NSCC has the need to update its Water Conservation and Management Plan (WCMP) with a roadmap of projects that will enable greater conservation of water, define opportunities to develop and/or conserve energy, and make deliveries to shareholders more reliable and efficient. Projects



envisioned to meet these goals include: canal lining/piping, gravity pressure pipelines, canal gate control automation and SCADA, regulating reservoirs, grower education, online tools for growers, and improved water accounting methods, just to name a few. The 2003 plan indicated that only 50% of the water diverted at Milner Dam actually makes it to the farm. Once distributed through the on-farm irrigation system, only 35% of that diverted at Milner Dam is available for the crop. Depending on the weather for any given year, NSCC will divert roughly 1,000,000 acre-feet of water to meet conveyance losses and crop water demand. Just the canal system conveyance loss of 50% alone, means that potentially 500,000 acre-feet of water could be conserved with the strategic implementation of projects that this plan update will begin to define.

Technical Description

Information in the 2003 plan such as company description, water resource inventory, water budget, legal considerations, institutional considerations, and environmental considerations will be reviewed and updated with minimal effort expected. Most of the planning effort will be focused on defining areas for canal improvements, quantifying benefits, and prioritizing projects based on water savings, energy savings, and costs. NSCC is in the process of receiving scopes of work and cost proposals from qualified engineering consultants that have worked with other irrigation entities in the past on water management and conservation plans. NSCC staff will also be working on the plan by compiling existing records and information (GIS, legal, financial, water accounting), field data (conveyance loss measurements, field reviews of existing infrastructure), and plan development administration.

Planned tasks and approach for the project are:

1. Define specific goals, objectives, opportunities, challenges, relationships, and near term projects with stakeholders.
2. Compile existing maps, water conveyance records, GIS data, previous reports/studies, and any other available information that will be helpful in analyzing and developing high-level engineering designs, project strategies, project priorities, project water & energy savings, and cost estimates.
3. Review and analyze compiled information and determine areas within the canal system and the canal company organization that could be modernized/improved.
4. Gather additional field data and review organizational processes that are identified in #3.
5. With knowledge obtained through activities 2-4, the team will review the project areas and begin ranking the potential projects based on water savings, energy savings, water delivery reliability improvement, water conflict reduction, environmental impact, costs, and overall feasibility.
6. The team will develop funding and scheduling strategies for the projects that are determined feasible in task 5.
7. Utilizing the existing plan and information gathered in tasks 1-6, the team will produce an updated Water Management and Conservation Plan following the USBR's outline described in "*Achieving Efficient Water Management, A Guidebook for Preparing Agricultural Water Conservation Plans, 2000"*.

8. The plan's information will be used to perform a "System Optimization Review" if needed for defined larger and more complex projects. Smaller and less complex projects will be selected from the plan based on priority. Funding will then be secured and the projects completed.

A - Association with Reclamation project water supplies

NSCC diverts water from the Snake River, part of the Columbia River Basin whose waters are managed by the USBR. NSCC has storage contracts with the USBR in Jackson Lake, Palisades Reservoir, and American Falls Reservoir in the amount of 859,898 acre-feet annually. NSCC also has natural flow water rights on the Snake River for 4,560 cubic feet per second. Water conservation efforts by NSCC directly benefit the community and the basin as a whole by keeping water in the system longer and allowing for more targeted application of the water supply to mitigate supply issues in southern Idaho. Irrigation water conservation will also allow for more recreation and fishing activities upstream and also aid in maintaining good water quality.

B - Extent to which the completed activity will improve the applicant's ability to modernize their existing water delivery infrastructure

An updated Water Management and Conservation Plan with short and long term projects will provide direction to NSCC stakeholders to systematically upgrade infrastructure where it is most needed and improve water administration and control. While NSCC's staff is mostly focused on the day to day tasks of running the company, a consultant can assist and focus on the big picture, provide structure to the process, and help identify areas where water can be conserved by improved water administration processes, education, system control, canal piping & lining, and constructing other strategic infrastructure within the canal system.

C - Extent to which Federal Funding would promote completion of an activity that might otherwise be delayed or postponed

The funding that this opportunity would provide would help ease the financial burden that the scoping study of the system would incur and also allow NSCC to begin work on the plan immediately and be completed by the end of 2022.

D - Reasonableness of Cost

NSCC is in the procurement stage for consultant services with firms that have helped irrigation districts/canal companies develop water management and conservation plans in the past. Based on review of our 2003 plan and their understanding of NSCC's needs, prospective consultants have indicated that the fees for their services would be approximately $85,000. NSCC staff and board believe that given the size of the canal system and company and the level of effort needed to complete the planning tasks, these are reasonable fees for an

investment in a plan that will help guide the future of the company towards greater water and energy conservation.

E - DOI and Reclamation priorities

Environmental Compliance

No construction or disturbance to any land will occur during the assessment performed by the consultant and NSCC staff. All planning and design activities will be done at a high level and will be conceptual in nature. NEPA and cultural resources will be evaluated when necessary.

Real Property

No property, equipment or intangible property will be acquired with the Federal money awarded.

F - Amount and sources of non-Federal funding

NSCC will be providing in-kind staff labor in support of the consultants activities. NSCC will fund a minimum of $25,000 to match the federal share to pay for the consultant's costs to prepare the plan.

G - Presidential and Department of the interior priorities

Climate Change

Future projects developed by the planning efforts will include pressurized irrigation pipelines that harness potential energy and decrease the demand for electrical energy. Additionally, the piped canals that result from the planning efforts will help conserve water by eliminating seepage and evaporation losses. Conserving water will help with drought resilience as the water not used at the end of the season can be carried over to the next.

