

Bureau of Reclamation WaterSMART
Water and Energy Efficiency Grants
Phase 1 Grant Application
NOFO No. R24AS00052

Winters Creek Canal Company Diversion Modernization Project



Sunrise over the North Platte River, Scottsbluff NE, photo by Jimmy Emerson

Project Applicant

Winters Creek Canal Company
290823 Highland Rd
Minatare, NE 69356
(308) 631-0917

Project Manager

Michael Placke, JEO Consulting Group
2000 Q Street, Suite 500
Lincoln, NE 68503
402-435-3080

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Abbreviations

Winters Creek	Winters Creek Canal Company
The Project	Diversion Modernization Project
NPNRD	North Platte Natural Resources District
NDNR	Nebraska Department of Natural Resources
PRRIP	The Platte River Implementation Program
NPVIA	North Platte Valley Irrigators Association
NSIA	Nebraska State Irrigation Association

Technical Project Proposal

Executive Summary

Constructed in 1889, Winters Creek Canal harnesses the power of the North Platte River to irrigate the farmland around Scottsbluff, Nebraska, the largest population center in Nebraska's panhandle region. The North Platte River courses through Wyoming and Nebraska, driving countless agricultural and recreational activities. Since 1911, Winters Creek Canal Company (Winters Creek) has operated north of the North Platte River, diverting water from the River and from Winters Creek to its appropriators. The 13.5 mile long Winters Creek Canal currently delivers water to 33 users over 3,025 acres, sustaining the area's sugar beet, alfalfa, and corn production. Winters Creek faces significant challenges in providing its users with reliable service because of unpredictable fluctuation in flows due to discharge from neighboring diversions, flood events, and drought. Mitigating shortages and excesses is increasingly difficult. In addition to changing conditions, Winters Creek's diversion is significantly dilapidated; the headgate was installed in the early 1900s and is no longer efficacious. To meet these challenges, Winters Creek proposes the Diversion Modernization Project (the Project) to prevent losses and spills, insure reliable deliveries, and fortify the region's resiliency in the face of climate change. The Project will remove the dilapidated diversion and replace it with an automated, solar-powered headgate with automated controls and precise, continuous measurement. Winters Creek is a small family company with one ditch rider. This project will enable the ditch rider to conduct district maintenance and better control flows during irrigation season with improved infrastructure. This modernization endeavor will enable Winters Creek to minimize spills and waste, maximize its full natural flow water right on the North Platte River, and benefit district appropriators as well as the greater hydrological resiliency of the basin.

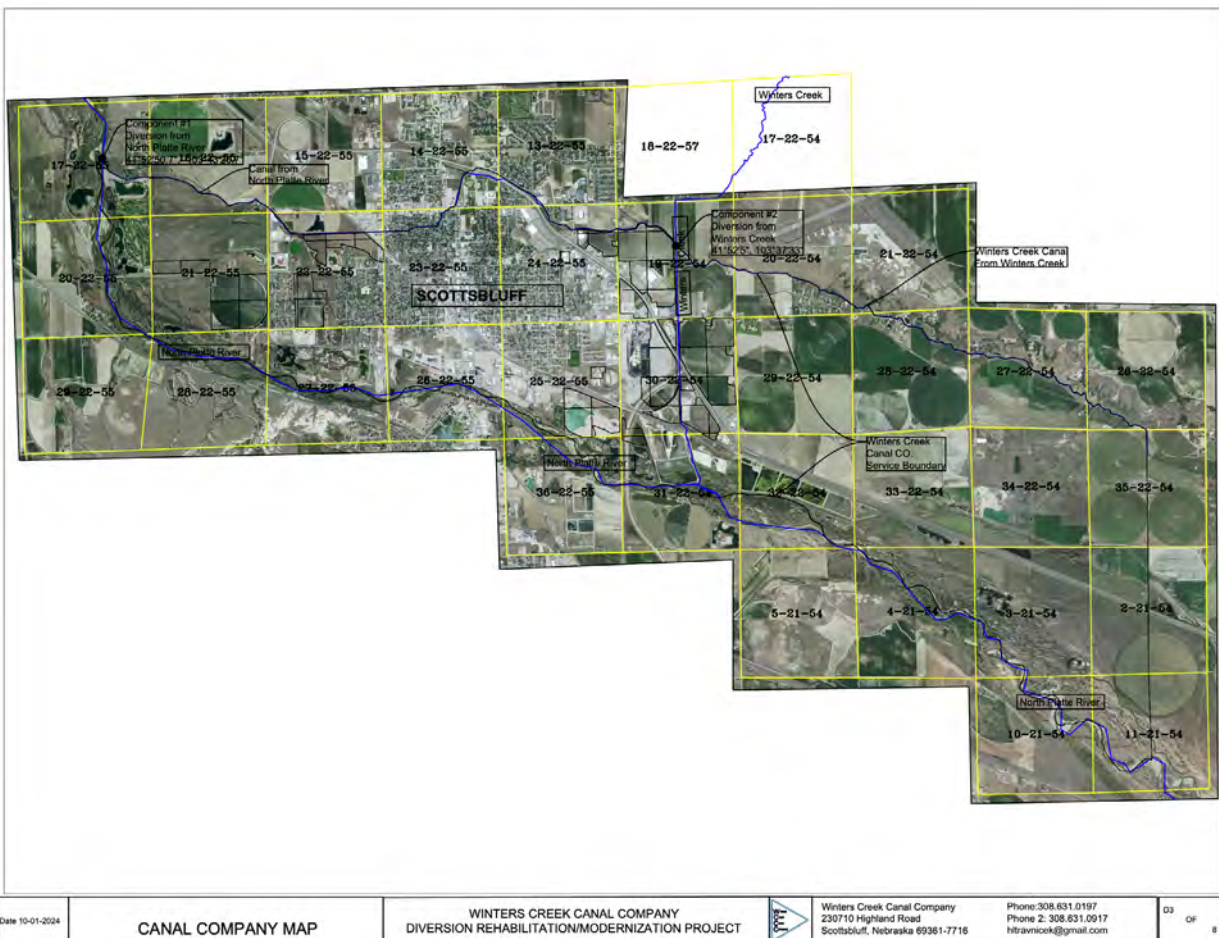
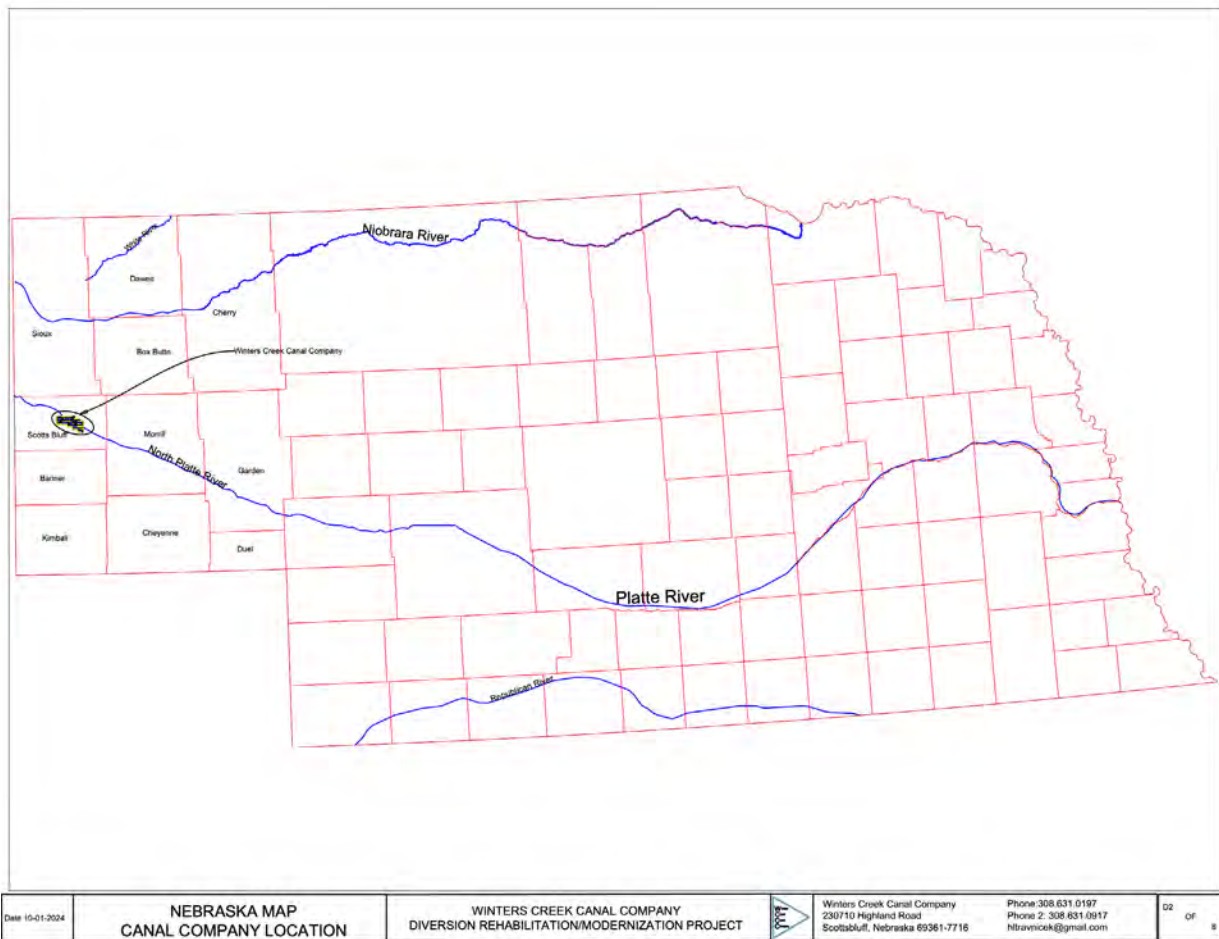
Winters Creek Canal Company aims to begin the Diversion Modernization Project in Spring 2025, with the goal of beginning construction Fall 2026 to be operational by the Spring 2027 irrigation season. Winters Creek Canal Company's partners include the State of Nebraska Department of Natural Resources (NDNR), the Nebraska State Irrigation Association (NSIA), and the North Platte Valley Irrigators Association (NPVIA).

