Central Platte Natural Resources District and 30 Mile Irrigation District

30-mile Flow Measurement and Canal Efficiency Project

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Application Date: 1/16/2024

Central Platte Natural Resources District

Grand Island, Hall County, Nebraska

Project Manager:

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Requested Reclamation Funding: $95,542; **Total Project Cost:** $191,084

Project Summary

Provide a one-paragraph project summary that provides the location of the project, a brief description of the work that will be carried out, any partners involved, expected benefits, and how those benefits relate to the water management issues you plan to address.

The Central Platte Natural Resources District (CPNRD) and 30-Mile Irrigation District (TMID) are Category A applicants. CPNRD is half-owner of TMID. None of the District's facilities are federally owned, operated, or connected to a federal Reclamation project. The CPNRD and TMID are located in south central Nebraska, along the Platte River. The proposed project will install five Rubicon or equivalent water-automated precision gates, two slip gates, and three slip meter gates. The gate's ability to accurately measure high and low flow rates and automatically adjust will increase water use efficiency from 5-10%. The work at each of the five sites will not require extensive reconfiguring of the current canal structures. New gates will be installed with automatic control and telemetry enabling remote operations. The addition of these gates will automate the canal operations and provide valuable flow data. The automation of the canals will

lead to greater safety, water savings, and improved service throughout the area. Flow data that is collected from these features will add to the CPNRD and TMID understanding of water usage patterns and water-losing breaches and provide information to further water-saving efforts while allowing the tracking of water savings amounts. The total cost to implement the proposed project is $191,084. Of this amount, $95,542 has been committed by the CPNRD. Reclamation's investment of $95,542 would complete the funding necessary to execute this project. The project is slated to be completed in January 2026, and implementation will meet the goals of the CPNRD's Integrated Management Plan (IMP).

Project Location

Provide detailed information on the proposed project location or project area, including a map showing the geographic location.

The 30-mile Irrigation District Flow Measurement and Canal Efficiency project is located in Dawson County, Nebraska. Near the incorporated towns of Gothenburg and Cozad, on the Great Plains of central Nebraska, along the Union Pacific Railroad and U.S. Route 30, just south of the Platte River. The Project headgate location is approximately 9 miles from Gothenburg, Nebraska. The project coordinates are as follows: TM1, Latitude 40.986479° and Longitude -100.333762°, TM2, Latitude 40.858407° and Longitude -100.165480°, TM 3, Latitude 40.829771° and Longitude -100.122730°, TM4, Latitude 40.801320° and Longitude -100.073022.

