State Water Commission Pre-Commission Meeting
Ground Floor East/West Conference Room (SWC Staff Only)
1000 E. Divide Ave., Bismarck, ND
Thursday, September 15 – 1:00 p.m. CT
A QUORUM OF THE COMMISSION MAY BE PRESENT

Microsoft Teams meeting
Join on your computer or mobile app
Click here to join the meeting
Or call in (audio only)
+1 701-328-0950; Passcode 465917910#
Phone Conference ID: 465 917 910#

AGENDA

A. Roll Call

B. SWC Secretary Update (no attachment)
   1. Potential Legislation

C. Southwest Pipeline Project – REM Reimbursement Request (Sindhuja)

D. Northwest Area Water Supply – Snake Creek Intake Modifications Contract 1 Award (no attachment) (Tim)

E. Four-Year Progress Updates (Julie)

F. Flood Control (Julie)
   1. Neche: Neche Flood Protection System PC
   2. Richland-Sargent Joint WRD: Drain No. 1 Improvement Phase 3 PC

G. General Water (Julie)
   1. Ward County WRD: Ward County Low Head Dams Remediation PC

H. Water Supply (Municipal/Regional) (Jeffrey)
   1. Crosby: Hendrickson Holmes Improvements PC
   2. Western Area Water Supply: R&T Battleview McGregor Rural Phase 1 PC
   3. Western Area Water Supply: MCWRD Phase 2 Transmission Line C
   4. Elgin: 1st, 2nd, 3rd Avenue Reconstruction C
   5. Williston: 8th Avenue and 31st Street Improvements C
   6. Lincoln: Water Tank Replacement CI
   7. Washburn: Raw Water Intake CI

I. Water Supply (Rural) (Jeffrey)
   1. East Central RWD: Service to Galesburg PC
   2. South Central RWD: Hawktree Tank PC
   3. Stutsman RWD: Well Field Expansion PC
   4. Upper Souris WUD: 2022 Improvements Phase 1 SCADA C
J. Water Development Plan Update (Pat)

K. Cost-Share Policy Update (Pat)

L. Adjourn

PC Pre-Construction
C Construction
L Legislative
CI Cost Increase
O Other
SECTION 1. Amendment. Section 61-24.6-02 of the North Dakota Century Code is amended and reenacted as follows:

61-24.6-02. Northwest area water supply advisory committee - Created.
The northwest area water supply advisory committee consists of the following representatives, appointed by the director of the department of water resources:
1. One person from the city of Minot recommended by the Minot city council.
2. One person from the Bottineau, Burke, Mchenry, McLean, Pierce, Renville, and Ward County water resource districts recommended jointly by the governing boards of the Bottineau, Burke, Mchenry, McLean, Pierce, Renville, and Ward County water resource districts.
3. One representative of the state water commission recommended by the commission.
4. One representative of the Turtle Mountain Band of Chippewa Indians recommended by the tribal council who will serve as a nonvoting member.
5. One representative of rural water distribution systems located in northwestern North Dakota. This representative must be a resident of Bottineau, Burke, Mchenry, McLean, Pierce, Renville, or Ward County.
6. One representative of a municipality other than the city of Minot, located in Bottineau, Burke, Mchenry, McLean, Pierce, Renville, or Ward County.
7. One representative of the Garrison Diversion Conservancy District recommended by the board of directors of the conservancy district.
8. One at-large representative.

61-24.6-02. Northwest area water supply authority - Created.
The northwest area water supply authority consists of the following representatives, serving four year terms:
1. Four representatives from the city of Minot recommended by the Minot city council, one of which may represent North Prairie Rural Water District.
2. One representative of all seasons water users district recommended by the all seasons water users district board of directors.
3. One representative of the upper souris water district recommended by the upper souris water district board of directors.
4. Two representatives of municipalities other than the city of Minot, with direct water service from the northwest area water supply project to be selected for by election by cities during the annual meeting of the North Dakota league of cities in every even-numbered year beginning in 2024.
5. One representative of the State Water Commission recommended by the State Water Commission.
6. One representative of the Garrison Diversion Conservancy District recommended by the Garrison Diversion Conservancy District Board of Directors who will serve as a nonvoting member.
7. One representative of the Turtle Mountain Band of Chippewa Indians recommended by the tribal council who will serve as a nonvoting member.

SECTION 2. Amendment. Section 61-24.6-03 of the North Dakota Century Code is amended and reenacted as follows:

61-24.6-03. Advisory committee Authority - Duty - Officers - Meetings - Compensation – Staffing - Revenue.
The northwest area water supply advisory committee authority shall develop recommendations for the legislative management regarding the transition of long-term operations and management of the northwest area water supply project. The advisory committee authority shall elect a chairman and vice chairman and meet no less than once per quarter at the times
and places necessary to carry out the purposes of this chapter. The advisory committee authority members may be reimbursed for their mileage and expenses in the amount provided for by sections 44-08-04 and 54-06-09. The advisory committee authority members serve at the pleasure of the director of the department of water resources state water commission. Vacancies must be filled in the same manner as original appointments are made. The state water commission department of water resources shall provide staffing and support for the advisory committee authority. Revenue for the Authority will be provided by.....

SECTION 3. Amendment. Section 61-24.6-04 of the North Dakota Century Code is amended and reenacted as follows:

61-24.6-04. Powers of the state water commission in consultation with the northwest area water supply advisory committee authority.

The state water commission shall consult with the northwest area water supply advisory committee authority regarding the following duties of the commission:
1. Accept funds, property, services, or other assistance, financial or otherwise, from federal, state, tribal, and other public or private sources for the purpose of aiding and promoting the development of a project to deliver water to northwestern North Dakota.
2. Cooperate and contract with the state, its agencies, or its political subdivisions, the Three Affiliated Tribes, or any agency of the United States, in research and investigation or other activities promoting the development of a project to deliver water to northwestern North Dakota.
3. Appoint and procure the services of engineers, attorneys, and others to assist in developing a project to deliver water to northwestern North Dakota.
4. Exercise such other powers as may be necessary for, or incidental to, the achievement of the purposes of this chapter.
5. Construct, operate, and manage a project to deliver water throughout the project area.

SECTION 4. Amendment. Section 61-24.6-06 of the North Dakota Century Code is amended and reenacted as follows:

61-24.6-06. Commission to fix water rates for the northwest area water supply project.

The state water commission, after consulting with the northwest area water supply advisory committee authority, shall establish the payments for water service to be paid by water user entities for purchase of water from the northwest area water supply project. The payments for water service must include each water user entity's proportionate share of the operation, maintenance, and replacement costs, and also include a component for payment for capital costs. The commission shall include in its determination of each water user entity's share of operation, maintenance, and replacement costs an amount to be deposited in the northwest area water supply project reserve fund for replacement, as established by section 61-24.6-07, for replacement and extraordinary maintenance of northwest area water supply project works. The amount of the reserve fund for replacement must be determined by the commission.
Sixty-eighth
Legislative Assembly
of North Dakota

HOUSE BILL NO. TBD

Introduced by
Representative TBD

A BILL for an Act to amend and reenact subsection 13 of section 61-40-05, section 61-40-09, subsection 1 of section 61-40-10, subsection 2 of section 61-40-10, subsection 3 of section 61-40-10, section 61-40-11, of the North Dakota Century Code, relating to the oversight of the Western Area Water Supply Authority.

BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:

SECTION 1. AMENDMENT. Subsection 13 of section 61-40-05 of the North Dakota Century Code is amended and reenacted as follows:

13. Accept from any authorized state or federal agency loans or grants for the planning, construction, acquisition, lease, or other provision of a project, and enter agreements with the agency respecting the loans or grants. Other than state-guaranteed loans, additional debt that may form the basis of a claim for territorial or franchise protection for industrial water sales for oil and gas exploration and production may be acquired by the authority or member entities only upon approval by the industrial commission state water commission and the emergency commission.

SECTION 2. AMENDMENT. Section 61-40-09 of the North Dakota Century Code is amended and reenacted as follows:

61-40-09. Default.

The industrial commission Bank of North Dakota may review the ability of water depot and lateral sales to meet expenses in subdivisions a through d of subsection 1 of section 61-40-10, and if the industrial commission Bank of North Dakota is uncertain of that ability, the industrial commission Bank of North Dakota shall provide written notification to the state water commission and direct the Bank of North Dakota to consider revision of the terms of the loan repayments. If the authority is in default in the payment of the principal of or interest on the obligation to the Bank of North Dakota for a loan for which the Bank of North Dakota

Page No. 1
North Dakota is the source of funds for the loan, the state water commission western area water supply authority shall request funding from the legislative assembly to repay the principal and interest due.

SECTION 3. AMENDMENT. Section 61-40-10 of the North Dakota Century Code is amended and reenacted as follows:

61-40-10. Industrial water depot and lateral sales.

1. An accounting of industrial water depot and lateral sales collected and distributed by the authority must be reported to the industrial commission state water commission on a monthly basis. Participating member entities shall transfer industrial water depot and lateral sales to the authority within thirty days of receipt of the revenues. The boards of the authority and participating member entities must be notified of the sweep of revenues; however, board approval is not required. Upon the receipt of industrial water depot and lateral revenues by the authority, the authority shall apply immediately all revenues each month in the following order:

a. One hundred fifty thousand dollars per biennium to the industrial commission for one additional full-time equivalent position to implement this section.

b. Reimburse the authority for industrial water depot capital improvements and the cost for delivery of potable or nonpotable water sold at industrial water depots and lateral lines, at a cost no greater than the participating member, or submember, if applicable, entity rate at the location of the depot or lateral line.

c. Regular payments on the participating member entity debt as described in the agreements with the authority as of March 31, 2013, and baseline 2010 industrial water sales included in and subject to the terms of the authority and participating member agreements as of March 31, 2013. Baseline 2010 industrial water sales for the city of Tioga in the year 2013 are limited to the lesser of legally permitted industrial water sales or the amount in the member agreement.
d. Required monthly payments on state-guaranteed loans. The required transfer must occur no later than the twentieth day of the following month.

e. Additional principal payment on state-guaranteed loans.

f. Payment to the resources trust fund.