Winters Creek Canal Company is a Category A applicant. None of the proposed activities are located at a federal facility.

Project Location

Winters Creek's diversion structure on the North Platte River is approximately 2.5 miles west of Scottsbluff, NE near Nebraska Highway 26. The diversion structure is located in NE ¼ of Section 17, Township 22N, Range 55W of the 6th Meridian in Scotts Bluff County, Nebraska (Latitude 41°52'50.61"N, Longitude 103°43'20.72"W).

Three maps are provided to show Project location and Winters Creek Canal Company's operational area (see next page and [Appendix A](#)).



Technical Project Description

Project Overview

Winters Creek's existing diversion system was built in the late 1800s and early 1900's and has reached the end of its useful life. The Diversion Modernization Project includes replacement of the diversion dam and the headgate structure located in the North Platte River. The Project includes the following five tasks: the installation of a temporary coffer dam and diversion to bypass river flows, the demolition and removal of existing structures, the construction of the headgate and diversion structures, grading and riprap placement, and seeding and erosion control.

Construction

First, the contractor will divert water into Winters Creek Canal during the irrigation season by constructing a temporary earthen coffer dam across the entire south channel with culvert pipes to allow for a dry work area to install the concrete diversion structure and steel sheet pile overflow weir. The coffer dam will be reinforced with revetment to protect it against overtopping. Water will continue into the Winters Creek Canal to fulfill the Canal Company's obligations and excess water will be spilled back into the river via the existing wasteway structure per normal operating procedures.

Next, the diversion structure will be constructed using sheet piling in the overbank and as wingwalls, with a concrete water control structure that houses two solar powered Rubicon radial gates. The headgate structure abutting the diversion is proposed to utilize sheet piles as wing walls and footings, with a concrete water control structure to house two solar powered gates to manage flows entering into the diversion canal. A gangway to allow passage across the headgate and the diversion structures is proposed, along with riprap inlet and outlet protection to protect the structure from undermining and other failure mechanisms.

Upon the completion of the radial gate installation, the remaining grading adjacent to the structures will take place. Upon completion of the grading and any seeding/final stabilization that cannot be achieved from the south bank, the remainder of the temporary cofferdam will be removed to allow the new headgate structure to control flow into the irrigation canal. Upon completion of both structures, installation of the solar panels and gate controls will occur. The gates will be commissioned and tested to verify functionality of the system and associated controls.

Finally, the contractor will restore the area, seeding and mulching, and providing any other necessary erosion control items such as erosion control blanket, silt fence, and/or straw wattles.

See 10% drawings of the proposed structure by JEO Contracting Group on the Next Page. Full 10% drawings are included as a Project Attachment.

Evaluation Criteria

E.1.1. Evaluation Criterion A – Quantifiable Water Savings

E.1.1.1. – Describe The Amount of Estimated Water Savings

The estimated savings for the entire project are:

Project Savings:	9,528 acre-feet
On farm Savings:	969.92 acre-feet
Total Estimated Savings:	10,497.92 acre-feet

See E.1.1.3 for explanation of these figures.

E.1.1.2. – Describe Current Losses

The conserved water will be returned to the stream at the various diversion points, by not over-diverting water. Conserved water remains in the stream for use by downstream appropriators thereby reducing demands on upstream storage water and or hydrologically connected groundwater sources. Conserved water remaining in the stream will benefit fish and wildlife species along the North Platte River and endangered species in the Central Platte of Nebraska.

E.1.1.3. – Describe The Support/Documentation Of Estimated Water Savings

Winters Creek's Project will install Rubicon gates on the canal diversion from the North Platte River and the secondary canal diversion from Winters Creek itself, providing instantaneous measurement and adjusting flows accordingly, eliminating any over-diversion of water that would result in a spill. The flow in the canal is currently measured 0.75 miles downstream from the North Platte River diversion at Winters Creek's measuring device. If there is water in excess of their order of appropriation, the excess is spilled back to the river at a spillway located .63 miles downstream, or adjustments have to be continually made at the diversion point. Travel time for adjustments is estimated at .75 hours from the time the adjustment is made at the headgate until it reaches the measuring device. With the travel time and constant variations in flows in the River due to irrigation returns and changing conditions, accurate reregulation of the flows is not always possible or precise. The diversion from Winters Creek is measured about 100 feet downstream at the Department of Natural Resources gaging station. Travel time for adjustments is quick, making it easier to make changes.

The primary issue with the diversion from Winters Creek is the constantly fluctuating flows due to field irrigation returns, upstream returns, releases from other irrigation districts, and local rain events. To keep the flow regulated within the range of Winters Creek's water rights would require constant, manual observation of flows. Excess flows from the canal diverting from Winters Creek are spilled back to the river at the first spillway located 2.5 miles downstream or at the end of the canal located 4.5 miles downstream. According to the District's operations staff, the amount of water diverted in excess of their water right has been as high as 179 cubic feet per second (cfs) combined for both diversions, during flood events. Average daily spills are 35 cfs, caused mainly by

fluctuations in the flow of the River and creek, and the travel time for diversion adjustments.

Winters Creek's Project will eliminate spills by 75% and increase water savings by 9,528 acre-feet/year, significantly improving water use efficiency. Losses deriving from the Winters Creek Canal diversion's aging infrastructure are calculated from Nebraska Department of Natural Resources (NDNR) records for the Winters Creek Diversion from both the river and the creek, for the period 1995-2019 (25 years). There were 4,575 days that the canals were diverting water, and of those 4,575 days, 946 days (20.68%) had average daily diversions in excess of their natural flow water rights. In turn, these excessive diversions cause Winters Creek to spill water at their spillways and/or make multiple adjustments at the diversion to divert below its water right in subsequent diversions. This approximation does not take into account the days their order was less than their water rights, and spills were occurring due to their inability to accurately regulate the flows at their diversion points.