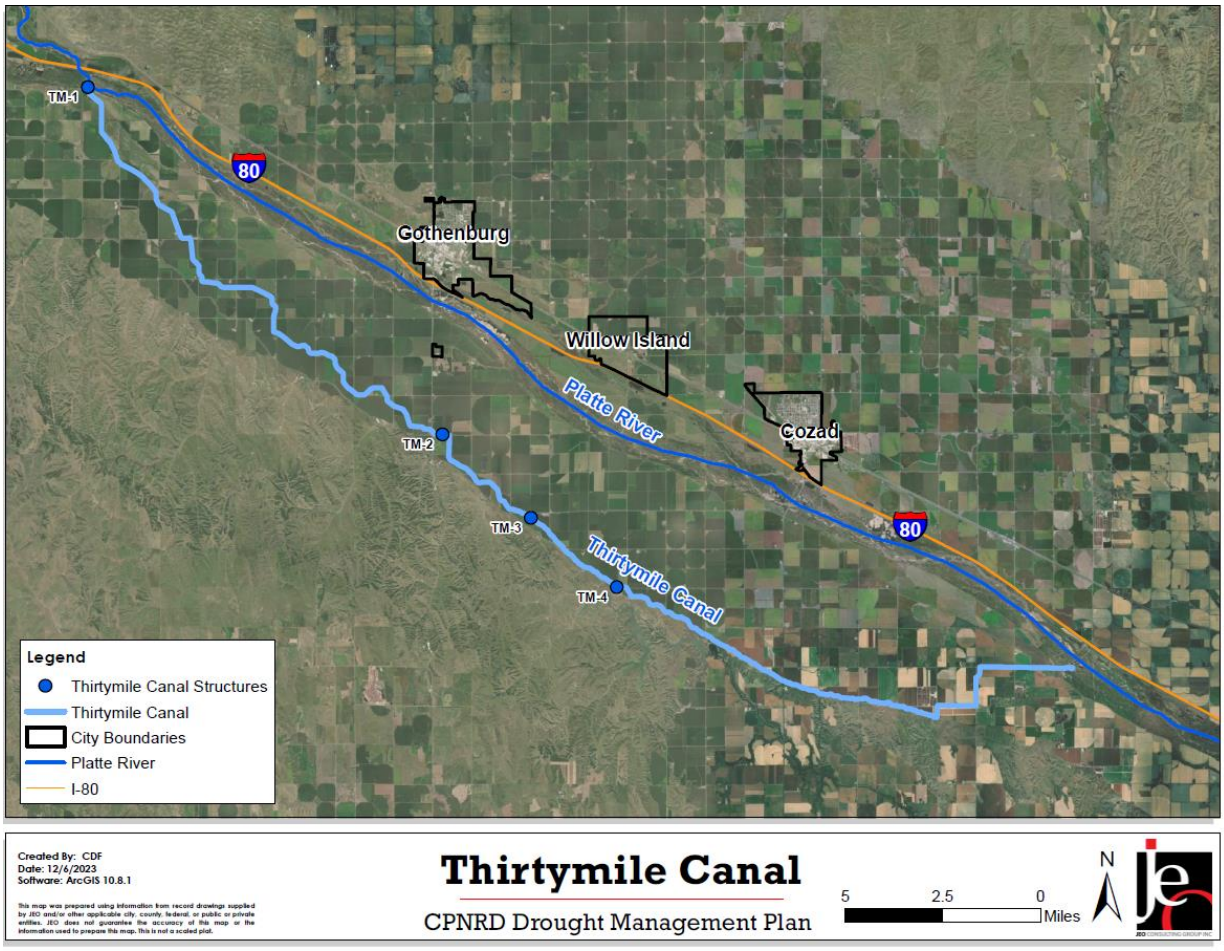


Figure 1 Thirty Mile Canal Map

Technical Project Description

Provide a more comprehensive description of the technical aspects of your project, including the work to be accomplished and the approach to complete the work

The TMID canal located in south central Nebraska receives water from the Platte River upstream of Gothenburg and Cozad, Nebraska. The canal flows towards the southeast and irrigates lands primarily in the Platte River valley. The canal is south of the Platte River and Interstate 80. It provides needed agricultural irrigation water to producers in the area.

The TMID and CPNRD, in partnership with the Nebraska Department of Natural Resources (NeDNR), are proposing to automate headgates, laterals, and turnouts in the TMID. CPNRD is half-owner of TMID. This system will use Rubicon or equivalent undershot style Slipmeters and Slipgates. The automated gates will be controlled by a cloud-based SCADA monitoring and control system. The Slipmeter and Slipgate can automatically deliver a constant and accurately

measured flow rate and volume and are used for laterals and turnouts. The SlipMeter gate will be an improvement to the site by adding the benefit of flow monitoring measurement. The new gate will reduce spills by solving the leaking gate issues often experienced with aging gate infrastructure and providing accurate flow rate information to canal operators, which will allow for precise scheduling of water deliveries. The system will automate operation by adjusting each gate as the inlet waters rise and fall, thereby conserving water and improving efficiency.

The gates will be installed at four separate locations. The undershot style Slipmeters will be installed at the Henderson, Stanley, and 96 Spillways. The two Slipgates will be installed at the TMID Canal Headgates. Minimal soil disturbance will occur since new concrete or excavation will not be needed.

30-Mile Headgates (TM1). Two Slipgates will be equipped with a 4-sided seal designed for a nominal pipe size of 60 inches. The wall mounting height will be no greater than 3.3 feet. The fully integrated system will be equipped with a partial-full level sensor. The SCADA system is not needed since it is already installed and operational.

Henderson Spillway (TM2). The Slipmeter will be equipped with a 60 by 60-inch meter box/gate. The wall mounting height will be no greater than 10 feet. The system will have an 11.25° sensor pattern. The minimum flow will be 6.6 cubic feet per second (cfs), and the maximum flow will be 158 cfs. The fully integrated system will be equipped with a partial-full level sensor. The SCADA system will include operation and communication software and a cellular modem, antenna, and cabling.

Stanley Spillway (TM3). The Slipmeter will be equipped with a 36 by 36-inch meter box/gate. The wall mounting height will be no greater than 8 feet. The system will have a 45° sensor pattern. The minimum flow will be 1 cfs, and the maximum flow will be 57 cfs. The fully integrated system will be equipped with a partial-full level sensor. The SCADA system will include operation and communication software and a cellular modem, antenna, and cabling.

96 Spillway (TM4). The Slipmeter will be equipped with a 60 by 60-inch meter box/gate. The wall mounting height will be no greater than 10 feet. The system will have an 11.25° sensor pattern. The minimum flow will be 6.6 cfs, and the maximum flow will be 158 cfs. The fully integrated system will be equipped with a partial-full level sensor. The SCADA system will include operation and communication software and a cellular modem, antenna, and cabling.