2. If the state-guaranteed loans have not been repaid, without the written consent of the industrial commission the authority may not sell, lease, abandon, encumber, or otherwise dispose of any part of the property used in a water system of the authority if the property is used to provide revenue. Any requirements on the state-guaranteed loans for establishment of reserve funds for operation and maintenance or debt service are waived.

3. The state water commission shall approve the planning, location, and water supply contracts of any authority depots, laterals, taps, turnouts, and risers for industrial sales for oil and gas exploration and production after July 1, 2013.

SECTION 4. AMENDMENT. Section 61-40-11 of the North Dakota Century Code is amended and reenacted as follows:


The industrial commission may authorize the authority to contract at competitive, floating, market rates for industrial water depot and lateral retail sales. The authority shall provide a report on the rates to the commission, state water commission, and legislative management’s water topics overview committee on a regular basis. The authority shall develop domestic water rates that must include all costs for operation, maintenance, and operating and capital reserves, and debt repayment of all infrastructure managed or constructed by the authority, with the exception of the costs identified in section 61-40-10 which are paid for by industrial water depot and lateral sales.
MEMORANDUM

To: Andrea Travnicek, Ph.D., Director, Department Water Resources

From: Ledeanna O'Shields, CFO/Office Administrator, SWA

Subject: Reimbursement from the Reserve Fund for Replacement and Extraordinary Maintenance

Date: September 6, 2022

Copy: Sindhuja S. Pillai-Grinolds, P.E., Water Development Division Director
Jarrett Hillius, P.E., Project Manager, Department Water Resources
Jen Murray, Manager/CEO, SWA

Reimbursement and authorization to transfer funds from the Replacement and Extraordinary Maintenance Fund is being requested for four separate items of work.

Work was completed on the Phase II Replacement of the Card Rack Telemetry Units. They were replaced with modern Remote Terminal Unit’s, the Central Terminal Unit and the system software was upgraded. This was done at Davis Buttes Reservoir, the Dodge Pump Station, the Richardton Pump Station and the Dickinson WTP. The billing amount was $48,532.60 and has been paid. A copy of the contractor’s application for final payment is included with the memorandum. This has been a budget item for the Replacement and Extraordinary Replacement fund since 2015. The amount in the budget is $50,000.00 and was previously approved in the budgeting process.

Work was completed on the Cathodic Protection Improvement Program on Steel Vaults. The installation of solid state de-coupler (SSD) to improve cathodic protection was installed at the older vaults. The billing amount was $119,298.23 and has been paid. This has been a budgeted item for the Replacement and Extraordinary Replacement fund since 2019. The amount in the budget is $75,000.00 and was previously approved in the budgeting process. A spreadsheet listing the invoices is included with this memorandum.
Costs are also being requested for the leak repair on Contract 2-3E during installation of the main transmission line (MTL). The leak occurred April 11, 2022, when the contractor struck the MTL due to inaccurate locate. The billing amount was $25,184.50 and has been paid. This was not included in the approved REM budgets.

Reimbursement is requested for the above three items for a total of $193,015.33. Copies of invoices are available upon request. Authorization for transfer of funds from REM fund is requested for Contract 2-3A replacement work.

Contract 2-3A is the 30 inch raw water main transmission line east of Taylor. A leak occurred in the polyethylene encased ductile iron pipe (DIP) on May 2020 and again in August 2021. The initial replacement estimate was 1,800 feet at an estimated $1.8 million. SWA requested Capital Assets funding for this replacement. In December 2020, the SWC directed SWA to use REM funds for this replacement project. An assessment of the pipeline indicated the need for an additional 1,700 feet, or a total of 3,700 feet, of DIP in need of replacement at an estimate of $6 million. The SWA REM Budget was adjusted to $6 million on April 4, 2022. SWA Contract PP-2022-1; 2-3A Pipeline Replacement near Taylor, was bid as an installation contract on March 31, 2022. Due to the long lead times, SWA did purchase the pipe and materials. The use of $4.5 million in State Fiscal Recovery Funds was requested by SWA. The request of up to $4.5 million is for 75% of the estimated replacement costs from the State Fiscal Recovery Fund and the remaining 25% to be funded from the SWPP REM fund. This request was approved on August 11, 2022, by the SWC.

It is expected that, moving forward, SWA will submit receipts for Contract PP-2022-1 expenses to the DWR for reimbursement of 75% from the State Fiscal Recovery Funds. The remaining 25% is eligible for reimbursement from the REM fund. SWA requested the SWA Board of Directors to authorize approval of funds to be transferred from the REM fund as the receipts are submitted to the DWR and reimbursed from the State Fiscal Recovery Fund.

The current balance in the Reserve Fund for Replacement and Extraordinary Maintenance is $23,765,679.77 as of July 31, 2022.

I respectfully request that the Phase II Replacement of the Card Rack Telemetry Units, Cathodic Protection Improvement Program on Steel Vaults and the Contract 2-3E Leak Repair to be repairs and extraordinary maintenance and to be eligible for reimbursement from the Reserve Fund for Replacement and Extraordinary Maintenance and to approve the transfer of REM fund to for Contract PP-2022-1 as receipts are submitted to DWR and approve the release of $193,015.33 from this fund at this time.

The SWA Board of Directors took similar action at its September 6, 2022, meeting.
## Requesting Extension

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Project</th>
<th>Project Category</th>
<th>Approved Date</th>
<th>Total Cost</th>
<th>%</th>
<th>Cost-Share Approved</th>
<th>Total Payments</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walsh Co. WRD</td>
<td>Forest River Dam 1 (Matejcek Dak) Rehabilitation</td>
<td>Flood Control</td>
<td>10/11/18</td>
<td>$873,000</td>
<td>75</td>
<td>$279,750</td>
<td>$226,751</td>
<td>$52,999</td>
</tr>
<tr>
<td>North Cass WRD</td>
<td>Sheldon Subdivision Levee</td>
<td>Flood Control</td>
<td>10/11/18</td>
<td>$617,000</td>
<td>60</td>
<td>$370,200</td>
<td>$0</td>
<td>$370,200</td>
</tr>
<tr>
<td>GDCD</td>
<td>Mile Marker 0 and 0.4 Irrigation</td>
<td>General</td>
<td>12/7/18</td>
<td>$3,347,586</td>
<td>50</td>
<td>$1,673,793</td>
<td>$53,739</td>
<td>$1,620,054</td>
</tr>
<tr>
<td>Dept. of Water Resources</td>
<td>Probable Maximum Precipitation (PMP) Estimates</td>
<td>General</td>
<td>10/11/18</td>
<td>$600,000</td>
<td>100</td>
<td>$600,000</td>
<td>$594,308</td>
<td>$5,692</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td></td>
<td></td>
<td></td>
<td>$4,564,586</td>
<td>N/A</td>
<td>$2,643,993</td>
<td>$648,047</td>
<td>$1,995,946</td>
</tr>
</tbody>
</table>
August 27, 2022

ND Department of Water Resources
ATTN: Cost-Share Program
900 E Boulevard Ave.
Bismarck, ND 58505-0850

Subject: Matejcek Dam Rehabilitation Plan (NRCS Watershed Rehabilitation Program)
Extension of prior approved ND State Water Commission Cost Share

Dear Commission Members,

The Walsh County Water Resource District (WCWRD) respectfully requests a one-year extension for the Matejcek Dam Rehabilitation Plan project (Project), which was approved for funding during the October 11, 2018 NDSWC meeting. Matejcek Dam is a high hazard dam located on the Forest River near Fordville, ND. The dam has several deficiencies including inadequate spillway capacity, geotechnical seepage concerns, and an erodible spillway. The Project will result in a plan to rehabilitate Matejcek Dam through the NRCS Watershed Rehabilitation Program.

The work that has been completed to date includes all on site field investigations and surveys, existing conditions assessments of engineering and environmental concerns, public outreach, and development of alternatives. NRCS also added a review of water quality concerns that have resulted in impacts to the fishery provided by the normal pool. The remaining items include finalizing the alternative to carry forward, public outreach, and finalize the Watershed Plan-EA document.

The Watershed Plan-EA document is required to be completed following federal requirements to ensure that the Project qualifies for federal funding during implementation. Federal requirements have recently changed. The planning process has slowed to ensure NRCS agency requirements are consistent with the modified federal requirements.

We would request an extension of the remaining prior approved $279,750 for a period of one-year to allow sufficient time to finish remaining work items and coordinate with NRCS on documentation to meet federal requirements.

If you have any questions, please do not hesitate to contact our office at (701) 352-0081.

Sincerely,

Walsh County Water Resource District

Board Members
Daryl Campbell, Chairman  Larry Tanke, Vice Chairman  Albin Jallo, Mgr
August 25, 2022

Julie Prescott, PE  
Cost-Share Program Manager  
North Dakota Department of Water Resources  
900 East Boulevard Avenue  
Bismarck, ND 58505

Dear Julie:

RE: Sheldon Subdivision Levee Cost-Share Extension Request  
Raymond Township, Cass County, North Dakota

In October 2018, the Cass County Joint Water Resource District (WRD) was approved for $370,200 in cost-share for construction of the Sheldon Subdivision Levee. The levee will protect a rural subdivision that was constructed in the 1970s and experienced flooding in 1997, 2000, 2007, 2009, and 2011. Although the Sheldon Subdivision is adjacent to the Metro Flood Diversion Project, it will remain outside of the permanent protection provided by the Diversion.

The WRD has finalized the financing plan, including cost-share from the Cass County Flood Sales Committee and formation of an assessment district, which passed unanimously.