The estimated water savings was derived from NDNR records for average daily diversions into Winters Creek's canals from both the river and creek diversions. During the aforementioned 25-year period, Winters Creek exceeded its water right on 946 days with a total exceedance of 33,435 cfs or an average daily required spill of 35 cfs or 69.4 acre-feet. Winters Creek averages 183 days of operation per year for a total annual spill of 12,704 acre-feet. With the implementation of the Project, control of the diversion into the canals will be greatly improved since a measurement made at the river and creek diversion gates will eliminate the travel time to the current point of measurement. As a result, Winters Creek conservatively estimates that spills will be reduced by 75% for a savings of 9,528 acre-feet/year.

Current losses or spills go back to the North Platte River through the spillway located .63 miles downstream of the river diversion, 2.5 miles downstream of the creek diversion, or at the end of the 13.5-mile-long canal where they are also released back to the river. While current losses could be utilized by the next senior downstream appropriation, the timing of the excesses that are spilled back to the river can negatively impact the downstream appropriator if the water is not available at the appropriator's diversion when adjustments are being made, causing a shortage in divertible flow for the appropriator. If the downstream appropriator also has storage rights, they may call for the release of storage from the Federal reservoirs many miles upstream to make up the diversion requirement. By the time the storage water reaches the downstream appropriator, the spills from the Winters Creek canal may be available, causing a waste of the storage water. As a result, better management by Winters Creek' causes less storage water waste as well as increased water use efficiency for district appropriators.

Table 1
Winters Creek Canal Company - Project Water Savings
Estimated Water Savings from Compiled Data from Nebraska Department of Natural Resources

	Total CFS of Spill	Average Daily Spill - cfs	Average Days/Year	Average Annual Spill - cfs	Average in Acre-ft.	Savings @ 90% in Acre-ft.
Data Period: 1995-2019 (25 years)	33,435.00	35.50	183	6,405.00	12,704.00	3,748.00

This table compiles data from 4,575 Total Days, with 946 days exceeding Winters Creek's 87.51 cfs water right, totalling 20.68% of days exceeding that water right.

***Address The Following According To The Type Of Infrastructure Improvement
You Are Proposing For Funding: Irrigation Flow Measurement***

(a) How have average annual water savings estimates been determined? Please provide all relevant calculations, assumptions, and supporting data.

According to NDNR diversion records from 1995-2019, Winters Creek exceeded its water right on 946 of 4,575 days of operation. The total loss over the 946 days was 33,435 cfs, or an average daily required spill of 35 cfs or 69.4 acre-feet. Winters Creek averages 183 days of operation per year for a total annual spill of 12,704 acre-feet. With the installation of Rubicon gates, Winters Creek anticipates a 75% reduction in losses, resulting in a savings of 9,528 acre-feet/year.

The calculation (in rounded up figures) is:

$33,435/946 \text{ days} = 35 \text{ cfs average per day} \times 183 \times 1.9835 = 12,704 \text{ acre-feet} \times 75\% = 9,528 \text{ acre-feet savings.}$

See Table 1 on previous page.

b) Have current operational losses been determined? If water savings are based on a reduction of spills, please provide support for the amount of water currently being lost to spills.

Current operational losses have been determined with NDNR diversion data from 1995-2019. Of the 4,575 days of operation, NDNR logged 946 days in which the District diverted above its water right, for a total spill of 33,435 cfs, for an average daily required spill of 35 cfs or 69.4 acre-feet.

The calculation (in rounded up figures) is:

$33,435/946 \text{ days} = 35 \text{ cfs average per day} \times 183 \times 1.9835 = 12,704 \text{ acre-feet} \times 75\% = 9,528 \text{ acre-feet savings.}$

(c) Are flows currently measured at proposed sites and if so, what is the accuracy of existing devices? How has the existing measurement accuracy been established?

The measurement of flows into Winters Creek Canal is calculated using a USGS rated section of the canal. After the section rated discharge table is established the section is periodically measured to make adjustments to the discharge table using a shift change, which can be either a plus or minus. USGS states that a good to fair rated section provides for an accuracy of 10-15% of the true value. The Rubicon gates provide an accuracy of 2.5% and will provide the measurement at the point of diversion from the river regardless of fluctuations in the river itself.

(d) Provide detailed descriptions of all proposed measurement flow devices, including accuracy and the basis for the accuracy.

The Rubicon FlumeGate and SlipMeter gates will provide flow measurement with an accuracy of plus or minus of 2.5%. The FlumeGate M-626-620 model's accuracy was verified by Manly Hydraulics Laboratory in August 2005. The SlipMeter 24" model was verified by Manly Hydraulics Laboratory in April 2011.

(e) Will annual farm delivery volumes be reduced by more efficient and timely deliveries? If so, how has this reduction been estimated?

The stabilization of flows in Winters Creek Canal will make deliveries more reliable, which in turn supports conversions from gravity irrigation systems to more efficient center pivot irrigation systems. Winters Creek estimates that delivery volumes will be reduced due to the efficiency of on-farm systems.

[See E.1.4. Evaluation Criterion D — Complementing On-Farm Irrigation Improvements](#) for on farm reduction estimates.

(f) How will actual water savings be verified upon completion of the project?

Actual water savings will be reflected in Winters Creek's Department of Natural Resources diversion records. The difference will be evident in DNR diversion records after the project is completed, since that is how the spills were originally estimated.

E.1.2. Evaluation Criterion B – Renewable Energy

E.1.2.1. Subcriterion No. B.1: Implementing Renewable Energy Projects Related To Water Management And Delivery

All relevant components are described in E.1.2.2.

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

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

(a) 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.

Rubicon's energy requirement for the gates the Project has selected is 160 watts. Motors would only be in use during adjustments, which Winters Creek estimates to be 50% of a 24 hour day. Winters Creek estimates 351.36 kwh per year would come from solar power instead of power sources that have a carbon footprint due to Project improvements.

Calculation: 160 watts x 12 hours = 1.92 kwh/day. 1.92 kwh x 183 day irrigation season = 351.36 kwh

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

In addition to energy saved with the SCADA system, the project will result in fewer miles driven and a reduction in greenhouse gas emissions. See (f) under this criteria for more information.

(c) - (e)?

Not applicable to project.

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

With the operation of the automated diversion, less vehicle travel will be required in fine tuning adjustments at the canal and creek diversions, thus reducing greenhouse emissions from the operator's vehicle. Currently, Winters Creek's ditch rider estimates they are making 3 trips per day to the river diversion dam and the creek diversion to regulate their discharge. Round trip to the river diversion dam is 12 miles and 7 miles between the river diversion and the creek diversion for a total of 19 miles. With the installation of the Rubicon gates and SCADA system, Winters Creek will be able to monitor and control the amount being diverted from the office and only make 1 trip a day to the site to clear debris. Winters Creek diverts water for approximately 183 days each year. It is estimated that 2 of the 3 trips will be eliminated with the improvements saving 3,294 miles and 329 gallons of gasoline per year, resulting in a reduction of 2.92 metric tons in emissions. See calculation on next page.

Calculation: 19 miles x 183 days x 2 = 3,294 miles saved / 10 mpg = 329 gallons saved x .008887 = 2.92 metric tons

(g) 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).

The Project will operate the diversion gates and SCADA system via a small-scale solar power system, avoiding the creation of further demand for power generated by fossil fuels.

E.1.3. Evaluation Criterion C – Sustainability

E.1.3.1. Enhancing Drought Resiliency

(a) Does the project seek to improve ecological resiliency to climate change?

Playing a role in strengthening local ecological resilience is a core motivating factor for Winters Creek's Diversion Modernization Project. Climate change threatens the communities and ecosystems dependent on the North Platte River by causing increased variability in precipitation and subsequently irregular river flows. By steadying river flows, the Project supports broader ecosystem health by assuring water provision and mitigating flood and drought events.