Evaluation Criteria

Evaluation Criteria A – Project Benefits

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

- *Clearly explain the anticipated water management benefits to the Category A applicant's water supply delivery system and water customers.*
    - ❖ The quantification of current flows through the proposed project location is a critical need for the CPNRD's and TMID's water savings goals. If the quantity and timing of canal flows and wastes are not precise, or unknown, it is difficult to plan and prioritize water savings projects. As the CPNRD and TMID continue to work to meet the needs of rural customers, timing water through the system is increasingly difficult with unknown quantities. The addition of the proposed flow measuring, and water control devices will provide more efficient and effective flow measurement information to work from. The automated gates and SCADA system will have the ability to accurately measure high and low flow rates and automatically adjust when necessary. Based on previous applications of this technology, this will increase water use efficiency by 5-10%. With this information, TMID can better time the diversion and delivery of system water while minimizing waste. This will allow for efficient planning of future projects that will continue to improve service to patrons and conserve water.
- *Explain the significance of the anticipated water management benefits for the Category A applicant's water delivery system and customers.*
    - ❖ *Are customers not currently getting their full water right at certain times of year?*
        - Yes, depending on the year, water shortages do occur. When full allocations cannot be met by diversions from the Platte River, irrigators have to buy water from the Nebraska Public Power District at higher prices. This places a financial strain on the irrigators. The years since 2000 when the full water rights allocations from the river were not provided include 2022, 2021, 2020, 2006, 2005, 2004, 2003, 2002, 2001, and 2000, for a total cost of $361,559.
    - ❖ *Does this project have the potential to prevent lawsuits or water calls?*
        - Yes, the project has the potential to prevent lawsuits and water calls. Nebraska has a long history of conflict regarding water rights, lawsuits, water calls, in-stream flow rights, and protection of threatened and endangered species. The Platte River Recovery and Implementation Program (PRRIP) was created to address these issues. The PRRIP was formed in 2006 between the U.S. Department of Interior (The Bureau of Reclamation being the lead Federal agency) and the States of Nebraska, Colorado, and Wyoming. It brings together Federal and State agencies, utilities, water and canal districts, Natural Resources Districts, environmental groups, and the public to address water use and supply issues. The PRRIP has established target flows for the Platte River for the purpose of recovery of threatened and endangered

species. These target flows represent ideal conditions with the goal of achieving recovery of the specified species. In addition to the PRRIP, CPNRD, and TMID comply with the requirements of the Nebraska New Depletion Plan (NNDP), which delivers a moratorium on the issuance of any new surface water appropriations in the Platte River Basin upstream of the confluence with the Loup River. Since no new appropriations are allowed, TMID's proposed automation solutions focusing on water conservation and management efficiency improvements are critical for complying with the NNDP.

- The TMID canal is adjacent to the Platte River and receives flow from the river. By installing and automating water control gates in the canal, water use efficiency will be improved, and as a result, more water will remain in the Platte River. This will bolster the PRRIP to meet its flow targets and comply with the requirements of the NNDP. Ultimately, improving water use and preventing lawsuits and water calls.

❖ *What are the consequences of not making the improvement?*

- The consequence of not making the improvement of this automation and monitoring project is that agricultural water throughout the district will continue to be lost through inefficiencies created by a lack of delivery inefficiencies, and data and precise flow metering.

❖ *Are customer water restrictions currently required?*

- No, customer water restrictions are not currently required. When full allocations cannot be met by diversions from the Platte River, irrigators have to buy water from the Nebraska Public Power District at higher prices. This places a financial strain on the irrigators.

❖ *Other significant concerns that support the need for the project.*

- With a continued trajectory of extreme weather events, varying precipitation, demand on water systems, and the need for precise delivery and updated water delivery interface, leaving this proposed project incomplete will result in continued inefficient management and delivery of water. These results would be due to a lack of precise measuring, management, and delivery tools, such as automated gates and SCADA systems.

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

- *Will the project improve broader water supply reliability at the sub-basin or basin scale?*
  - ❖ Benefits are expected to be geographically localized to the TMID and its patrons.

- *Is the project in an area that is experiencing, or has recently experienced drought or water scarcity? Will the project help address drought conditions at the sub-basin or basin scale? Please explain.*
    - ❖ The proposed project is within a small radius of multiple wildlife refuges and management areas that would see fringe benefits from efficient and proper water management. This project is also in an area where adequate water management allows for more efficient management of waters left in rivers, streams, and lakes, which feed into the Platte and eventually the Missouri and Mississippi Rivers.
- *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.*
    - ❖ Yes. By reducing the amount of water diverted, additional water flows can be allocated to augment downstream flows to the Platte River, home to several threatened and endangered species, such as the Whooping Crane, Pallid Sturgeon, and Piping Plover.
- *Will the proposed project positively impact/benefit various sectors and economies within the applicable geographic area (e.g., impacts on agriculture, environment, recreation, and tourism)? Please explain.*
    - ❖ The proposed project will allow for more available water to stay in the canal by reducing water delivery inefficiencies that arise from spillage and flow measurement errors. Increasing the amount of water that is kept in the canal positively impacts agricultural producers and riparian ecosystems by allowing excess saved water to be released into the Platte River.
- *Will the project complement work being done in coordination with NRCS in the area (e.g., the area with a direct connection to the district's water supply)? Please explain.*
    - ❖ None are presently known to the district.