There are several ongoing items that have impacted the construction schedule:

- **Land Acquisition:** The landowner of all underlying real estate needed for the project easement requested the acquisition for the Sheldon Subdivision Levee be conducted concurrently with the real estate being acquired for the adjacent Metro Flood Diversion Project. The Board granted this request, and the land rights were only recently acquired.

- **Value Engineering:** An agreement between the WRD and the Diversion Authority was reached to require the Diversion’s contractor to provide 12,000 yd³ of clay levee material, the estimated volume needed to complete the project, to the project site. This will have a substantial benefit to the final cost of the project. The schedule agreed upon is for the clay to be provided no later than September 1, 2023. The WRD will continue working to see if that date can be moved forward.

- **Construction Permit:** A construction permit application was submitted in 2020. The last correspondence from the NDDWR regulatory staff was in October 2020. The permit had not been reviewed at that time.
The WRD intends to complete the project as quickly as possible within the constrains outlined above and requests a two-year extension to the existing cost-share agreement.

If you have any questions, please feel free to contact me or our project manager, Kurt Lysne, Moore Engineering, Inc., at 701-282-4692.

Sincerely,

CASS COUNTY JOINT WATER RESOURCE DISTRICT

Carol Harbeke Lewis
Secretary-Treasurer
August 26, 2022

Julie Prescott, PE
Department of Water Resources
900 East Boulevard Avenue, Dept 770
Bismarck, ND 58505

Dear Julie,

The Garrison Diversion Conservancy District (Garrison Diversion) would like to apply for an extension to the cost-share agreement for the Mile Marker (MM) 0 and Mile Marker 0.4 Irrigation Project. Garrison Diversion is requesting to extend $92,619 of the approved $1,673,793 cost-share reimbursement.

Garrison Diversion submitted one cost-share application to the State Water Commission for these two irrigation projects. Each project had a separate cost estimate that was provided with the application. Pre-construction engineering has been completed for both projects. Construction on the "on-farm" portion of the MM 0.4 project has been completed, with the "off-farm" portion planned to be constructed and completed in 2023. The MM 0 irrigation project is unable to be constructed at this time.

The extension request of $92,619 is for the "off-farm" construction and completion of the MM 0.4 irrigation project, which has been delayed several times due to covid restrictions, supply cost increases, and supply lead times.

Please contact us regarding any information that you will need to approve this extension.

Sincerely,

Kip Kovar, PE
District Engineer
TECHNICAL MEMORANDUM

DATE: August 29, 2022

TO: Pat Fridgen, Planning Division Director
    Julie Prescott, Cost-Share Program Manager
    Beth Nangare, Cost-Share Program Administrator

FROM: Aaron Carranza, Regulatory Division Director
      Michael Hall, Silver Jackets Program Coordinator

SUBJECT: SWC #2115 – Probable Maximum Precipitation (PMP) Estimates Project

In October 2018, the North Dakota State Water Commission (SWC) approved up to $600,000 for the North Dakota Department of Water Resources (DWR), through the DWR Regulatory Division, to fund a Statewide Probable Maximum Precipitation (PMP) Analysis (Project). The Project was completed by Applied Weather Associates (AWA) in June 2021 and reviewed, approved, and published for use on the DWR website in February 2022.

Prior to completion, the DWR approved contract amendments with AWA to post Project data on AWA’s National PMP Web Portal (Portal). The Portal houses three other states’ AWA-developed PMP data, with six additional states under consideration. DWR elected to participate in the Portal for two years, ending in December 2022, for a cost of approximately $12,000. Participation in the Portal allows for national visibility of North Dakota PMP data and use by federal, state, and private entities. Participation also provides for AWA technical support, assistance, guidance, updates, amendments, maintenance, and potential training.

The DWR requests a 6-month extension for the use of the remaining $5,692 authorized for the Project. If approved, these remaining funds would be used to continue participation in the Portal for a third year starting in January 2023. Participation costs $6,000.00 per year, with the DWR covering the remaining $308.00 out of DWR current appropriations.
21430 - City of Neche Flood Protection System

Application Details

Funding Opportunity:
19214-2022 Infrastructure Request

Due Date: Dec 31, 2022 3:00 PM

Program Area:
Funding for Infrastructure in ND - FIND

Status: Under Review

Stage: Final Application

Contact Information

Primary Contact Information

Active User*: Yes
Type: External User
Name: Mr. Nate Salutation First Name
Middle Name Dalager Last Name
Title:

Email*: nate.dalager@hdrinc.com
Address*: 213 North LaBree, Suite 203

Organization Information

Status*: Approved
Name*: City of Neche
Organization Type*: Municipal Government
Tax Id:

Organization Website:
Address*: 353 Madison Avenue
<table>
<thead>
<tr>
<th></th>
<th>Thief River Falls</th>
<th>Neche North Dakota</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>Minnesota</td>
<td>North Dakota</td>
</tr>
<tr>
<td>State/Province</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postal Code/Zip</td>
<td>56701</td>
<td>58265-___</td>
</tr>
<tr>
<td>Phone*</td>
<td>218-689-1042 Ext.</td>
<td>Phone</td>
</tr>
<tr>
<td>Fax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefactor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vendor ID</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PeopleSoft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplier ID</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location Code</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAM.gov Entity ID</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAM.gov Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAM.gov Entity ID</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expiration Date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Issued ID</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category #</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year Begin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NCES#</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restricted Indirect Cost Rate</td>
<td></td>
<td>0.0%</td>
</tr>
</tbody>
</table>

https://grants.nd.gov/printPreviewDocument.do?OIdString=166179374...le=dashboard&submodule=myReviews&tab=details&doc=app&printer=Yes  Page 2 of 8
Infrastructure Funding Request

Project, Program, or Study Name*: City of Neche Flood Protection System

Sponsor(s)*: City of Neche

County*: Pembina

City*: Neche

Description of Request*: New

If Study, What Type: Floodplain Mgmt.

If Project/Program, What Type: Flood Control

Jurisdictions/Stakeholders Involved*: City of Neche Pembina County Pembina County Water Resource District State of North Dakota

Specific Needs Addressed By the Project, Program or Study*: Neches flood control system consists of an outdated and undersized levee, a road embankment, an aging pump station, and two internal ponding areas that limit flooding damages from the Pembina River. The flood protection alignment is 13,300 feet of earthen embankment that surrounds Neche. The purpose of the project is to certify Neches levee system in order to increase public safety, reduce frequent flood preparation demands on emergency services, and become compliant with FEMA regulations.

Description of Problem or Need and How Project Addresses that Problem or Need:

The Project will greatly reduce the emergency flood fight that is required on a regular basis. Also, flood insurance is required for all habitable structures in Neche that are financed by mortgages from companies or banks that are Federal Deposit Insurance Corporation insured. Flood insurance premiums have increased over the years. The Project will assist the City with the ability to grow and maintain a stable population in rural North Dakota.

For this project,
Choose City, County or Water District*:

What is the Current Estimated Population?:

For this project,

What is the Benefited Population?:

Has Feasibility Study Been Completed*:

Has Engineering Design Been Completed*:

Have Assessment Districts Been Formed*:

Have Land or Easements Been Acquired*:

Has Sediment Analysis For Reconstruction Of An Existing Drain Been Completed?*

Extraterritorial Jurisdiction? :

Have You Applied For Any Federal Permits*:

If Yes or Ongoing, Please Explain (include type/number):

Have You Applied for any State Permits*:

If Yes or Ongoing, Please Explain (include type/number):
Have You Applied for any Local Permits?: No

If Yes or Ongoing, Please Explain
(include type/number):
Briefly explain the level of review the Project/Program/Study has undergone.

Level Review*:
The City of Neche has been working with the State Water Commission for over seven years. This time has
been spent completing the feasibility study and detailed hydraulic modeling necessary to advance the
Project towards completion. As we enter the next phase of work that includes the final designs and
associated project development activities, we hope to that the Department of Water Resources will
continue to support us with a new cost-share agreement.

Do You Expect Any Obstacles To Implementation (i.e. problems with land acquisition, permits, funding, local
opposition, environmental concerns, etc.)?

Obstacles*:
No

Have you received, or do you anticipate receiving federal funding?

Federal Funding*:
No

Implementation Timelines

Study*:
6/2015
Month/Year (00/0000)

Design*:
10/2022
Month/Year (00/0000)

Bid*:
06/2024
Month/Year (00/0000)

Construction Start*:
06/2024
Month/Year (00/0000)

Construction Completion*:
06/2025
Month/Year (00/0000)

Explain Additional Timeline Issues*:
The City is has been working diligently trying to move the Project forward. Since our last cost share
request in August 2021, we have developed an EA, which is also included with this submittal. It is our
understanding that our Project is still eligible for cost share based upon reconsideration of the EA and its
bearing on community flood protection projects. The City desperately needs cost share assistance to
move forward with the Project.

**Certification**

Submitted by*: Nate Dalager 08/29/2022  
First Name Last Name Date

Address*: 213 North LaBree, Suite 203  
Address Line 1  
Address Line 2  
Thief River Falls Minnesota 56701-0000  
City State Zip Code

Telephone Number*: 218-689-1042

Sponsor Email*: nate.dalager@hdrinc.com

Consulting Engineer*: Nate Dalager

Engineer Telephone Number*: 218-689-1042

Engineer Email*: nate.dalager@hdrinc.com

This section needs to be completed by the project sponsor.  
I certify that, to the best of my knowledge, the provided information is true and accurate.

Certify*: Yes

Authorized Individual*: Nate Dalager 08/29/2022  
First Name Last Name Date

**Documentation**

Project Specific Map  
(Including an inset map of location within state.)  
CLICK HERE to see examples.

Project Specific Map*: NECHE_Sudy_Area_FinalDesign_ANSI_B_Portrait.pdf

Are You Seeking Department of Water Resources Cost-Share?: Yes

CLICK HERE for SFN 61801 Delineation of Costs.