The Aquatic and fluvial habitats are vulnerable to changing river levels as consistent water supply is crucial to preserving biodiversity and encouraging reproduction. Stable flows reinforce the integrity of ecosystems like those along the North Platte River, facilitating crucial natural processes like nutrient cycling, sediment transport, and floodplain connectivity.

Ensuring water supply aids in the mitigation of climate change effects by strengthening riverbank vegetation. Steady river flows foster growth along riverbanks which prevents erosion, which is critical to flood prevention and floodplain connectivity. Riverbank vegetation also acts as a carbon sink, absorbing and storing greenhouse gasses, improving area resilience to climate change.

(b) 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.)

The Project will change annual water distribution; water will not stay in the system for longer periods of time, but will be better regulated. The Project will stabilize the flows in the river and the canal, providing for a more stable flow downstream. This stabilization will help in maintaining water levels which will aid in avoiding increases in water temperatures.

(c) 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 recover plan or conservation plan under the Endangered Species Act (ESA).

This initiative will stabilize flows, aiding in the conservation of a large number of waterfowl species. Winters Creek's Project is in step with larger conservation efforts in the area, such as the Platte River Implementation Program and the efforts of the neighboring North Platte Wildlife refuge. Winters Creek's service area is adjacent to the North Platte Wildlife Refuge, and is thereby part of the same water system. Established in 1916 for the preservation of migratory birds' breeding grounds, the Refuge's species list is currently 228 birds long. The American Bird Conservancy has named Lake Minatare, one of the four Bureau of Reclamation projects in the Refuge, "globally significant" wintering area for waterfowl. Species listed as species of concern by the The U.S. Fish and Wildlife Service include long-billed curlew, red-headed woodpecker, dickcissel, and the northern harrier. The piping plover and the least tern, federally endangered species found in the area, benefit from stable

fluvial habitats as they rely on riverine sandbars for breeding.

The Platte River Implementation Program (PRRIP), sponsored by the Department of Interior, water users, and the States of Colorado, Wyoming, and Nebraska, is actively working to enhance the well-being of threatened and endangered species. PRRIP's water projects, designed to support the specific needs of species that rely on the Platte River, involve allocating a percentage of flows during specific months for storage in environmental storage accounts upstream and downstream of Winters Creek. This initiative aims to ensure more consistent river flows downstream of Winters Creek's diversion, thereby reducing shortages for downstream appropriators and preventing calls for storage waters from upstream federal reservoirs. By increasing carryover in federal reservoirs, both the federal and downstream reservoirs experience a boost in water supply, benefiting aquatic ecosystem health.

(d) Please describe any other ecosystem benefits as a direct result of the project.

The Project is designed to improve water usage and management by stabilizing canal flows, which will provide more reliable water delivery to appropriators. It also aims to reduce spills in Winter Creek's service area. By promoting water efficiency in the North Platte River, the Project seeks to minimize spills, thus enhancing water availability to support local ecosystems, particularly during drought events. This strategy helps ensure a consistent water supply for local communities and ecosystems.

E.1.3.2. Addressing A Specific Water And/Or Energy Sustainability Concern(s)

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

(a) 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.

The Project will mitigate shortages due to drought or over-diversion. Data shows that Winter Creek's water system is stressed: Since 2002, the North Platte River basin has experienced water shortages in nine out of 21 years (43%). Water supplies have varied from 50% to 80% of a full supply.

(b) 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.

Not applicable to project.

(c) 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?

The Project will regulate canal and river levels by reducing over-diversion. Stabilizing the water flows in the river by not over-diverting will benefit downstream appropriators and reduce their demand on both storage water and groundwater sources to make up for shortages in surface water supplied. The North Platte Natural Resources District (NPNRD) is considered over-appropriated

under state law. The NPNRD has an integrated management plan in place that regulates the use of groundwater (See [Appendix E](#)).

(d) 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 system, or used to meet another intended use.

Water conserved by Winters Creek's modernization effort will benefit downstream appropriators and fluvial habitats down the Platte River. Reducing shortages will lessen the demand for storage water, leaving more water in the system.

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

The Project does not propose an additional mechanism outside of the construction proposed in the Technical Project Proposal.

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

Quantifiable water savings are listed in [E.1.1](#).

E.1.3.3. Other Project Benefits

(1) Combating the Climate Crisis

Please describe how the project will address climate change, including the following:

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

Winters Creek's Project supports E.O. 14008 by combating the climate crisis in multiple ways. The Project will stabilize flows in both the North Platte River and Winters Creek, reducing stress on water management, preparing for extreme weather events, and ensuring water availability for the biodiverse Platte River ecosystem. Better management allows for fewer supply shortages and storage water releases. Stable river and creeks flows support healthy habitats for plants and animals, water availability being a key factor in ecosystem resiliency in the face of changing climate conditions. Importantly, the Project's improved infrastructure would steady water levels, reducing flood and drought risk. This is particularly vital given the rise in extreme weather events driven by climate change. By effectively managing flows in the North Platte River, local communities can better prepare for and respond to these challenges. Stable river flows also help conserve water resources, leading to more efficient management and fewer spills. This is essential for areas along the North Platte River facing water scarcity and increased demand due to climate change. Additionally, stable flows facilitate carbon sequestration. Healthy river systems serve as carbon sinks, capturing and storing carbon dioxide from the atmosphere. By stabilizing flows along the North Platte River, we also support the growth of vegetation along the banks, which further aids in carbon absorption and storage. The advantages of river flow stabilization contribute to reducing greenhouse gas emissions and addressing climate change.

(b) Does this proposed project strengthen water supply sustainability to increase resilience to climate change?

The Project strengthens water supply sustainability by reducing calls for storage water from federal reservoirs, bolstering the area's preparedness for the impacts of climate change. By helping to stabilize North Platte River flows, the Project is part of a patchwork of initiatives seeking to ensure a consistent supply of water, allowing communities along the Platte to have a reliable source for irrigation and drinking water. Stabilizing flows helps improve water quality, as adequate levels and drainage dilute pollutants and minimize contaminants. Clean water is vital for both human consumption and ecosystem health. Furthermore, communities can better manage water resources, maximizing water usage, with improved infrastructure. More efficient water management will allow local reservoirs and storage facilities to accumulate water reserves, ensuring supply during drought events, which are increasing in frequency.

(c) Will the proposed project establish and utilize a renewable energy source?

The power source for the proposed Rubicon gates will be a 12 volt battery pack and a solar charging system. The gates' motion and water measurement uses a solar-powered battery pack which is supported and recharged by solar panels.

(d) Will the project result in lower greenhouse gas emissions?

There are four primary ways in which the Project will help lower greenhouse gas emissions. First, automating diversion needed to regulate flow will reduce the miles driven each day by Winters Creek staff to manage the diversions, and therefore greenhouse gasses emitted by Winters Creek vehicles. Second, by stabilizing flows along the North Platte River, the project will allow for more consistent and reliable hydropower generation along the river. This will reduce reliance on fossil fuels for electricity production, thereby reducing greenhouse gas emissions. Third, this project will result in a more reliable and consistent water supply that will enable local farmers to optimize their irrigation systems and ensure crops receive the necessary amount of water without excess spills. Efficient irrigation reduces the need for energy-intensive practices like pumping and transporting water, thus lowering greenhouse gas emissions associated with energy consumption. Fourth, this project will help ensure adequate flow levels in the North Platte River which will help dilute pollutants and flush out contaminants, reducing the need for extensive water treatment processes. Water treatment and purification require energy intensive processes, which can contribute to greenhouse gas emissions.

(2) Disadvantaged or Underserved Communities

Please describe how the project supports E.O. 14008 and E.O. 13985 including:

(a) Does the project directly service and/or benefit a disadvantaged or historically underserved community?