Evaluation Criteria B – Planning Efforts Supporting the Project

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?*

❖ Water management in Nebraska is accomplished through the combined efforts of the Nebraska Department of Natural Resources (NeDNR) and the Natural Resources Districts (NRD)s. NRDs manage groundwater, whereas surface water is managed by the NeDNR. In areas where groundwater and surface water are hydrologically connected, NRDs have the authority through Neb. Rev. Stat. § 46-715(1)(b) to jointly develop an Integrated Management Plan (IMP) with NeDNR. IMPs are plans that allow the NRDs, NeDNR, and stakeholders to address areas of water shortage jointly. Agriculture production is a primary economic driver in CPNRD, and irrigation plays a critical role. Due to heavy development, areas of decline in groundwater and surface

water resources have occurred. To address the declines, river basins throughout the state have been evaluated, and areas have been identified as fully-appropriated or over-appropriated surface water status. When a river basin, subbasin, or reach is designated as fully appropriated, the NeDNR places an immediate stay on the issuance of any new natural flow, storage, or storage-use appropriations. The CPNRD contains both fully-appropriated and over-appropriated basins, including the Platte River. The CPNRD IMP (including TMID) discusses water management for irrigation, instream flows, storage, and storage use. CPNRD has an instream flow water right that represents the largest quantity of surface water in the NRD. During the implementation of the first phase of the IMP, TMID underwent extensive renovations. This included reshaping the canal, tree removal, and gate structure repairs. As part of the ongoing enactment of the IMP, upgrading and automating the TMID canal gates is an important step to improving water use efficiency. This will allow CPNRD to meet specific goals specified in the IMP, including:
Goal 1. Reach and maintain a Fully Appropriated Condition. Within this increment of the IMP, implement measures to address the impacts of streamflow depletions on surface water appropriations.
Goal 2. Interstate Compliance. To ensure that no act or omission of the CPNRD or the NeDNR would cause noncompliance by Nebraska with the Nebraska New Depletion Plan included within PRRIP, for as long as PRRIP exists.

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.*

- The NeDNR and CPNRD developed the IMP with input from public power and water districts, government agencies, environmental groups, non-profits, and the public. The geographic scope of the IMP covers the entire CPNRD, including the TMID. Both CPNRD and TMID are Category A applicants.

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

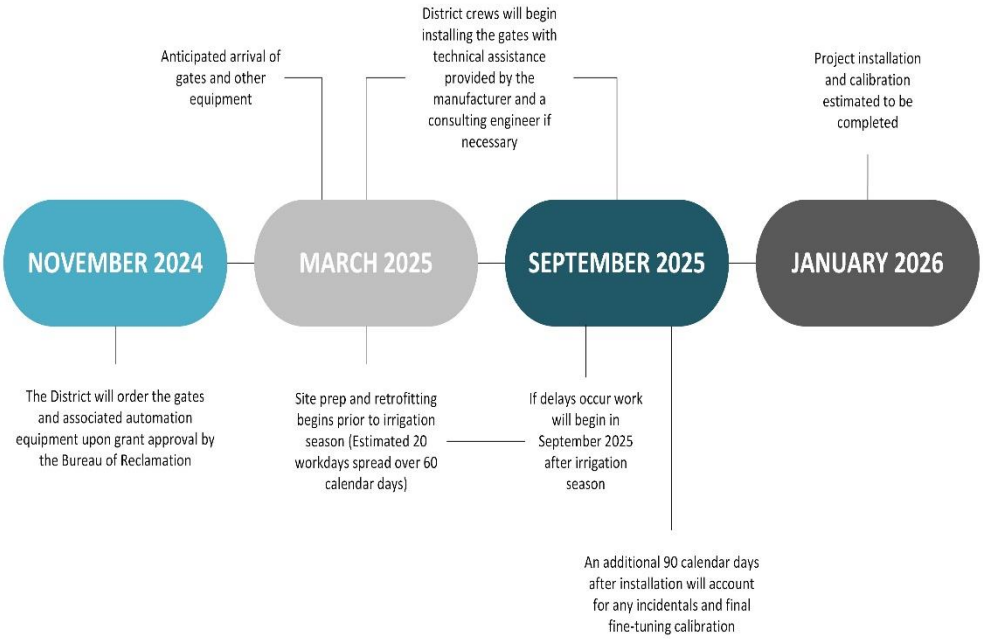
- *Is the project identified specifically by name and location in the planning effort?*
  The structural improvements to the TMID canal are not specifically stated in the IMP. However, to meet IMP Goals 1 and 2 (stated in the previous question), improving water efficiency will help CPNRD and TMID meet the goals.
- *Is this type of project identified in the planning effort?*
  The IMP sets targets that specify that CPNRD will offset streamflow upstream of Chapman, Nebraska (including the TMID area) by 15,000 acre-feet by 2029.