Disadvantaged or Underserved Communities

Idaho is a large and mostly rural western state. Due to geography and distance, rural communities often do not have access to the same services that urban residents do. NSCC spans 3 rural counties in which agriculture is the primary industry. NSCC's water distribution is essential to the local agricultural economy that these rural communities rely on. Water conservation projects developed in conjunction with a consultant will help ensure that the water keeps flowing to the local farms and dairies.

Project Schedule

Potential consultants estimate that the planning process will take 6 months to accomplish. According to the NOFO for this grant, the USBR is expected to notify award recipients by May 30, 2022. NSCC is prepared to begin project activities as soon as the grant agreement is

executed and complete the planning project by the end of 2022. Below is a Gantt chart of the estimated project timeline.

Estimated Project Schedule

PROJECT TITLE		WMCP Update		COMPANY NAME	North Side Canal Company
WBS NUMBER	TASK TITLE	START DATE	DUE DATE	PHASE ONE	PHASE TWO	PHASE THREE	PHASE FOUR
				W1 W2 W3 W4 W5	W6 W7 W8 W9	10 11 12 13 14 15 16 17	18 19 20 21 22 23
0	**Proposal reviews and recipient contact**						
0.1	Grant proposal review and anticipated award date (USBR dependent)	4/1/22	5/30/22				
0.2	Grant agreement review and execution (USBR dependent)	5/30/22	7/1/22				
1	**Project planning and goal setting**						
1.1	**Work Begins:** Define objectives, opportunites and goals	7/15/22	7/30/22				
1.2	Engage stakeholders and identify near term projects	7/30/22	8/15/22				
2	**Water conveyance data collection and analysis**						
2.1	Data collection	8/15/22	8/30/22				
2.2	Data compilation and analysis	8/30/22	9/15/22				
3	**Develop and rank future projects**						
3.1	Use data gathered to develop water budget	9/15/22	9/30/22				
3.2	Future Project Identification	9/30/22	10/15/22				
3.3	Rank projects by water savings potential	10/15/22	10/30/22				
3.4	Development of high level cost estimates	10/30/22	11/15/22				
4	**Produce updated WMCP**						
4.1	Start writing the WMCP	11/15/22	11/30/22				
4.2	Finalize reviews and edits	11/30/22	12/15/22				
4.3	Produce the final updated document	12/15/22	12/30/22				

Budget Narrative

The estimated cost for the planning project is $114,000. All of the funds from this grant opportunity would go towards paying for the consultant services . Additionally, NSCC staff would be putting in time assisting with information gathering, project administration and engaging in the tasks outlined earlier in this application. Staff at NSCC that will engage in this project are Jesus Barrera, staff engineer, Kimberly Shulsen, GIS technician, and Alan Hansten, general manager. Based on a 6 month time period, the estimated cost for this project is summarized in the table below. NSCC will pay for all costs above the awarded grant amount.

Item	Time	Total
Consultant	6 Months	$85,000
Staff Engineer's Time	20% of working hours	$16,000
Manager's Time	5% of working hours	$10,000
GIS Technician Time	5%	$3,000

	Grand Total:	$114,000

Conflict of Interest Disclosure

To its knowledge, NSCC does not have any conflicts of interest related to applying and receiving federal funds associated with this funding opportunity.

Single Audit Reporting Statement

NSCC does not intend to spend more than $750,000 or more in Federal funds for this fiscal year.

Certification Regarding Lobbying

NSCC is not requesting more than $100,000 in Federal funding.

Official Resolution

Resolution

The Board of Directors of the North Side Canal Company, Ltd. (NSCC) reviewed this resolution at their regular board meeting on March 24, 2022. Alan Hansten, Secretary/Treasurer of the board informed the directors that a formal resolution was needed to apply for a United States Bureau of Reclamation (USBR) WaterSmart grant to assist with funding for the development of a Water Management and Conservation Plan for the canal system. A quorum of the board was present and voted unanimously in favor of the following resolution:

RESOLVED, North Side Canal Company authorizes Alan W. Hansten, Secretary/Treasurer, to enter into an agreement for USBR WaterSmart grant funding for the development of a Water Management and Conservation Plan for the canal system. Alan W. Hansten, secretary/treasurer has reviewed the grant application to be submitted on behalf of the company and NSCC has the financial capability to meet its obligations under the funding plan. NSCC will work with the USBR to meet established deadlines for entering into a grant or cooperative agreement.

ATTEST: _____
Secretary – Alan W. Hansten

_____
Chairman – Mike Elliott

North Side Soil & Water Conservation District
1441 Fillmore Street, Ste A, Twin Falls Idaho 83301

April 18, 2022

RE: Support of North Side Canal Company's Water Management and Conservation Plan – USBR WaterSmart Grant Application

To Whom it May Concern:

The North Side Soil and Water Conservation District (NSSWCD) supports North Side Canal Company's (NSCC) Water Management and Conservation Plan project and associated WaterSmart grant application to the United States Bureau of Reclamation. We believe that this planning effort will serve NSCC and the community well in helping to define future capital improvement projects within the canal system that will modernize it and lead to greater water and energy conservation. NSSWCD is currently reviewing its financial obligations and may choose to participate monetarily in this project if able to in the near future.

If you have any questions regarding our support of NSCC's project, feel free to contact me at (208) 280-2163.

Sincerely,

Steven Hartley

~~Roy Prescott~~
~~Chairman~~ Vice Chairman
North Side Soil & Water Conservation District