The Project directly benefits disadvantaged communities by ensuring a stable and clean water supply for the agricultural sector. Unpredictable water deliveries and flooding can adversely affect struggling farmers, hindering their ability to sustain their livelihoods and limiting access to health and

education opportunities. Winters Creek's Project aims to reduce variability in farming conditions, resulting in better crop yields and improved economic security.

(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.

In the 2022 census, the area served by Winters Creek Canal Company had a median household income of \$46,855, 65% of the state median household income, \$71,722. According to Massachusetts Institute of Technology's Living Wage Calculator, which is updated annually according to census data and new economic analyses, the average annual salary for farming in Nebraska is \$40,750, and significantly less than the post-tax income required for a household of two adults and two children, \$66,826, let alone one adult and one child, \$59,471.

(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.

The community served by Winters Creek's Project meets the underserved definition in E.O. 13985 in that it is a population living in and bound to a rural area. The appropriators of Winters Creek Canal Company are a geographic community far from urban economic centers and tied to the land they farm. The Project provides farmers with more dependable access to water, thereby lessening precarity in the local agricultural sector.

(3) Tribal Benefits

Please address the following, (a) - (c), if applicable.

Not applicable to project.

(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?

The Project will help avoid excessive releases of storage water from the Bureau of Reclamation facilities on the North Platte River in Wyoming. This will leave more water in carryover storage, reduce instances of ownerships running out of storage water, and avoid calls for regulation upstream of the federal reservoirs in Wyoming, as required by Wyoming water law and the U.S. Supreme Court Modified North Platte Decree.

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

The Project will support agricultural water users within the North Platte basin by stabilizing canal and river flows, reducing unnecessary spills, and enhancing water delivery to irrigators. Environmental benefits will arise from this stabilization, aiding aquatic ecosystem health. In turn, aligned recreational activities such as fishing, bird watching, and canoeing will also be positively affected. Additionally, stabilizing river flows along the North Platte River will benefit downstream hydroelectric generators, like the Kingsley Dam on Lake McConaughy, by providing a consistent water supply to the turbines. This will facilitate reliable and uninterrupted power generation, allowing them to operate at optimal efficiency.

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

The Project benefits the North Platte Natural Resources District's larger sustainability initiatives. The hydraulically connected alluvial aquifer which provides water to the entire NPNRD is considered over-appropriated by the Nebraska Department of Natural Resources. Consequently, the NPNRD is striving to adjust its water usage to sustainable levels. By stabilizing river flows and preventing over-diversion from Winters Creek, the Project will alleviate shortages for downstream water users who rely on groundwater wells in times of scarcity.

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

In years with limited water supply, tensions rise as water users in the North Platte River Basin encounter more frequent and severe shortages, closely tied to stringent regulation of water rights. Historical litigation between Nebraska and Wyoming has resulted in U.S. Supreme Court decrees, including *Nebraska v. Wyoming*, 515 U.S. 1 (1995), and *Nebraska v. Wyoming*, 507 U.S. 584 (1993), based on equitable apportionment outlined in the Court's 1945 opinion. Past overuse of commingled water supply by the NPNRD has led to legal action by downstream surface water projects. Winters Creek Canal Company aims to play its part in easing area disputes by providing accurate measurement and equitable distribution, decreasing the likelihood of future conflicts within the North Platte River Basin.

E.1.4. Evaluation Criterion D – Complementing On-Farm Irrigation Improvements

(1) Describe any planned or ongoing projects by farmers/ranchers that receive water from the applicant to improve on-farm efficiencies

- (a) Provide a detailed description of the on-farm efficiency improvements.*
- (b) Have the farmers requested technical or financial assistance from NRCS for the on-farm efficiency projects, or do they plan to in the future?*
- (c) If available, provide documentation that the on-farm projects are eligible for NRCS assistance, that such assistance has or will be requested, and the number or percentage of farms that plan to participate in available NRCS programs.*
- (d) Applicants should provide letters of intent from farmers/ranchers in the affected project areas.*

Winters Creek currently has two on-farm improvement projects. Project #1 will replace gravity irrigation on 126 acres to a center pivot irrigation system. Project #2 will eliminate 1.2 miles of open earthen lateral and 2.3 miles of old underground pipe through residential and commercial properties within the city of Scottsbluff, Nebraska.

The locations within the District are shown on in [Appendix A](#), Drawing 5 (DISTRICT ON-FARM PROJECT LOCATION). Drawing 6 (ON-FARM PROJECT #1) and Drawing 7 (ON-FARM PROJECT #2) shows more detail for the projects.

The farm does not receive NRCS assistance and does not have eligibility documentation available at this time.

Yes, Winters Creek has letters of intent from the farmers attesting that they are ready to move forward with the on-farm improvements they have planned. See [Appendix B](#) for Letters of Commitment and Support.

(2) Describe how the proposed WaterSMART project would complement any ongoing or planned on-farm improvement.

- (a) Will the proposed WaterSMART project directly facilitate the on-farm improvement? If so, how? For example, installation of a pressurized pipe through WaterSMART can help support efficient on-farm irrigation practices, such as drip irrigation. OR*
- (b) Will the proposed WaterSMART project complement the on-farm project by maximizing efficiency in the area? If so, how?*

The proposed WaterSMART project will complement two on-farm improvements. Enhanced control and management of the canal diversion will significantly stabilize flows, ensuring reliable delivery to center pivots and preventing shutdowns caused by flow loss.

(3) Describe the on-farm water conservation or water use efficiency benefits that are expected to result from any on-farm work.

- a) Estimate the potential on-farm water savings that could results in acre-feet per year. Include support or backup documentation for any calculations or assumptions.*

Project #1 is a planned center pivot with swing-arm conversion from gravity to pivot irrigation on 126 acres that is estimated to save approximately 178.92 acre-feet of water annually at the diversion point. Net irrigation requirements in Scotts Bluff County, Nebraska, is 14 inches per year. A gravity irrigation system is, at best, 55% efficient. A center pivot system is 87% efficient at meeting the irrigation requirement. The majority of the earthen canal systems in the service area are 55% efficient. Calculations are as follows:

Gravity system $[(14 \text{ inches}/55\%)/55\% = 46.3 \text{ inches}$ or a 3.86-acre-foot diversion requirement]

Center pivot system $[(14 \text{ inches}/87\%)/55\% = 29.26 \text{ inches}$ or a 2.44-acre-foot diversion requirement]

Savings per acre $[3.86 - 2.44 = 1.42 \text{ acre-foot/acre}]$ $[1.42 \times 126 \text{ acres} = 178.92 \text{ acre-feet}]$ per year at the point of diversion

Project #2 is a joint project between Winters Creek Canal Company, Western Sugar Cooperative and the City of Scottsbluff. The plan is to eliminate 1.2 miles of earthen lateral and 2.3 miles of old underground pipe through residential and commercial properties located within the City of Scottsbluff, Nebraska. The delivery to lands served by this facility will be replaced with a pump and pipeline from Western Sugar Cooperative's holding pond that receives water from Winters Creek. The lands served by the delivery are owned by Western Sugar Cooperative. A conservative estimate of the annual savings ranges between 435.54 and 791 acre-feet/year.

The Winters Creek Canal Company's water delivery system operates on the north side of the North Platte River in Scotts Bluff County, Nebraska. The Company's entire system runs through sandy loam soils that have a large effect on their system losses. Since Winters Creek is an aged, small system, it does not have many measuring devices to record diversions and deliveries from which to calculate system efficiencies. Pathfinder Canal Company, which is a large district located in the same area as Winters Creek, operates through similar soil types and has documented an average water loss in its earthen laterals of 1 cfs/mile. Calculations are as follows:

$(1.0 \text{ cfs} \times 1.2 \text{ miles open lateral} = 1.2 \text{ cfs}$ or 2.38 acre-feet $\times 183\text{-day irrigation season} = 435.54 \text{ acre-feet}$.