Water efficiency improvements to the canal will help achieve these depletion requirements.

- ❖ *Explain whether the proposed project implements a goal or addresses a need or problem identified in the existing planning effort.*
  To meet IMP Goals 1 and 2 (stated in the previous question), improving water efficiency and management practices will help CPNRD and TMID meet the goals.
- ❖ *Explain how the proposed project has been determined as a priority in the existing planning effort as opposed to other potential projects/measures.*
  CPNRD is actively searching for projects to help meet the goals and targets specified in the IMP, PRRIP, and NNDP. The TMID canal improvement project is needed, and the opportunity to improve the structures is readily apparent. Therefore, CPNRD, TMID, and NeDNR are pursuing funding to implement water efficiency improvements to the canal through gate automation and implementation of SCADA systems.

Evaluation Criteria C – Implementation and Results

- *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.*
  - ❖ Implementation of the TMID canal improvement project will be done in one phase. The CPNRD and TMID will order the gates and associated automation equipment upon notice to proceed by the Bureau of Reclamation. The



anticipated date is November 2024. All necessary site prep and retrofitting will begin in March of 2025, prior to the irrigation season. If delays occur, work will begin in September 2025 after the irrigation season. It is estimated that this will take no more than 20 workdays spread over 30 calendar days. The gates and other equipment are anticipated to arrive approximately March 2025. District crews will begin installing the gates in March or September of 2025 with technical assistance provided by the manufacturer and a consulting engineer if necessary. The CPNRD and TMID staff are allowing an additional 90 calendar days after installation for any incidentals and final fine-tuning calibration that might be needed. Completion of the project is anticipated to be by January 2026.

- *Proposals with a budget and budget narrative that provides a reasonable explanation of project costs will be prioritized under this criterion.*
    - ❖ The project consists primarily of equipment and installation, with much of the cost being equipment. This system will use Rubicon or equivalent Slipmeters and Slipgates. The automated gates will be controlled by a cloud-based SCADA monitoring and control system. The Slipmeter and Slipgate can automatically deliver a constant and accurately measured flow rate and volume and are used for laterals and turnouts. Mobilization and installation are anticipated to take two days (no greater than four days) per site.
- *Describe any permits that will be required, along with the process for obtaining such permits*
    - ❖ Yes, a U.S. Army Corps of Engineers (USACE) 404 permit will likely be needed for this project if working directly within the channel. It is anticipated that Nationwide Permit (NWP) 2 – Structures in Artificial Canals, may be utilized to authorize this activity. CPNRD is requesting that the Bureau of Reclamation Nebraska-Kansas Area Office obtain the 404 permit, if necessary. If this is not possible, CPNRD will obtain the 404 permit.
- *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.*
    - ❖ The gates for this project are fabricated off-site, and then installed in the retrofitted TMID facilities.
- *Describe any new policies or administrative actions required to implement the project.*
    - ❖ After the installation, the timing, measurement, and movement of water will be refined for operational efficiency.

- *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, the CPNRD and TMID have full access to both land and water at the locations of the proposed project.
- *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 needs to complete some of the compliance activities, separate line items should be included in the budget for Reclamation's cost and the contractor's costs.*
    - ❖ CPNRD is requesting that the cultural review for the project be performed by the Nebraska-Kansas Area Office. CPNRD discussed this with Reclamation employee Joshua Neuffer. If needed, CPNRD can also perform the review. For planning purposes, it is assumed that the review will be done by December 2024.

Evaluation Criteria D – Nexus to Reclamation

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?*
    - ❖ No, CPNRD and TMID do not hold any current agreements or contracts with Reclamation.
- *If the applicant is not a Reclamation contractor, does the applicant receive Reclamation water through a Reclamation contractor or by any other contractual means?*
    - ❖ No, CPNRD and TMID do not receive water through any Reclamation contractors or by any other contractual means.
- *Will the proposed work benefit a Reclamation project area or activity?*
    - ❖ Yes, Reclamation is the lead agency for the Department of Interior for the Platte River Recovery and Implementation Program. The PRRIP was formed in 2006 between the U.S. Department of Interior and the States of Nebraska, Colorado, and Wyoming. It brings together Federal and State agencies, utilities, water and canal districts, Natural Resources Districts, environmental groups, and public citizens to address water supply issues. The PRRIP has established target flows for

the Platte River for the purpose of recovery of threatened and endangered species.