Delineation of Costs SFN 61801: Neche_economic_analysis_worksheet_HDR_3.xlsx
Type of Request: Preconstruction

Water Supply Projects?: No
Rural Flood Control?: No
Drain Reconstructions?: No
Flood Recovery Property Acquisition?: No
Community Flood Control, Rural Flood Control, Bank Stabilization, or Snag & Clear Project With Total Cost of $200,000 or More?: Yes

CLICK HERE for Economic Analysis Instructions.

Economic Analysis:

Feasibility/Engineering Study for the Proposed Project or Other Applicable Documents: Yes

Feasibility/Engineering Study Material or Other Applicable Document: Deficiency_Report_FINAL_w_app.pdf

Engineering Total Cost of $35,000 or More?: Yes


Sources

Funding Amount Requested - Include Amount Requested for All State Funding Sources

<table>
<thead>
<tr>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Cost Source</th>
<th>Type</th>
<th>Term</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>$572,000.00</td>
<td>$0.00</td>
<td>$3,478,786.00</td>
<td>$4,050,786.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>$572,000.00</td>
<td>$0.00</td>
<td>$3,478,786.00</td>
<td>$4,050,786.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

Other Funding Sources
<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Grant or Loan</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>City of Neche</td>
<td>N/A</td>
<td>$381,273.00</td>
<td>$0.00</td>
<td>$2,319,191.00</td>
<td>$2,700,464.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$381,273.00</td>
<td>$0.00</td>
<td>$2,319,191.00</td>
<td>$2,700,464.00</td>
</tr>
</tbody>
</table>

**Project Total**

Current Requested Amount: $4,050,786.00
Other Funding Sources: $2,700,464.00
Total Project: $6,751,250.00
## Delineation of Costs

**City of Neche Levee Certification Project**

### Project Information
- **Sponsor:** City of Neche
- **Contact:** Stuart Symington, Mayor
- **Phone:** 701-238-3502
- **Engineer:** Nate Dauger, HDR
- **Phone:** 218-681-6100

### Cost Classification

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost Classification</th>
<th>Quantities</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>2</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>3</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>4</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>5</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>6</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>7</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>8</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>Construction Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>10</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>11</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>12</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>13</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>14</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>15</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>16</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>17</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>18</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>19</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>20</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>21</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>22</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>23</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>24</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>25</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>26</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>Construction Sub-Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>28</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>29</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>30</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>31</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>32</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>33</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>Engineering Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>35</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>36</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>37</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>38</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>39</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>40</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>41</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>Other Eligible Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>43</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>44</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>45</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>46</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>47</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>48</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td>49</td>
<td>#DVI/01</td>
<td>0</td>
<td>$</td>
<td>$</td>
<td>60%</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>Other Ineligible Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Total Costs
- **Total Cost:** $953,273
- **Ineligible Cost:** $-
- **Eligible Cost:** $953,273
- **Cost-Share:** 60%

### Summary
- **Federal or State Funds That Supplant Costs:** $115,000
- **Cost Share Total:** $572,000

---

*The Cost-share estimate is purely for planning and informational purposes only and does not, in any way, guarantee a financial commitment to any degree, from the State Water Commission.*
{EA placeholder}
City of Neche, ND

Stuart Symington, Mayor
353 Madison Ave, Neche, ND 58265

August 23, 2022

Ms. Julie Prescott, P.E.
North Dakota Department of Water Resources
ATTN: Cost-Share Program
900 East Boulevard Avenue, Dept 770
Bismarck, ND 58505-0850

RE: Request For Additional Cost Share Assistance, City of Neche Levee Certification Project

Ms. Prescott:

The City of Neche has been working with the State Water Commission for over seven years. This time has been spent completing the feasibility study and detailed hydraulic modeling necessary to advance the Project towards completion. As we enter the next phase of work that includes the final designs and associated project development activities, we hope that the Department of Water Resources will continue to support us with a new cost-share agreement.

The City is requesting the Department of Water Resources to contribute 60% of the total costs, which are detailed in the attached SFN 61801 delineation of costs worksheet. Since our last cost share request in August 2021, we have developed an EA, which is also included with this submittal. It is my understanding that our Project is still eligible for cost share based upon reconsideration of the EA and its bearing on community flood protection projects. A portion of this request includes retroactive reimbursement request for hydraulic modeling costs (FEMA - CLOMR), geotechnical boring costs, and approximately the last year of engineering expenses incurred. These costs have already been paid by Neche, as we have been trying to keep the Project moving along by accomplishing tasks with NDDOT, while we worked through the EA and cost-share approval process over the past year.

In additional recent discussions with ND DWR Commissioner Michael Anderson, we have also included “new” up-front engineering expenses in our request that are required to replace a new sanitary sewer lift station and access crossing. This past Spring’s 2022 flood overwhelmed our aging infrastructure, and we are increasing the scope of our Project to include these items at this time.

We appreciate your participation with our Project as we move towards levee certification and removal of our City from the 100 year floodplain.

Sincerely,

Stuart Symington
Mayor of Neche

Encl: SFN 60439 Cost Share Application, SFN 61801 Delineation of Costs, Economic Analysis
### 21360 - Richland-Sargent Drain No. 1 Improvement Project Phase 3 - Final Design

**Application Details**

<table>
<thead>
<tr>
<th>Funding Opportunity:</th>
<th>19214-2022 Infrastructure Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding Opportunity Due Date:</td>
<td>Dec 31, 2022 3:00 PM</td>
</tr>
<tr>
<td>Program Area:</td>
<td>Funding for Infrastructure in ND - FIND</td>
</tr>
<tr>
<td>Status:</td>
<td>Under Review</td>
</tr>
<tr>
<td>Stage:</td>
<td>Final Application</td>
</tr>
<tr>
<td>Initial Submit Date:</td>
<td>Aug 24, 2022 2:14 PM</td>
</tr>
<tr>
<td>Initially Submitted By:</td>
<td>Joshua Hassell</td>
</tr>
<tr>
<td>Last Submit Date:</td>
<td>Aug 31, 2022 1:34 PM</td>
</tr>
<tr>
<td>Last Submitted By:</td>
<td>Joshua Hassell</td>
</tr>
</tbody>
</table>

**Contact Information**

**Primary Contact Information**

- **Active User**: Yes
- **Type**: External User
- **Name**: Joshua Hassell
- **Title**:
- **Email**: joshua.hassell@mooreengineeringinc.com
- **Address**: 925 10th Avenue East, Suite 1, West Fargo, North Dakota 58078
- **Phone**: (701) 282-4692 Ext.
- **Fax**: ####-####
- **Comments**:

**Organization Information**

- **Status**: Approved
- **Name**: Richland/Sargent Joint Water Resource District
- **Organization Type**: Political Subdivision
- **Tax Id**:
- **Organization Website**:

---

F2

Water Development Plan: Yes (2021)
Plan Priority: Low
Infrastructure Funding Request

Project, Program, or Study Name*: Richland-Sargent Drain No. 1 Improvement Project Phase 3 - Final Design
Sponsor(s)*: Richland-Sargent Joint Water Resource District
County*: Sargent
City*: Cayuga
Description of Request*: New

If Study, What Type:
If Project/Program, What Type: Rural Flood Control

Jurisdictions/Stakeholders Involved*:

Specific Needs Addressed By the Project, Program or Study*:
Drain 1 has experienced flooding due to inadequate drainage over the years. This project is a solution to address the poor drainage which causes frequent crop loss in this area. The proposed project would establish a new gradeline with flattened side slopes for channel stability and replace existing crossings that are past their service life with the new crossings will be sized to meet ND Stream Crossing Standards. The proposed channel
will be designed to contain the 10-yr discharge.
Description of Problem or Need and How Project Addresses that Problem or Need.

Description of Problem*:
Drain 1 has experienced flooding due to inadequate drainage over the years. This project is a solution to address the poor drainage which causes frequent crop loss in this area. The proposed project would establish a new gradeline with flattened side slopes for channel stability and replace existing crossings that are past their service life with the new crossings will be sized to meet ND Stream Crossing Standards. The local costs are being funded by the Drain’s maintenance funds.

For this project,

Choose City, County or Water District*: Water District

What is the Current Estimated Population*?: 26

For this project,

What is the Benefited Population*?: 26

Has Feasibility Study Been Completed*?: Yes

Has Engineering Design Been Completed*?: Ongoing

Have Assessment Districts Been Formed*?: Yes

Date Formed: 01/01/2014

Have Land or Easements Been Acquired*?: Ongoing

Has Sediment Analysis For Reconstruction Of An Existing Drain Been Completed*?: N/A

Extraterritorial Jurisdiction*?: No

Have You Applied For Any Federal Permits*?: No

If Yes or Ongoing, Please Explain (include type/number):

Have You Applied for any State Permits*?: No

If Yes or Ongoing, Please Explain (include type/number):

Have You Applied for any Local Permits*?: No

If Yes or Ongoing, Please Explain (include type/number):

Briefly explain the level of review the Project/Program/Study has undergone.

Level Review*:
Preliminary engineering study to estimate the potential permitting requirements, right-of-way needs, and design constraints for Phase 3. Preliminary design survey and engineering was completed including preliminary plans, wetland investigation, cost estimation, and utility investigation.

Do You Expect Any Obstacles To Implementation (i.e. problems with land acquisition, permits, funding, local opposition, environmental concerns, etc.)?

Obstacles*:

Have you received, or do you anticipate receiving federal funding?