Because the water for these lands will no longer be diverted from the river the full savings would include the losses to deliver the water to the lateral headgate with a system efficiency of 55%. $435.54 \text{ acre-feet}/55\% = 791 \text{ acre-feet}$.

(4) Please provide a map of your water service boundaries.

Maps of Winter's Creek Canal Company's water service boundaries, as well as Drawings 1-7 are included in [Appendix A](#).

E.1.5. Evaluation Criterion E – Planning and Implementation

E.1.5.1. Subcriterion No. E.1.: Project Planning

(1) 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:

- (a) 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.*
- (b) 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).*
- (c) 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).*

Winters Creek Canal Company is a non-federal contract entity with no supplemental storage water rights. Winters Creek is not required to have a Water Conservation Plan or System Optimization Review. A WaterSMART Basin Study has not been conducted for the North Platte River Basin. The NDNR does have a Drought Contingency Plan in place. Winters Creek, as well as most surface water districts in the area, were part of developing the Drought Contingency Plan which includes implementing projects that conserve water and/or improve water management. Specific projects, however, are not mentioned in the NDNR Drought Contingency Plan. Winters Creek is also a member of the NPNRD's Hazard Mitigation Plan which addresses several types of hazards, including flooding. See [Appendix E](#) for NDNR Upper Platte River Drought Contingency Plan and NPNRD Hazard Mitigation Plan.

E.1.5.2. Subcriterion No. E.2.: Readiness To Proceed

(a) Identify and provide a summary description of the major tasks necessary to complete the project. Note: please do not repeat the more detailed technical project description provided in Section 1.3; this section should focus on a summary of the major tasks to be accomplished as part of the project.

Winters Creek has received a funding commitment from the State of Nebraska Department of Natural Resources, and plans to begin construction on the Project in Fall 2026. The Project will consist of the construction and refurbishment of Winters Creek's river and creek diversions, replacing their headgates, overflow weir, and diversion structure. The District expects the Project to be completed by June 1st 2027 to allow for improved use for the 2027 irrigation season.

(b) Describe any permits that will be required, along with the process for obtaining such permits.

Winters Creek's Project requires the following permits:

- A Categorical Exclusion (Cat-Ex) document following guidance from the Bureau of Reclamation will be required to comply with the National Environmental Protection Act (NEPA).
- A United States Army Corps of Engineers (USACE) Clean Water Act (CWA) 404 Permit – submission of application upon finalization of design footprint. We anticipate this project will be permitted under a Nationwide Permit (NWP), specifically NWP 3(a). The permit application will be submitted to the USACE Omaha Regulatory Office.
- A NPDES Construction Stormwater – submission of application during final design process. A construction stormwater permit (CSW) will be obtained through the Nebraska Department of Environment and Energy (NDEE). This will include development of a Stormwater Pollution Prevention Plan (SWPPP) to specify the erosion control measures included in the contract documents.
- A Local Floodplain – submission of application with final design. The permit application is provided to the local jurisdiction, Scotts Bluff County, with certification of meeting the local floodplain permitting requirements.

(c) Identify and describe any engineering or design work performed specifically in support of the proposed project.

A topographic survey was completed to determine the existing dimensions and grades of the existing structure and adjacent terrain. Conceptual designs and budgetary cost estimates were prepared for the removal and re-construction of the headgates and concrete weir structure. Further planning and design will commence after the announcement of award results.

(d) Describe any new policies or administrative actions required to implement the project.

Not applicable to project.

(e) Please also include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.

Milestones associated with the Project Schedule above include:

Design Process - Spring 2025 through Spring 2026; Conclusion of Permitting and Commencement of Bidding Process - Through Spring 2026; Project Contractor Selected - By June 1 2026; Mobilization - By September 30 2026; Construction and Installation (100%) - By May 30 2027; Infrastructure Ready for Irrigation Season - June 1 2027.

Winters Creek Canal Company - Project Schedule																															
	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Jul-25	Aug-25	Sep-25	Oct-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-25	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27
Survey																															
Preliminary Design																															
Final Design																															
Permitting																															
Bidding																															
Contracting																															
Construction																															

E.1.6. Evaluation Criterion F – Collaboration

Please describe how the project promotes and encourages collaboration. Consider the following:

(a) 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?

The Nebraska Department of Natural Resources (NDNR) is a supporter and primary funding partner for the proposed project. The North Platte Natural Resource District (NPNRD) is a non-funding partner that is in support of the proposed project. The Nebraska State Irrigation Association (NSIA) is providing in-kind support to assist water districts, including Winters Creek, with securing funding assistance for improving water management and efficiencies in their systems and aiding in grant writing efforts. The North Platte Valley Irrigators Association (NPVIA) is a non-funding local supporter of the project and they are providing in-kind assistance with grant writing.

(b) What is the significance of the collaboration/support?

The NDNR will provide financial assistance and support the project as it contributes to goals identified in the NPNRD Drought Mitigation and Hazard Mitigation plans (See [Appendix E](#)). The NPVIA is a local association of water districts and canal companies that work to assist member districts and others with issues relating to their operations. The NSIA is a statewide association of water districts, public power districts, canal companies, reclamation districts, and individuals working to support surface water irrigation in Nebraska. The support of these bodies is significant and attests to the importance of the Project on a local and state level.

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

Yes, Winters Creek's Project will demonstrate the possibility of infrastructure improvement, adding to a larger movement toward modernization of water appropriation and conservation systems in the state.

(d) Please attach any relevant supporting documents (e.g., letters of support or memorandum of understanding).

See attached letters of support and commitment in [Appendix B](#).

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

State the percentage of non-Federal funding provided using the following calculation: Non-Federal Funding / Total Project Cost.

\$1,632,312.00 (Non-Federal Funding Amount) / \$3,258,750 (Total Project Cost) =
50.1% Non-Federal Funding

E.1.8. Evaluation Criterion H – Nexus To Reclamation

Describe the nexus between the proposed project and a Reclamation project or Reclamation activity. Please consider the following:

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

Winters Creek Canal Company does not have a federal Water Service Contract.

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

Winters Creek is a non-federal contract entity and does not have any supplemental storage water supply, relying strictly on its direct flow rights to supply water to its appropriators.

(c) Will the proposed work benefit a Reclamation project or activity?

Reclamation's North Platte Project, which includes thirteen districts and canal companies in both Wyoming and Nebraska, will benefit from the Project. There are eight water districts in Wyoming and Nebraska that receive water from the Glendo Unit of the Pick-Sloan Project that will benefit. Better control of Winters Creek's diversion will stabilize flows downriver, reducing calls for storage water, leaving more water in the upstream reservoirs to the benefit of all water users.

(d) Is the applicant a Tribe?

No.

Performance Measures

Provide a brief summary describing the performance measure(s) that will be used to quantify actual benefits upon completion of the project (e.g., water saved or better managed, energy generated or saved).

Winters Creek will quantify benefits from the Project by comparing NDNR diversion data used to estimate spills with diversion data after the installation of the Diversion Structure. Winters Creek expects to see a 75% reduction in over-diversion at the point of control, leading to immense water savings estimated at 9,528 acre-feet per year.

Throughout the first year of automated operation, Winters Creek staff will be asked to log the number of trips taken to the diversion structures. This figure will then be compared with their pre-Project estimates to ascertain the amount of gas conserved annually as a result of remote operation.

Project Budget

Funding Plan and Letters of Commitment

The funding plan for Winters Creek Canal Company's Project will be split by percentage as follows:

- 50.1% Nebraska Department of Natural Resources match: \$1,632,312.00
 - committed as of October, 2024. See [Appendix B](#) for letter of commitment by NDNR Director Tom Riley.
- 49.9% U.S. Bureau of Reclamation WaterSMART Grant: \$1,626,438.00
 - proposed as of November 13, 2024.

Please identify the sources of the non-Federal cost share contribution for the project, including:

(a) Any monetary contributions by the applicant towards the cost-share requirement and source of funds (e.g., reserve account, tax revenue, and/or assessments)

Not applicable to project.