Evaluation Criteria E – Presidential and DOI Priorities

Sub-criterion No. E1. Climate Change

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

- *Please provide specific details and examples on how the project will address the impacts of climate change and help combat the climate crisis.*
  - ❖ Automation of the district's Thirty Mile Canal will address the impacts of climate change through the responsible and efficient usage of available water. The use of automated gates increases water conservation between 5-10% of total annual flow. Additionally, the automation of the canal negates the need for individual employees to travel to the site and manage the canal. The elimination of routine vehicle travel reduces the overall carbon emissions associated with manual gate operations.
- *Does this proposed project strengthen water supply sustainability to increase resilience to climate change?*
  - ❖ Yes, the project will increase the efficiency and sustainability of the delivery of water to agricultural providers by minimizing spillage through automation. Correctly timed releases aid in application efficiency which increases sustainability and resiliency during times of drought brought on by climate change.
- *Does the proposed project contribute to climate change resiliency in other ways not described above?*
  - ❖ Yes, the data generated by the automated FlumeGates will quantify fluctuations of water in the canal which will lead to improved long-term resource management and drought planning.

Sub-criterion No. E2. Disadvantaged or Underserved Communities

- *Will the proposed project serve or benefit a disadvantaged or historically underserved community? Benefits can include but are not limited to, public health and safety by addressing water quality, new water supplies, or economic growth opportunities.*
  - ❖ Yes, the project will positively impact agricultural producers in the district's service area that stand to be disproportionately impacted by the effects of climate change.
- *Please use the White House Council on Environmental Quality's interactive Climate and Economic Justice Screening Tool, available online at http://screeningtool.geoplatform.gov, to identify any disadvantaged communities that will benefit from your project.*

- ❖ Communities found to be disadvantaged via the White House Council on Environmental Quality's interactive Climate and Economic Justice Screening Tool within a beneficial proximity to this project include; Lexington, NE, Hayes Center, and Hamlet, NE.

- *If applicable, describe how the project benefits those disadvantaged or underserved communities identified using the tool. For example, does the project increase reliability for 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 proposed project is beneficial to the above-listed disadvantaged communities by contributing to more reliable and consistent management of water supplies, more predictable and dependable water flow downstream, and benefits as seen from the availability of consistent and sustainable water flow and management.

E.1.5.3. Sub-criterion No. E.3. Tribal Benefits

Points will be awarded based on the extent to which the Project will honor 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?*
  - ❖ No, the project does not directly serve and/or benefit a Tribe.
- *Does the proposed project support Reclamation's Tribal trust responsibilities or Reclamation activity with a tribe?*
  - ❖ No, this project does not provide any known benefits or support for Reclamation's Tribal trust responsibilities or Reclamation activity with 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?*
  - ❖ No, this project does not provide any known benefits for tribes in the area.

Project Budget

Funding Plan and Letters of Commitment

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

- *Any monetary contributions by the applicant towards the cost-share requirement and source of funds (e.g., reserve account, tax revenue, and/or assessments)*
  - ❖ The Monetary portion of the project costs, 50% of the project cost, will be

covered by the CPNRD and NeDNR. CPNRD receives funding from Nebraska property tax, and NeDNR receives funding from Nebraska income tax.

- *Any costs that will be contributed by the applicant*
  - ❖ The remaining portion of the district's contributions will be monetary. CPNRD and NeDNR will contribute $95,542 to the project.
- *Any third-party in-kind costs (i.e., goods and services provided by a third party)*
  - ❖ No other contributions toward the non-Federal portion of project costs are anticipated.
- *Any cash requested or received from other non-Federal entities*
  - ❖ Yes, the NeDNR is a funding partner. A letter of commitment is provided in Appendix C.
- *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*
  - ❖ No other funding requests are pending or proposed for this project at this time.

Budget Proposal

Table 1.—Summary of Non-Federal and Federal Funding Sources

FUNDING SOURCES	AMOUNT
Non-Federal Entities	
1. CPNRD and NeDNR	$95,542
Non-Federal Subtotal	$95,542
REQESTED RECLAMATION FUNDING	$95,542

Table 2. —Total Project Cost Table

SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal funding	$95,542
Costs to be paid by the applicant	$95,542
Value of third-party contributions	$0
TOTAL PROJECT COST	$191,084