Federal Funding*:

No

Implementation Timelines

Study*:

08/2022

Month/Year (00/0000)
Design*: 11/2022
Month/Year (00/0000)

Bid*: 3/2023
Month/Year (00/0000)

Construction Start*: 6/2023
Month/Year (00/0000)

Construction Completion*: 6/2024
Month/Year (00/0000)

Explain Additional Timeline Issues*: No issues are foreseen at this time

Certification

Submitted by*: Tiffany Bladow 08/25/2022
First Name Last Name Date

Address*: 418 2nd Ave N
Address Line 1
Address Line 2

Wahpeton North Dakota 58075-0000
City State Zip Code

Telephone Number*: 701-642-7733

Sponsor Email*: tbladow@co.richland.nd.us

Consulting Engineer*: Nathan Trosen

Engineer Telephone Number*: 701-551-1060

Engineer Email*: nathan.trosen@mooreengineeringinc.com

This section needs to be completed by the project sponsor.
I certify that, to the best of my knowledge, the provided information is true and accurate.

Certify*: Yes

Authorized Individual*: Tiffany Bladow 08/25/2022
First Name Last Name Date

Documentation

Project Specific Map
(Including an inset map of location within state.)
CLICK HERE to see examples.

Project Specific Map*: Project Map.pdf

Are You Seeking Department of Water Resources Cost-Share*: Yes

CLICK HERE for SNR 61801 Delineation of Costs.

Delineation of Costs SNR 61801: RS-1 Phase 3 Delineation of Costs.xlsx

Type of Request:

Water Supply Projects*: No

Rural Flood Control*: Yes

Approved Drainage Permit:

Results Of Positive Assessment Vote: RS 1-Master Assessment Roster.xls

Drain Reconstructions*: Yes

Sediment Analysis:
<table>
<thead>
<tr>
<th>Funding Amount Requested - Include Amount Requested for All State Funding Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State FY1</strong></td>
</tr>
<tr>
<td>$75,600.00</td>
</tr>
<tr>
<td>$75,600.00</td>
</tr>
</tbody>
</table>

**Other Funding Sources**

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Grant or Loan</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>Assessment District</td>
<td>N/A</td>
<td>$92,400.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$92,400.00</td>
</tr>
</tbody>
</table>

**Project Total**

- **Current Requested Amount:** $75,600.00
- **Other Funding Sources:** $92,400.00
- **Total Project:** $168,000.00
### Project Details
- **Project:** Richland-Sargent Drain 1 Improvements Phase 3
- **Sponsor:** Richland-Sargent Joint Water Resource District
- **Contact:** Tiffany Bladow (Secretary)
- **Phone:** 701.642.7733
- **Engineer:** Nathan Trosen, Moore Engineering Inc.
- **Phone:** 701.551.1060

### Cost Summary

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost Classification</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Construction Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>12</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>13</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>14</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>15</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>17</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>18</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>19</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>20</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>21</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>22</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>23</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>24</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>25</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td>26</td>
<td>#DIV/0!</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>45%</td>
<td>$ -</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Construction Sub-Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contingency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construction Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Preconstruction Costs | Final Design | 1 | Na | 143,000.00 | $ 143,000 | 45% | $ 64,350 |
| Engineering - Utilities | 0 | Na | 25,000.00 | $ 26,000 | 45% | $ 11,250 |
| 100.0% | Preconstruction Total | $ 168,000 | 45% | $ 75,600 |

### Construction Engineering Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>Other Eligible Costs</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Other Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>Federal or State Funds That Supplant Costs</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Cost-share estimate is purely for planning and informational purposes only and does not, in any way, guarantee a financial commitment to any degree, from the State Water Commission.
### 21312 - Ward County Low Head Dams Remediation

#### Application Details

**Funding Opportunity:** 19214-2022 Infrastructure Request

**Due Date:** Dec 31, 2022 3:00 PM

**Program Area:** Funding for Infrastructure in ND - FIND

**Status:** Under Review

**Stage:** Final Application

**Initial Submit Date:** Aug 26, 2022 8:18 AM

**Initially Submitted By:** Dennis Reep

**Last Submit Date:**

**Last Submitted By:**

#### Contact Information

**Active User:** Yes

**Type:** External User

**Name:** Salutation Dennis

**Title:** ND Managing Principal

**Email:** dennis.reep@hdrinc.com

**Address:** 3231 Greensboro Dr., Ste. 200

**Organization Information**

**Status:** Approved

**Name:** Ward County WRD

**Organization Type:** County Government

**Tax Id:** 450279510

**Organization Website:**

**Address:** P.O. Box 5005
<table>
<thead>
<tr>
<th>Bismarck North Dakota</th>
<th>Minot North Dakota</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>City</strong></td>
<td><strong>City</strong></td>
</tr>
<tr>
<td><strong>State/Province</strong></td>
<td><strong>State/Province</strong></td>
</tr>
<tr>
<td>58501</td>
<td>58701-__</td>
</tr>
<tr>
<td><strong>Postal Code/Zip</strong></td>
<td><strong>Postal Code/Zip</strong></td>
</tr>
<tr>
<td><strong>Phone</strong>: (701) 595-2142 Ext.</td>
<td><strong>Phone</strong>: 701-240-5874 Ext.</td>
</tr>
<tr>
<td>Phone</td>
<td><strong>Fax</strong>:</td>
</tr>
<tr>
<td><strong>Fax</strong>: (701) 557-9640</td>
<td><strong>Fax</strong>:</td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td><strong>Comments:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Location Code:</strong></td>
<td><strong>Location Code:</strong></td>
</tr>
<tr>
<td><strong>SAM.gov Entity ID:</strong></td>
<td><strong>SAM.gov Entity ID:</strong></td>
</tr>
<tr>
<td><strong>SAM.gov Name:</strong></td>
<td><strong>SAM.gov Name:</strong></td>
</tr>
<tr>
<td><strong>SAM.gov Entity ID:</strong></td>
<td><strong>SAM.gov Entity ID:</strong></td>
</tr>
<tr>
<td><strong>Expiration Date:</strong></td>
<td><strong>Expiration Date:</strong></td>
</tr>
<tr>
<td><strong>State Issued ID:</strong></td>
<td><strong>State Issued ID:</strong></td>
</tr>
<tr>
<td><strong>Category #:</strong></td>
<td><strong>Category #:</strong></td>
</tr>
<tr>
<td><strong>Year Begin:</strong></td>
<td><strong>Year Begin:</strong></td>
</tr>
<tr>
<td><strong>Year Closed:</strong></td>
<td><strong>Year Closed:</strong></td>
</tr>
<tr>
<td><strong>NCES#:</strong></td>
<td><strong>NCES#:</strong></td>
</tr>
<tr>
<td><strong>Restricted Indirect Cost Rate:</strong></td>
<td><strong>Restricted Indirect Cost Rate:</strong></td>
</tr>
<tr>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
Infrastructure Funding Request

Project, Program, or Study Name*: Ward County Low Head Dams Remediation
Sponsor(s)*: Ward County Water Resource District
County*: Ward
City*: Minot
Description of Request*: New
If Study, What Type: 
If Project/Program, What Type: DAM Safety/EAP
Jurisdictions/Stakeholders Involved*: Ward County Water Resource District

Specific Needs Addressed By the Project, Program or Study*:
Remediation of five (5) low head dams on the Mouse River near population centers of Minot and Burlington to removing drowning hazards to the general public due to their hydraulic parameters. All five (5) dams were identified in the NDDWR low head dam inventory with a Risk Ranking of 4 or 3 (out of a maximum of 5).

Description of Problem or Need and How Project Addresses that Problem or Need.

Description of Problem*:
Five (5) low head dams on the Mouse River are near population centers of Minot and Burlington. These represent drowning hazards to the general public due to their hydraulic parameters. The remediation will greatly improve the human safety hazard by eliminating the hydraulic roller effect these dams currently induce.

For this project,
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose City, County or Water District*</td>
<td>Water District</td>
</tr>
<tr>
<td>What is the Current Estimated Population?*</td>
<td>60000</td>
</tr>
<tr>
<td>For this project,</td>
<td></td>
</tr>
<tr>
<td>What is the Benefited Population?*</td>
<td>60000</td>
</tr>
<tr>
<td>Has Feasibility Study Been Completed?*</td>
<td>No</td>
</tr>
<tr>
<td>Has Engineering Design Been Completed?*</td>
<td>No</td>
</tr>
<tr>
<td>Have Assessment Districts Been Formed?*</td>
<td>N/A</td>
</tr>
<tr>
<td>Have Land or Easements Been Acquired?*</td>
<td>No</td>
</tr>
<tr>
<td>Has Sediment Analysis For Reconstruction Of An Existing Drain Been Completed?*</td>
<td>N/A</td>
</tr>
<tr>
<td>Extraterritorial Jurisdiction?*</td>
<td>Yes</td>
</tr>
<tr>
<td>Have You Applied For Any Federal Permits?*</td>
<td>No</td>
</tr>
<tr>
<td>If Yes or Ongoing, Please Explain (include type/number):</td>
<td></td>
</tr>
<tr>
<td>Have You Applied for any State Permits?*</td>
<td>No</td>
</tr>
<tr>
<td>If Yes or Ongoing, Please Explain (include type/number):</td>
<td></td>
</tr>
</tbody>
</table>
Have You Applied for any Local Permits?*: No

If Yes or Ongoing, Please Explain (include type/number):

Briefly explain the level of review the Project/Program/Study has undergone.

Level Review*:
Local prioritization of the dams utilizing prior NDDWR inventories has been achieved. This application addresses all five (5) structures concurrently.

Do You Expect Any Obstacles To Implementation (i.e. problems with land acquisition, permits, funding, local opposition, environmental concerns, etc.)?

Obstacles*: No

Have you received, or do you anticipate receiving federal funding?