(b) Any costs that will be contributed by the applicant.

Not applicable to project.

(c) Any third party in-kind costs (i.e., goods and services provided by a third party)

The North Platte Valley Irrigators Association (NPVIA) and the Nebraska State Irrigation Association (NSIA) are providing in-kind assistance with grant writing.

(d) Any cash requested or received from other non-Federal entities

The Nebraska Department of Natural Resources (NDNR) is supporting this Project with a \$1,632,312.00 grant toward the cost-share requirement.

(e) Any pending funding requests (i.e., grants or loans) that have not yet been approved and explain how the project will be affected if such funding is denied.

Not applicable to project.

Budget Proposal

Table 2. — Total Project Cost Table

SOURCE	AMOUNT
Costs to be reimbursed by proposed Federal funding	\$1,626,438.00
Costs to be reimbursed by third party contribution - State funding	\$1,632,312.00
TOTAL PROJECT COST	\$3,258,750.00

Table 2. — Budget Proposal

BUDGET ITEM DESCRIPTION	\$/Unit	Quantity	Quantity Type	TOTAL COST
Personnel Salaries and Wages				
Included in Contractual	N/A	N/A	N/A	\$0.00
Fringe Benefits				
Not applicable	N/A	N/A	N/A	\$0.00
Travel				
Not applicable	N/A	N/A	N/A	\$0.00
Equipment				
Included in Construction	N/A	N/A	N/A	\$0.00
Supplies and Materials				
Included in Construction	N/A	N/A	N/A	\$0.00
Contractual				
Engineering, Survey, Architecture Design Services	See Appendix D			\$400,000.00
Construction				
Equipment, Materials, Supplies, and Labor for Project Tasks A-F	See Appendix D			\$2,287,000.00
25% Contingency	See Appendix D			\$571,750.00
TOTAL DIRECT COSTS				\$3,258,750.00
Indirect Costs				
Not applicable	N/A	N/A	N/A	\$0.00
TOTAL ESTIMATED PROJECT COSTS				\$3,258,750.00

For more information on the Project Budget, please see the Budget Narrative file included with this application and the cost estimate supplied in [Appendix D](#).

Environmental and Cultural Resources Compliance



As the proposed project replaces a diversion structure, creates a cofferdam to divert river flow, and installs new Rubicon gates, the work will have temporary effects on the surrounding environment such as increased noise, dust, and river turbidity. Disturbances to the soil and water will be minimized with physical processes while disturbances like noise will be minimized by the time of day that the work is completed. State and federally threatened species in the North Platte River Basin should not be affected by construction. The Project will go through an environmental review process in accordance with NEPA to confirm that all activities are carried out with the utmost awareness of ecosystem impact.

Winters Creek Canal, constructed between 1888 and 1890 by the Farmers' Canal Company, will undergo modification. The Project will modify the original canal infrastructure by removing the antiquated diversion gate structure and installing an automated gate for more accurate diversion and flow measurement. The proposed project should not have an adverse effect on low income or minority populations. No Indian sacred sites or archaeological sites have been identified in the Project location.

The Project is committed to restoration of the area surrounding the structure, and will be seeding and mulching the areas disturbed by construction. As this restoration takes place, the contractor will be required to remove toxic weeds and non-native plant species.

Required Permits or Approvals

The Project includes the following permitting activities in compliance with municipal, state, and federal guidelines:

- Environmental Review/Cat-Ex in accordance with NEPA
- United States Army Corps of Engineers (USACE) Clean Water Act (CWA) 404 Permit, Nationwide Permit (NWP), specifically NWP 3(a) via the USACE Omaha Regulatory Office.
- Local Floodplain Permitting via Scotts Bluff County.
- NPDES Construction Stormwater Permit on Stormwater Pollution Prevention Plan (SWPPP) and a Construction Stormwater Permit (CSW) through the Nebraska Department of Environment and Energy (NDEE).

Conflicts of Interest Disclosure

There are no known conflicts of interest with regard to Winters Creek Canal Company and the proposal for federal assistance.

Single Audit Reporting Statement

Winters Creek Canal Company has not spent more than \$750,000 in U.S. Dollars this fiscal year.

Unique Entity Identifier and System for Award Management

Winters Creek Canal Company is registered with SAM under the Unique Entity Identifier HHQCM43TAME8.



Good Life. Great Water.

DEPT. OF NATURAL RESOURCES

October 1, 2024

Rod Adams, Manager
Winters Creek Canal Company
230710 Highland Road
Scottsbluff, NE 69361



Jim Pillen, Governor

Dear Rod:

Please consider this letter a formal expression of support and commitment from the Nebraska Department of Natural Resources to provide up to \$1,632,312 of matching state funding for your Bureau of Reclamation WaterSMART grant application. These types of projects are key investments toward sustaining irrigation operations over the long term, and enhancing water supplies during periods of drought. The Department's current plans pertaining to the project area include an integrated management plan and basin-wide plan. Both plans recognize the benefits of these types of activities in supporting goals aimed at the long-term sustainability of irrigation uses in the basin.

Once again, the Department fully supports your District's efforts to implement these water supply improvements and appreciates your District's efforts in working to support the state's integrated management plan and basin-wide plan goals.

Sincerely,

Jesse Bradley, P.G.

Interim Director

Jesse Bradley, P.G., Interim Director

Department of Natural Resources

245 Fallbrook Blvd., Suite 201 OFFICE 402-471-2363
Lincoln, Nebraska 68521 FAX 402-471-2900

dnr.nebraska.gov



P.O. Box 280 • 100547 Airport Rd. • Scottsbluff, NE 69363-0280 • Phone: 308 632-2749 • Fax: 308 632-4346

October 9, 2024

Via Email

Winters Creek Canal Company
c/o Rod Adams
rncadams@charter.net

Re: Letter of Support for Bureau of Reclamation WaterSmart Grant Application

Dear Mr. Adams:

The North Platte Natural Resources District would like to provide this letter of support to you for your Bureau of Reclamation WaterSmart Grant application. The NPNRD supports this project because we recognize the important hydrological benefits that your canal company and others provide to the overall water system in this area.

We are fully aware of the need to repair and improve your infrastructure and feel funding program can assist you in accomplishing those repairs and make improvements to your canal system to better control, manage and conserve your available water supply. We have a close relationship with all our surface water partners in this District and would like to continue to provide any level of support we can.

If you have any concerns or need anything further from us, please do not hesitate to contact our office.

Sincerely,

A handwritten signature in blue ink that reads "Scott Schaneman".

Scott Schaneman
General Manager

cc: Dennis Strauch (dennis@pathfinderirrigation.com)

NEBRASKA STATE IRRIGATION ASSOCIATION

1233 Lincoln Mall • Suite 201 • Lincoln, NE 68508 • Phone 402-476-0162 • Fax 402-476-2469

September 4, 2024

To Whom It May concern:

RE: Winters Creek Canal Company Application for Project Grant Support

The Nebraska State Irrigation Association here supports the Winters Creek Canal Company's request for support of a grant to assist the Company in its important work on the project to rehabilitate, repair and replace some facilities within the Company's project. The Association appreciates your consideration of our support of the Company's planned work.

The Association [NSIA] is a nonprofit organization established in 1894 to represent the interests of Nebraska irrigation water organizations. In that capacity the Association has worked closely with organizations like Winters Creek over its years of service to member irrigators.

The NSIA has worked closely with the Legislature in the establishment of the Surface Water Irrigation Infrastructure Fund, and has worked closely with Nebraska's surface irrigation organizations to review their facilities needs; identify the designs necessary to rehabilitate, repair and replace such facilities, and coordinate with the Company to identify the costs necessary to complete these efforts.

Winters Creek Canal Company has identified this project to restore its project delivery system and automate the diversion from the North Platte River. The existing system is difficult to operate and manage resulting in fluctuating flows and causing shortages and the wasting of water back to the river.