Table 3. —Budget Proposal CPNRD and TMID Canal Automation

BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity	TOTAL
	$/Unit	Quantity	Type	COST
Personnel, Salaries and Wages				
CPNRD is not requesting salaries and wages.				
Employee 1	NA			$
Employee 2	NA			$
Employee 3	NA			$
Fringe Benefits				
CPNRD is not requesting fringe benefits				
Full-Time Employees	NA			$
Part-Time Employees	NA			$
Travel Expenses				
CPNRD is not requesting travel expenses				
Travel	NA			$
Contractual (unit price for equipment includes installation costs and 10% contingency)				
Henderson Spillway	$40,120	1	Slipmeter gate and automation	$40,120
Stanley Spillway	$31,115	1	Slipmeter gate and automation	$31,115
96 Spillway	$40,120	1	Slipmeter gate and automation	$40,120
Headgates	$31,179	2	Slipgates	$62,358
Contingency	$17,371	1	Contingency	$17,371
Supplies and Materials				
CPNRD is not requesting supplies and materials				
Equipment				
Equipment is listed in contractual				
Construction				
CPNRD is not requesting reimbursement for construction				
Other Direct Costs				
CPNRD is not requesting reimbursement for other direct costs				
TOTAL DIRECT COSTS				$ 191,084
Indirect Costs				

Type of rate	percentage	$base		$ 0
TOTAL INDIRECT COSTS				$0
CPNRD is not requesting reimbursement for indirect costs				
TOTAL PROJECT COSTS				$191,084

Budget Narrative

Personnel: Salaries and Wages

The CPNRD is not requesting reimbursement for salaries and wages.

Fringe Benefits

The CPNRD is not requesting reimbursement for fringe benefits.

Travel

There is no travel authorized for this project nor included in the budget proposal.

Contractual

The time estimate for installation of each piece of equipment was determined from the average usage on similar past projects. The contractual expenditure that is anticipated will be for the equipment and installation in the amount of $191,084. A 10% contingency factor has been added for unforeseen expenses such as inflation, price increases, repair of damaged equipment, electrical components, wire, freight, or tools that might break.

Materials and Supplies

The CPNRD is not requesting reimbursement for materials and supplies.

Equipment

The cost of equipment is under contractual.

Construction

The CPNRD is not requesting reimbursement for construction.

Other Direct Costs

The CPNRD is not requesting reimbursement for other direct costs.

Indirect Costs

The CPNRD is not requesting reimbursement for indirect costs.

Environmental and Regulatory Compliance Costs

The CPNRD is requesting that Reclamation conduct the environmental and regulatory compliance review. This has been discussed with the Nebraska-Kansas Area Office and the Area Office and they agreed to perform the work. If needed, the CPNRD will conduct the environmental and regulatory compliance review.

Third-Party In-Kind Contributions

The Districts do not anticipate any contributions matching this description.

Environmental & Cultural Resource Compliance

Please answer the questions from Section H.1. Environmental and Cultural Resource Considerations in this section.

- *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.*
    - ❖ Impacts to surface waters will be minimal. There will be limited, and minimal sediments (dust) from concrete cutting during the initial phase. and it is only projected to last for up to 8 hours per site for one day.
- *Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?*
    - ❖ There are Federally listed threatened or endangered species within the immediate vicinity of the project. Listed species identified by Nebraska Game and Parks Commission to be within the vicinity of the project include; TM1 - the Whooping crane (*Gus Americana*) -Endangered, and the American Buring Beetle (*Nicrophorus americanas*) – Threatened; TM2, TM3, and TM4 - Whooping Crane, American Buring Beetle, and the Northern Long-eared Bat (*Myotis septentrionalis*) – Threatened. The project area does not overlap with listed critical habitat and their appears to be no suitable habitat for the Whooping

Crane, the American Burying Beetle, or the Northern Long-eared Bat within project limits.

- *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.*
    - ❖ Yes, Thirty-mile Canal is classified by United States Geological Survey (USGS) as an intermittent stream, a jurisdictional Water of the United States. The United States Fish and Wildlife Service (USFWS) list Thirty-mile Canal as a riverine, intermittent, streambed, seasonally flooded, excavated stream (R4SBCx). TM-1 is partially located in Thirty-mile Canal and an identified lacustrine, littoral, unconsolidated bottom, intermittently exposed, dike/impounded wetland (L2UBGh), while TM-2, TM-3, and TM-4 are all located within Thirty Mile canal.
- *When was the water delivery system constructed?*
    - ❖ 1926 – 1927, with the original Thirty Mile Canal dedication taking place on July 13th, 1928. The partnership between the Central Platte NRD and Thirty Mile Canal Company was initiated in January 2012 to create a more efficient irrigation system. The canal company became an irrigation district in September 2013; making the Thirty Mile Irrigation District a political subdivision.
- *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.*
    - ❖ The project will add automation apparatuses to existing structures. The construction dates are anticipated to vary between March 2025 and, if delays occur, September 2025.
- *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, there are no buildings, structures, or features listed or eligible for listing on the National Register of Historic Places within or near each of the four project areas. Additionally, History Nebraska does not list any buildings, structures, or features within or near the four project areas.
- *Are there any known archeological sites in the proposed project area?*
    - ❖ No, all four sites are absent of known archeological sites and sites listed on the National Register of Public Places.

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

- ❖ No, there are not any disproportionally high, low-income or minority populations within a 1-mile radius of the project, as reported by the Environmental Protection Agency (EPA) EJ Screen Report.