Federal Funding*: No

Implementation Timelines

Study*: 11/2022
Month/Year (00/0000)

Design*: 01/2023
Month/Year (00/0000)

Bid*: 11/2023
Month/Year (00/0000)

Construction Start*: 01/2024
Month/Year (00/0000)

Construction Completion*: 09/2024
Month/Year (00/0000)

Explain Additional Timeline Issues*:
N/A

Certification
Submitted by*: Tom Klein 08/25/2022
First Name Last Name Date

Address*:
P.O. Box 5005
Address Line 1
Address Line 2
Minot North Dakota 58702-5005
City   State   Zip Code

Telephone Number*: 701-720-8508
Sponsor Email*: thokle@srt.com
Consulting Engineer*: HDR Engineering
Engineer Telephone Number*: 701-557-9621
Engineer Email*: dennis.reep@hdrinc.com

This section needs to be completed by the project sponsor.
I certify that, to the best of my knowledge, the provided information is true and accurate.

Certify*: Yes

Authorized Individual*: Tom Klein 08/25/2022
First Name Last Name Date

Documentation

Project Specific Map
(Including an inset map of location within state.)
CLICK HERE to see examples.

Project Specific Map*: WardCoDams_NDSWC_CostShareApp_Map2.pdf
Are You Seeking Department of Water Resources Cost-Share?*: Yes

CLICK HERE for SFN 61801 Delineation of Costs.

Delineation of Costs SFN 61801: sfn_61801_delineation_of_cost_WardWRD_LowHeadDams.xlsx
Type of Request: Preconstruction
Water Supply Projects?: No
Rural Flood Control?: No
Drain Reconstructions?: No
Flood Recovery Property Acquisition?: No
Community Flood Control, Rural Flood Control, Bank Stabilization, or Snag & Clear Project With Total Cost of $200,000 or More?: No
Feasibility/Engineering Study for the Proposed Project or Other Applicable Documents: No
Engineering Total Cost of $35,000 or More?: Yes

Sources

### Funding Amount Requested - Include Amount Requested for All State Funding Sources

<table>
<thead>
<tr>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Cost Source</th>
<th>Type</th>
<th>Term</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>$588,800.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$588,800.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>$588,800.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$588,800.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

### Other Funding Sources

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Grant or Loan</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>Ward County WRD</td>
<td>N/A</td>
<td>$196,200.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$196,200.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Grant or Loan</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Other Sources</th>
</tr>
</thead>
</table>

Project Total

Current Requested Amount: $588,800.00
Other Funding Sources: $196,200.00
Total Project: $785,000.00
**Project:** Ward County Low Head Dams (5) Remediation  
**Sponsor:** Ward County Water Resource District  
**Contact:** Tom Klein, Chairman  
**Phone:** 701.720.8508  
**Engineer:** Dennis Reep  
**Phone:** 701.557.9621

### Delineation of Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>%</th>
<th>Cost Classification</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Construction Costs</td>
<td>1</td>
<td>LB</td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>23</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>0.0%</td>
<td>Construction Sub-Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>0.0%</td>
<td>Contingency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>0.0%</td>
<td>Construction Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
</tbody>
</table>

### Preconstruction Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>%</th>
<th>Cost Classification</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td></td>
<td>Final Design</td>
<td>1</td>
<td>NA</td>
<td>$</td>
<td>785,000</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>29</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>31</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
</tbody>
</table>

### Construction Engineering Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>%</th>
<th>Cost Classification</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td></td>
<td>Construction Contract Management</td>
<td>1</td>
<td>NA</td>
<td>$</td>
<td>785,000</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>33</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>34</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>35</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>36</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
</tbody>
</table>

### Other Eligible Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>%</th>
<th>Cost Classification</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td></td>
<td>Miscellaneous</td>
<td>1</td>
<td>LB</td>
<td>$</td>
<td>785,000</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>38</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>39</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>40</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
<tr>
<td>41</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>$</td>
<td>$</td>
<td>75%</td>
<td>$</td>
</tr>
</tbody>
</table>

### Federal or State Funds That Supplant Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>%</th>
<th>Cost Classification</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $</th>
</tr>
</thead>
</table>

* The Cost-share estimate is purely for planning and informational purposes only and does not, in any way, guarantee a financial commitment to any degree, from the State Water Commission.
20789 - Hendrickson/Holmes Comprehensive Improvement Project - Water/Sewer/Street

Application Details

Funding Opportunity: 19214-2022 Infrastructure Request
Funding Opportunity Due Date: Dec 31, 2022 3:00 PM
Program Area: Funding for Infrastructure in ND - FIND
Status: Under Review
Stage: Final Application

Initial Submit Date: Jul 26, 2022 12:41 PM
Initially Submitted By: Teaguean Knudsen
Last Submit Date: Aug 26, 2022 9:22 AM
Last Submitted By: Teaguean Knudsen

Contact Information

Primary Contact Information

Active User*: Yes
Type: External User
Name: Salutation Alexa Ashton Kruger
Title: City Auditor
Email*: crosbyauditor@nccray.com
Address*: 15 W. Central Ave.
             PO Box 67
             Crosby North Dakota 58730
Phone*: 701-965-6029 Ext.
          Phone
          ####-####-####
Fax: 701-965-6399
      ####-####-####
Comments:

Organization Information

Status*: Approved
Name*: City of Crosby
Organization Type*: Municipal Government
Tax Id: 
Organization Website:
Address:  15 West Central Avenue

Crosby North Dakota  58730-0067
City State/Province Postal Code/Zip

Phone*:  701-965-6029 Ext.
Fax:  ###-###-#####

Benefactor:  
Vendor ID:  
PeopleSoft Supplier ID:  
Comments:  
Location Code:  
SAM.gov Entity ID:  
SAM.gov Name:  
SAM.gov Entity ID Expiration Date:  
State Issued ID:  
Category #:  
Year Begin:  
Year Closed:  
NCES#:  
Restricted Indirect Cost Rate:  0.0%
Unrestricted Indirect Cost Rate:  0.0%

Infrastructure Funding Request

Infrastructure Funding Request
Project, Program, or Study*: Henrickson/Holmes Comprehensive Improvement Project - Water/Sewer/Street
Sponsor(s)*: City of Crosby
County*: Divide
City*: Crosby
Description of Request*: New

If Study, What Type:  
If Project/Program, What Type: Municipal Water Supply

Jurisdictions/Stakeholders Involved*: City of Crosby

Specific Needs Addressed By the Project, Program or Study*: 
Water: Correction of distribution system pressure problems, replacement of deteriorated mains/service lines, correction of operating deficiencies associated with finished water storage facilities, correction of water/sewer horizontal separation. Sewer: Correct mains with < min. slope, replacement of deteriorated mains/service lines & manholes, improve cover of mains by lowering sewer beginning at the lift station, correction of water/sewer horiz. separation. Improve infrastructure reliability
Description of Problem or Need and How Project Addresses that Problem or Need.

**Description of Problem**: 
Water: This 22 block project will replace 12 blocks of deteriorated 4” CI mains and upsize them to 6” diameter mains while also creating two loops to improve domestic and fire fighting capabilities. The remaining 10 blocks are primarily deteriorated 60+ year old 6” AC pipe. Sewer: 16 blocks of SAS main will be replaced in this project. The existing sewer has numerous locations where slope and cover are less than minimum standards and there is extensive damage to the pipe (fractures, cracks, etc)

For this project,

**Choose City, County or Water District**: City

**What is the Current Estimated Population?**

For this project,

1145

**What is the Benefited Population?**

152

**Has Feasibility Study Been Completed?**

Ongoing

**Has Engineering Design Been Completed?**

No

**Have Assessment Districts Been Formed?**

No

**Have Land or Easements Been Acquired?**

N/A

**Has Sediment Analysis For Reconstruction Of An Existing Drain Been Completed?**

N/A

**Extraterritorial Jurisdiction?**

N/A

**Have You Applied For Any Federal Permits?**

N/A

If Yes or Ongoing, Please Explain (include type/number):

**Have You Applied for any State Permits?**

No

If Yes or Ongoing, Please Explain (include type/number):

**Have You Applied for any Local Permits?**

N/A

If Yes or Ongoing, Please Explain (include type/number):

Briefly explain the level of review the Project/Program/Study has undergone.

**Level Review**: 
The City of Crosby has completed a Water & Sewer Infrastructure Planning effort with the final report dated 4/30/2021. This effort analyzed all public water and wastewater infrastructure within City limits and created priority schedules for the replacement or renovation of the system envisioned over the next 10+ years. The planning report outlines 5 priority schedules for each utility. The City of Crosby is currently preparing a Street Inventory Plan to accompany the Water & Sewer report.

**Do You Expect Any Obstacles To Implementation (i.e. problems with land acquisition, permits, funding, local opposition, environmental concerns, etc.)?**

**Obstacles**

No

**Federal Funding**

No

**Implementation Timelines**

**Study**

06/2018

Month/Year (000000)
Design*: 02/2023
Month/Year (00/0000)

Bid*: 02/2024
Month/Year (00/0000)

Construction Start*: 04/2024
Month/Year (00/0000)

Construction Completion*: 09/2026
Month/Year (00/0000)

Explain Additional Timeline Issues*:
The timelines above are proposed based on a single comprehensive project, constructed over two years. For the ease of tracking eligible funding bid items the design and bidding documents will be created with separate schedules such as Water Improvements, Sewer Improvements, and Street Improvements.

Certification

Submitted by*: Jerry King 07/25/2022
First Name Last Name Date

Address*:
907 Dakota Drive
PO Box 262
Crosby North Dakota 58730-0067

City State Zip Code

Telephone Number*:
701-965-6029

Sponsor Email*:
jking@ncrcay.com

Consulting Engineer*:
Interstate Engineering

Engineer Telephone Number*:
701-774-3637

Engineer Email*:
Teague.Knudsen@interstateeng.com

This section needs to be completed by the project sponsor.
I certify that, to the best of my knowledge, the provided information is true and accurate.

Certify*: Yes

Authorized Individual*:
Jerry King 07/25/2022
First Name Last Name Date

Documentation

Documentation

Project Specific Map
(Including an inset map of location within state.)
CLICK HERE to see examples.