We understand that irrigation organizations like Winters Creek wishing to fund such expensive work without added financial assistance from federal, state and other local sources may find it impossible to carry out.

We sincerely hope that you will consider and provide the funding assistance the Company's grant request has submitted.

Should you need other further information or have questions about the Nebraska State Irrigation Association's support of this Winters Creek request you may contact Lee Orton, The Executive Director of the Association by telephone at 402-476-0162.

Respectfully submitted,



Lee Orton, Executive Director



Where Every Drop Counts!

Post Office Box 904
Scottsbluff, Nebraska 69363-0904

North Platte Valley Irrigators Association

....16 Member Districts Serving Irrigators in Scotts Bluff,
Morrill and Sioux Counties

October 13, 2024

RE: Winters Creek Canal Company Grant Application

To Whom It May Concern:

The North Platte Valley Irrigators Association (NPVIA) is a nonprofit entity comprised of 16 surface water irrigation districts and canal companies in the North Platte River Valley from the Wyoming/Nebraska state line to Lewellen, Nebraska, servicing over 350,000 acres.

The Association is a supporter of its member districts in their efforts to improve management of their water delivery systems and conserve one of Nebraska's most precious natural resources, water. The Association provides in-kind support by providing grant writing assistance through its Executive Director.

Winters Creek Canal Company has identified a project to improve the management of their water delivery system through the rehabilitation/replacement and automation of their canal diversion from the North Platte River and their secondary canal diversion from Winters Creek itself. Winters Creek's diversions are significantly impacted by constantly changing flows in both the river and the creek caused by field irrigation returns and spills from upstream irrigation districts. The existing system is difficult to operate and manage resulting in fluctuating flows in their canal causing shortages, and excesses that are wasted back to the river impacting their irrigators and appropriators downstream.

It is nearly impossible for small irrigation districts like Winters Creek to fund improvements of this magnitude without financial assistance from federal, state and local sources. We hope you will seriously consider funding Winters Creek's grant request, so this important project can move forward.

We appreciate your consideration of our comments in support of Winters Creek's grant application. If you have any questions, please feel free to contact Dennis Strauch, our Executive Director at telephone number (308) 672-9577 or by email at dennis@pathfinderirrigation.com . Thank you.

Sincerely,
North Platte Valley Irrigators Association


Rodney Schaneman, President

Western Sugar Cooperative
2100 East Overland Drive
Scottsbluff, Nebraska 69361

October 4, 2024

Board of Directors
Winters Creek Canal Company
230710 Highland Road
Scottsbluff, Nebraska 69361

Western Sugar Cooperative (Western) in Scottsbluff, Nebraska utilizes water from Winters Creek for the processing of sugar beets. We share a point of diversion from the creek with Winters Creek Canal Company, and value our working relationship with you to share and utilize this valuable water resource.

We understand the Canal Company is applying for a grant to assist with replacement and automation of the Company's diversion dams from the North Platte River and Winters Creek. The existing diversion structures are in poor repair and are difficult to regulate the flows into the canals, causing fluctuations in water levels affecting deliveries to the irrigators you serve and Western. Western fully supports your efforts to make improvements for the benefit of your customers.

Western also owns a tract of land located in the SW $\frac{1}{4}$, of Section 30, Township 22N, Range 54W, Scotts Bluff County, Nebraska, containing lands served by the Winters Creek Canal Company. Water delivery to this tract of land comes through a lateral partly above ground and partly underground through a residential and commercial area of the City of Scottsbluff. Water delivery through the existing system is nearly impossible, with residents placing trash in the open sections of the lateral, making it difficult to maintain a reliable flow of water. We are currently working with Winters Creek and the City of Scottsbluff to abandon the lateral and replace it with a pump and pipeline delivery from one of Western's holding ponds containing water from the Winters Creek diversion. This project will improve water delivery and save a considerable amount of water that was lost in the lateral.

Western greatly appreciates the Company's efforts to improve water service to its irrigators and conserve our most precious natural resource. Please keep me informed as the project moves forward and let me know if I can help in any way.

Sincerely,



Jerry Darnell
Vice President of Agriculture
Western Sugar Cooperative

Cory Adams
230905 Highland Road
Scottsbluff, Nebraska 69361

October 4, 2024

Board of Directors
Winters Creek Canal Company
230710 Highland Road
Scottsbluff, Nebraska 69361

I own a tract of land located in the N $\frac{1}{2}$ NE $\frac{1}{4}$, and I rent a farm in the S $\frac{1}{2}$ NE $\frac{1}{4}$ of Section 30, Township 22N, Range 54W, Scotts Bluff County, Nebraska, containing land served by the Winters Creek Canal Company.

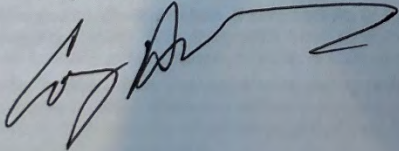
I understand the Canal Company is applying for a grant to assist with replacement and automation of the Company's diversion dams from the North Platte River and Winters Creek. The existing diversion structures are in poor repair and are difficult to regulate the flows into the canals, causing fluctuations in water levels and deliveries to my farm located in the company's service area.

The proposed project will greatly improve the control of the water levels in the canals and stabilize the delivery to my farm. In conjunction with the Company's project, I plan to make improvements to my on-farm irrigation system by converting from gravity irrigation to a center pivot system that will greatly improve my on-farm efficiency on 126 acres of land.

I greatly appreciate the Company's efforts to improve water service to its irrigators and conserve our most precious natural resource. Please keep me informed as the project moves forward and let me know if I can help in any way.

Sincerely,

Cory Adams

A handwritten signature in black ink, appearing to read 'Cory Adams', with a stylized, flowing script.

RESOLUTION
OF
WINTERS CREEK CANAL COMPANY

Date 9-18-2024, 2024

WHEREAS, the Winters Creek Canal Company (Company) was organized and formed under Nebraska State Statute, with irrigation water rights from the North Platte River and Winters Creek dated October 18, 1888 Appropriation D-952; and

WHEREAS, the Company is charged with the operation, maintenance, repair and replacement of the irrigation facilities to the benefit of its water right holders; and

WHEREAS, the Company continually takes steps, investing its own resources to improve on the performance of the facilities for water conservation, operation and maintenance;

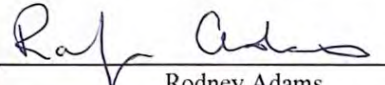
BE IT THEREFORE RESOLVED that the Board of Directors of the Winters Creek Canal Company has reviewed and authorizes the Company's Board Chairman to pursue a Department of Interior WaterSMART grant for the rehabilitation and automation of the Company's diversion from the North Platte River and Winters Creek. Project name: "Winters Creek Canal Company Diversion Structure Rehabilitation/Automation and Betterment Project", on behalf of the Company; and

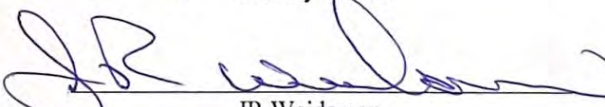
BE IT FURTHER RESOLVED that the Board of Directors of the Winters Creek Canal Company by authority granted under Nebraska State Statute, commits to the financial and legal obligations associated with receipt of a financial assistance award under this Notice of Funding Availability.

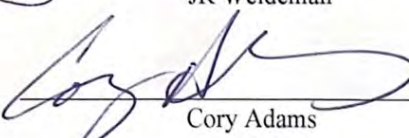
THEREFORE, BE IT RESOLVED.

ENACTED THIS 18 DAY OF September, 2024.

WINTERS CREEK CANAL COMPANY

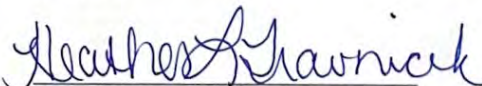
 president
Rodney Adams


JR Weideman


Cory Adams

BOARD OF DIRECTORS

ATTEST:


Heather Travnicek, Secretary