- *Will the proposed project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?*
  - ❖ No, the project will not contribute to any of the above-mentioned impacts to tribal sacred sites or tribal lands.
- *Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?*
  - ❖ No, the proposed project actions will not contribute to the introduction, continued existence, or spread of noxious weed or non-native invasive species. The project does not involve a watercraft, nor does it involve the transfer of equipment from one aquatic resource to another, which is the primary source of transfer and spread of aquatic invasive species.

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Required Permits and Approvals

Yes, an U.S. Army Corps of Engineers (USACE) 404 permit will likely be needed for this project if working directly within the channel. It is anticipated that Nationwide Permit (NWP) 2 – Structures in Artificial Canals, may be utilized to authorize this activity. CPNRD is requesting that the Nebraska-Kansas Area Office secure the permits and approvals, if needed CPNRD can do the work.

Overlap or Duplication of Effort Statement

The CPNRD does not have any projects that overlap or duplicate the effort of the proposed project in terms of activities, costs, or commitment of key personnel. The proposed project has not been or will be submitted for funding considerations to any other potential funding source – whether it be Federal or non-Federal.

Conflict of Interest Disclosure Statement

CPNRD does not have any actual or potential conflict of interest at the time of submission, nor do we anticipate having any conflict of interest during the Federal award period.

Applicability

CPNRD will take the appropriate steps to avoid conflicts of interest in its responsibilities under or in respect to Federal financial assistance agreements. The procurement of

supplies, equipment, construction, and services by recipients and by subrecipients shall be in accordance with the provisions of 2CFR§200.318,

Notification

CPNRD will disclose in writing any conflict of interest to Reclamation. CPNRD will establish internal controls that include procedures to identify, disclose, and mitigate or eliminate identified conflicts of interest.

Restrictions on Lobbying

CPNRD will not use funds under a grant or cooperative agreement for lobbying activities and will provide the required certifications and disclosures. CPNRD does retain a lobbyist and that information is reported in Form SF-LLL.

Review Procedures

CPNRD will resolve any conflict of interest if determined by the Financial Assistance Officer.

Uniform Audit Reporting Statement

CPNRD did not receive $750,000 or more in Federal grant award funds for the most recent fiscal year of 2023. The district did receive greater than $750,000 in Federal award funds during the period of 2020/2021.

Certification Regarding Lobbying

CPNRD is not requesting for than $100,000 in federal funding and is certifying such in Form SF-424 which is attached to this application.

Disclosure of Lobbying Activities

A fully completed and signed SF-LLL is attached to this application.

Official Resolution

The CPNRD Official Resolution is attached to the application in Appendix D.

Unique Entity Identifier and System for Award Management

The CPNRD is registered with SAM under the Unique Entity Identifier TH5CAGKVG7X8.

Letters of Funding Commitment

The Letter of Commitment from the Nebraska Department of Natural Resources is attached to the application in Appendix C.

Appendices

Appendix A – Rubicon Gate Quote and Product Selection Guide

Appendix B – CPNRD & NeDNR Integrated Management Plan

Appendix C - Letter of Commitment from the NeDNR

Appendix D – CPNRD Official Board Resolution

BOARD RESOLUTION 23-001

Of the

Central Platte Natural Resources District

RESOLUTION to submit an application on behalf of Thirty-Mile Irrigation District to the U.S. Bureau of Reclamation's WaterSMART Small-Scale Water Efficiency Grant Program.

WHEREAS: The Central Platte Natural Resources District and the Thirty-Mile Irrigation District (TMID) wish to engage in infrastructure improvement projects to increase water delivery efficiencies for TMID.

RESOLVED:

1. Lyndon Vogt, General Manager of Central Platte NRD has the legal authority to enter into contracts and agreements with all entities involved.

2. The Central Platte NRD Board of Directors approves this application for submittal.

3. Central Platte NRD will work with the U.S. Bureau of Reclamation to meet all deadlines and project deliverables.

Mick Reynolds

Board Chairman

Central Platte Natural Resources District

NEBRASKA

Good Life. Great Water.

DEPT. OF NATURAL RESOURCES

Jim Pillen, Governor

January 5, 2024

Lyndon Vogt, General Manager
Central Platte Natural Resources District
215 Kaufman Ave
Grand Island, NE 68803

Dear Lyndon:

Please consider this letter a formal expression of support and commitment from the Nebraska Department of Natural Resources to provide up to $95,542 of matching state funding for your Bureau of Reclamation WaterSMART grant application for the Thirty-Mile Irrigation District Project. 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 developed in partnership with your District and the 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.

Should your grant application be approved, Department staff will work with you to develop a contract that implements this financial commitment. 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,

Thomas E. Riley

Thomas E. Riley,
Director

Thomas E. Riley, P.E., Director

Department of Natural Resources

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