Project Specific Map*:
Crosby Water Network Schedule-Water Sewer Schedule 1 WebGrant.pdf

Are You Seeking Department of Water Resources Cost-Share*?: Yes

CLICK HERE for SFN 61801 Delineation of Costs.

Delineation of Costs SFN 61801:
S1800064 sfn_61801_delineation_of_cost.xlsx

Type of Request:
Preconstruction

Water Supply Projects*?: Yes

CLICK HERE for Life Cycle Cost Analysis Instructions.

Life Cycle Cost Analysis:
S1800064 life_cycle_cost_analysis_worksheet.xlsx

CLICK HERE for SFN 61938 Capital Improvement Plan.

Capital Improvement Plan SFN 61938:
S1800064 sfn_61938_capital_improvement_plan.xlsx
20789 - Hendrickson/Holmes Comprehensive Improvement Project - Water/Sewer/Street

Application Details

<table>
<thead>
<tr>
<th>Funding Opportunity:</th>
<th>19214-2022 Infrastructure Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding Opportunity Due Date:</td>
<td>Dec 31, 2022 3:00 PM</td>
</tr>
<tr>
<td>Program Area:</td>
<td>Funding for Infrastructure in ND - FIND</td>
</tr>
<tr>
<td>Status:</td>
<td>Under Review</td>
</tr>
<tr>
<td>Stage:</td>
<td>Final Application</td>
</tr>
<tr>
<td>Initial Submit Date:</td>
<td>Jul 26, 2022 12:41 PM</td>
</tr>
<tr>
<td>Initially Submitted By:</td>
<td>Teaguean Knudsen</td>
</tr>
<tr>
<td>Last Submit Date:</td>
<td>Aug 26, 2022 9:22 AM</td>
</tr>
<tr>
<td>Last Submitted By:</td>
<td>Teaguean Knudsen</td>
</tr>
</tbody>
</table>

Contact Information

Primary Contact Information

Active User*: Yes
Type: External User
Name: Salutation Alexa Ashton Kruger
       First Name Middle Name Last Name
Title: City Auditor
Email*: crosbyauditor@nccray.com
Address*: 15 W. Central Ave.
       PO Box 67
       Crosby North Dakota  58730
       City State/Province Postal Code/Zip
Phone*: 701-965-6029 Ext.
       Phone
       ####-####-####
Fax: 701-965-6399
       ####-####-####
Comments:

Organization Information

Status*: Approved
Name*: City of Crosby
Organization Type*: Municipal Government
Tax Id:
Organization Website:
Rural Flood Control?: No
Drain Reconstructions?: No
Flood Recovery Property Acquisition?: No
Community Flood Control, Rural Flood Control, Bank Stabilization, or Snag & Clear Project With Total Cost of $200,000 or More?: No
Feasibility/Engineering Study for the Proposed Project or Other Applicable Documents: Yes
Feasibility/Engineering Study Material or Other Applicable Document: Water-Sewer Facility Planning Report Digital Stamp.pdf
Engineering Total Cost of $35,000 or More?: Yes
Engineering Selection Documentation: Engineering Selection Documentation.pdf

Sources

Funding Amount Requested - Include Amount Requested for All State Funding Sources

<table>
<thead>
<tr>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Cost</th>
<th>Source</th>
<th>Type</th>
<th>Term</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>$78,000.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$78,000.00</td>
<td>Department of Water Resources</td>
<td>Grant</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>$78,000.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$78,000.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Funding Sources

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Grant or Loan</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Future DWR cost share for construction</td>
<td>Grant</td>
<td>$1,871,700.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$1,871,700.00</td>
</tr>
<tr>
<td>State</td>
<td>SRF Loans</td>
<td>Loan</td>
<td>$7,391,300.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$7,391,300.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$9,263,000.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$9,263,000.00</td>
</tr>
</tbody>
</table>

Project Total

Current Requested Amount: $78,000.00
Other Funding Sources: $9,263,000.00
Total Project: $9,341,000.00
### Project: Hendrickson/Holmes Comprehensive Improvement Project

**Sponsor:** City of Crosby

**Contact:** Jerry King, Councilman

**Phone:** 701-774-3637

**Engineer:** Teaguean Knudsen, Interstate Engineering

**Date:** July 19, 2022

<table>
<thead>
<tr>
<th>Cost Classification</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $ *</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.9% General Requirements and Mobilization</td>
<td>1 LS</td>
<td>142,000.00</td>
<td>$ 142,000</td>
<td>60%</td>
<td>$ 85,200</td>
<td></td>
</tr>
<tr>
<td>0.5% Exploratory Excavation</td>
<td>20 HR</td>
<td>350.00</td>
<td>$7,000</td>
<td>60%</td>
<td>$4,200</td>
<td></td>
</tr>
<tr>
<td>1.0% Traffic Control</td>
<td>1 LS</td>
<td>15,000.00</td>
<td>$15,000</td>
<td>60%</td>
<td>$9,000</td>
<td></td>
</tr>
<tr>
<td>43.4% 8&quot; C-900 DR 18 Pressure Class 235 PVC</td>
<td>7894 LF</td>
<td>80.00</td>
<td>$631,520</td>
<td>60%</td>
<td>$378,912</td>
<td></td>
</tr>
<tr>
<td>2.5% 8&quot; Gate Valve and Box</td>
<td>78 EA</td>
<td>2,500.00</td>
<td>$36,000</td>
<td>60%</td>
<td>$21,600</td>
<td></td>
</tr>
<tr>
<td>5.4% 8&quot; C-900 DR 18 Pressure Class 235 PVC</td>
<td>744 LF</td>
<td>105.00</td>
<td>$78,120</td>
<td>60%</td>
<td>$46,872</td>
<td></td>
</tr>
<tr>
<td>0.3% 8&quot; Gate Valve and Box</td>
<td>2 EA</td>
<td>2,500.00</td>
<td>$5,000</td>
<td>60%</td>
<td>$3,000</td>
<td></td>
</tr>
<tr>
<td>0.1% Curb Insulation</td>
<td>20 SY</td>
<td>65.00</td>
<td>$1,300</td>
<td>60%</td>
<td>$780</td>
<td></td>
</tr>
<tr>
<td>13.0% 1&quot; Water Service Reconnection incl. curb</td>
<td>95 EA</td>
<td>2,000.00</td>
<td>$190,000</td>
<td>60%</td>
<td>$114,000</td>
<td></td>
</tr>
<tr>
<td>10.8% 1&quot; Additional Water Service Line</td>
<td>660 LF</td>
<td>85.00</td>
<td>$55,250</td>
<td>60%</td>
<td>$33,150</td>
<td></td>
</tr>
<tr>
<td>1.0% Connect to Existing Water Main</td>
<td>6 EA</td>
<td>2,500.00</td>
<td>$15,000</td>
<td>60%</td>
<td>$9,000</td>
<td></td>
</tr>
<tr>
<td>3.4% Fire Hydrant Assembly</td>
<td>10 EA</td>
<td>5,000.00</td>
<td>$50,000</td>
<td>60%</td>
<td>$30,000</td>
<td></td>
</tr>
<tr>
<td>0.2% Type 2 Bedding</td>
<td>50 CY</td>
<td>70.00</td>
<td>$3,500</td>
<td>60%</td>
<td>$2,100</td>
<td></td>
</tr>
<tr>
<td>0.1% Paved Backfill</td>
<td>50 CY</td>
<td>40.00</td>
<td>$2,000</td>
<td>60%</td>
<td>$1,200</td>
<td></td>
</tr>
<tr>
<td>1.0% Landscape Restoration and Seeding</td>
<td>1900 SF</td>
<td>15.00</td>
<td>$28,500</td>
<td>60%</td>
<td>$17,100</td>
<td></td>
</tr>
<tr>
<td>4.5% Supply Temporary Water Service</td>
<td>1 LS</td>
<td>66,000.00</td>
<td>$66,000</td>
<td>60%</td>
<td>$39,600</td>
<td></td>
</tr>
<tr>
<td>0.3% Underground Utility Locator</td>
<td>1 EA</td>
<td>4,000.00</td>
<td>$4,000</td>
<td>60%</td>
<td>$2,400</td>
<td></td>
</tr>
<tr>
<td>0.7% Miscellaneous Work</td>
<td>10000 UNITS</td>
<td>1.00</td>
<td>$10,000</td>
<td>60%</td>
<td>$6,000</td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Construction Sub-Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,323,690</td>
<td>60%</td>
</tr>
<tr>
<td>10.0% Contingency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$152,369</td>
<td>60%</td>
</tr>
<tr>
<td>15.6% Construction Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,456,059</td>
<td>60%</td>
</tr>
<tr>
<td><strong>Preconstruction Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.9% Final Design</td>
<td>1 NA</td>
<td>199,000.00</td>
<td>$199,000</td>
<td>60%</td>
<td>$119,400</td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>1.4% Preconstruction Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$199,000</td>
<td>60%</td>
</tr>
<tr>
<td><strong>Construction Engineering Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.7% Construction Contract Management</td>
<td>1 NA</td>
<td>199,000.00</td>
<td>$199,000</td>
<td>60%</td>
<td>$119,400</td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2.1% Construction Engineering Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$199,000</td>
<td>60%</td>
</tr>
<tr>
<td><strong>Other Eligible Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.9% Asphalt Removal &amp; Subgrade Prep (12&quot;)</td>
<td>13037 SY</td>
<td>6.50</td>
<td>$84,741</td>
<td>60%</td>
<td>$50,844</td>
<td></td>
</tr>
<tr>
<td>2.8% 9&quot; NDDOT CLS Base Course (12’ Trench)</td>
<td>13037 SY</td>
<td>20.00</td>
<td>$260,740</td>
<td>60%</td>
<td>$156,444</td>
<td></td>
</tr>
<tr>
<td>11.2% Asphalt Paving (12’ Trench)</td>
<td>13037 SY</td>
<td>83.00</td>
<td>$1,424,860</td>
<td>60%</td>
<td>$857,760</td>
<td></td>
</tr>
<tr>
<td>0.5% Sidewalk Removal/Replace (12” Per Sidewalk)</td>
<td>2375 SF</td>
<td>18.00</td>
<td>$42,750</td>
<td>60%</td>
<td>$25,650</td>
<td></td>
</tr>
<tr>
<td>0.4% Curb &amp; Gutter Removal/Replace (12” Per Curb)</td>
<td>950 LF</td>
<td>35.00</td>
<td>$33,250</td>
<td>60%</td>
<td>$19,950</td>
<td></td>
</tr>
<tr>
<td>15.7% Other Eligible Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,466,441</td>
<td>60%</td>
</tr>
<tr>
<td><strong>Ineligible Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.4% Legal and Admin.</td>
<td>1 NA</td>
<td>40,000.00</td>
<td>$40,000</td>
<td>0%</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>15.5% Sanitary Sewer Improv. (S1l)</td>
<td>1 NA</td>
<td>1,449,000.00</td>
<td>$1,449,000</td>
<td>0%</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>49.3% Street &amp; Surface Improv. (S1)</td>
<td>1 NA</td>
<td>4,602,500.00</td>
<td>$4,602,500</td>
<td>0%</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>65.2% Other Ineligible Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$6,091,500</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$6,341,000</td>
<td></td>
</tr>
<tr>
<td><strong>Federal or State Funds That Supplant Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$3,249,500</td>
<td>60%</td>
</tr>
</tbody>
</table>

* The Cost-share estimate is purely for planning and informational purposes only and does not, in any way, guarantee a financial commitment to any degree, from the State Water Commission.
Life Cycle Cost Analysis Review

Sponsor: City of Crosby
Project Title: Hendrickson/Holmes Comprehensive Water/Sewer/Streets Improvement Project
Date: September 6, 2022

Explanation of Alternatives:
Schedule 1 Water Main Open Cut (Preferred) - Replace 60+ year old material and undersized water mains, increase residual pressures during fire flow with addition of hydraulic loops, and improve water quality with less dead-end mains.

No Action - Leave outdated and undersized water mains in place with no changes.

Inputs:

<table>
<thead>
<tr>
<th>New Connections Served</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Connections Served</td>
<td>0</td>
</tr>
<tr>
<td>Current Connections Served</td>
<td>95</td>
</tr>
<tr>
<td>Net Connections (New + Current)</td>
<td>101</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Schedule 1 Water Main Open Cut (Preferred)</th>
<th>No Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Cost</td>
<td>$3,249,500</td>
</tr>
<tr>
<td>Annual O &amp; M</td>
<td>$91,100</td>
</tr>
</tbody>
</table>

Details:
This is a street and utility replacement project. No reasoning or evidence was provided for the O&M expense under the No Action alternative.

Unaccounted for water is mentioned city-wide in the report but it is not specifically attributable to leaks or this area being addressed. With the cost of the water supply portion being about 1/3 the cost of the project at $35,000 per user or resident in the area, that translates to $115,000 or more for the total project. This does raise questions about the ability of the community to cover local costs.

LCCA Model Results:

Scenario Analysis - Present Value Life Cycle Cost Summary

<table>
<thead>
<tr>
<th>Present Value</th>
<th>Schedule 1 Water Main Open Cut (Preferred)</th>
<th>No Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Costs</td>
<td>$3,214,000</td>
<td>$0</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>$259,000</td>
<td>$4,301,000</td>
</tr>
<tr>
<td>Repair, Rehab, Replacement</td>
<td>$149,000</td>
<td>$0</td>
</tr>
<tr>
<td>Salvage Value</td>
<td>$39,000</td>
<td>$0</td>
</tr>
<tr>
<td>Total PVC</td>
<td>$3,583,000</td>
<td>$4,301,000</td>
</tr>
</tbody>
</table>

PV Cost Per User | $35,475 | $42,584 |

Current Water Rate (Cost Per 5000g) | $51 |
Comparable Water Rate | $47 |
Net Connections (New + Current) | 101 |
Cost-Share Percent | 60% 60% |
| Local Share | $1,285,600 | $0 |
| Other Funding | $0 | $0 |
| Total Local | $1,285,600 | $0 |

Payment Per User With Cost-Share | $64.39 | $0.00 |
| Local Share | $3,214,000 | $0 |
| Other Funding | $0 | $0 |
| Total Local | $3,214,000 | $0 |

Payment Per User Without Cost-Share | $160.98 | $0.00 |

Explanation of Results:
The sponsor's preferred project is the “Schedule 1 Water Main Open Cut” option. The present value cost of the preferred alternative is $3,583,000 and $4,301,000 for the “No Action” alternative for comparison. There was no documentation for the No Action O&M costs provided. The present value cost per user for the preferred alternative is $35,475. The monthly user cost of the local share with DWR 60% cost-share participation is $64.39 per month and $160.98 without DWR participation.

ND Dept. of Commerce
Population & Trends
2010 | 2020 | 2021 | 2022
---|---|---|---
Population & Trends | 1,070 | 1,293 | 2.1% | 22

Other Comments:
Leakage was not reported in the application. Therefore, O&M assertions cannot be confirmed for the No Action alternative.

The economic model appears to have functioned properly. The results are deemed to be reliable and repeatable with the inputs provided by the project sponsor.

LCCA Version Version 1.2022.07.08
### CAPITAL IMPROVEMENT PLAN (CIP)

**NORTH DAKOTA DEPARTMENT OF WATER RESOURCES**

**PLANNING AND EDUCATION DIVISION**

**SFN 61938 (7/2021)**

---

**System:** City of Crosby - Hendrickson/Holmes Comprehensive Water/Sewer/Streets Improve  
**Population:** 1,145  
**Date:** 08/26/22  
**Users:** 624

---

<table>
<thead>
<tr>
<th>ASSET</th>
<th>UNITS</th>
<th>UNIT COST</th>
<th>QTY</th>
<th>RESERVE REPLACEMENT %</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE (YRS)</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Main &amp; Appurtenances</td>
<td>Feet</td>
<td>$376.19</td>
<td>75,400</td>
<td>100.00%</td>
<td>$28,364,726</td>
<td>50</td>
<td>$567,356</td>
<td>$47,279</td>
<td>$75.76</td>
</tr>
<tr>
<td>0.5 MG Elevated Storage Tank</td>
<td>Each</td>
<td>$2,500,000</td>
<td>1</td>
<td>50%</td>
<td>$1,250,000</td>
<td>30</td>
<td>$68,333</td>
<td>$5,694</td>
<td>$15.16</td>
</tr>
<tr>
<td>0.5 MG Below Grade Reservoir</td>
<td>Each</td>
<td>$1,750,000</td>
<td>1</td>
<td>50%</td>
<td>$875,000</td>
<td>50</td>
<td>$35,000</td>
<td>$2,917</td>
<td>$6.37</td>
</tr>
</tbody>
</table>

**Total Existing CIP Costs**  
$30,489,726  
$685,628  
$57,136  
$97.29

**New Project CIP Costs**  
Hendrickson/Holmes Water Improvement Project  
Feet  
$376.19  
8,638  
100.00%  
$3,249,529  
50  
$64,991  
$5,416  
$8.68

**Total New CIP Costs**  
$3,249,529  
$64,991  
$5,416  
$8.68

**Total Existing and New Project CIP**  
$33,739,255  
$750,618  
$62,552  
$105.97

<table>
<thead>
<tr>
<th>TOTAL RESERVES</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>$500,000</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Adjustment</td>
<td>$33,739,255</td>
<td>$750,618</td>
<td>$62,552</td>
</tr>
</tbody>
</table>

**Notes:**

- Fill in colored items
- Enter Existing asset project CIP costs
- Enter New asset project CIP costs
- Enter current total reserves and annual reserve

**Report Prepared by:** Teaguean Knudsen, Project Engineer  
**Date:** 8/26/22

**Instructions:**

1. Fill in colored items
2. Enter Existing asset project CIP costs
3. Enter New asset project CIP costs
4. Enter current total reserves and annual reserve
21416 - WAWSA - R&T Battleview & McGregor Rural Distribution - Phase I

Application Details

Funding Opportunity:
19214-2022 Infrastructure Request
Funding Opportunity Due Date:
Dec 31, 2022 3:00 PM
Program Area:
Funding for Infrastructure in ND - FIND
Status: Under Review
Stage: Final Application

Initial Submit Date: Aug 29, 2022 9:41 AM
Initially Submitted By: Abby Ritz
Last Submit Date: 
Last Submitted By: 

Contact Information

Primary Contact Information
Active User*: Yes
Type: External User
Name: Salutation Tami First Name
Middle Name Madsen Last Name
Title: Executive Director
Email*: tami.madsen@wawsp.com
Address*: 1117 E. Broadway

Organization Information
Status*: Approved
Name*: Western Area Water Supply Authority
Organization Type*: Municipal Government
Tax Id: 45-2909916
Organization Website:
Address*: PO Box 2343
WebGrants - North Dakota

Williston North Dakota
City State/Province

Postal Code/Zip

Phone*: 701-609-0450 Ext.
Phone
###-###-####
Fax: ###-###-####
Comments:

Williston North Dakota
City State/Province

Postal Code/Zip

Phone*: (701) 774-6605 Ext.
###-###-####
Fax: ###-###-####
Benefactor:
Vendor ID:
PeopleSoft
Supplier ID:
Comments:

Location Code:

SAM.gov
Entity ID:
SAM.gov
Name:
SAM.gov
Entity ID
Expiration Date:
State Issued ID:
Category #:
Year Begin:
Year Closed:
NCES#:

https://grants.nd.gov/printPreviewDocument.do?oldString=166178202...le=dashboarde=myReviews&tab=details&doc=app&printer=Yes
Infrastructure Funding Request

Project, Program, or Study Name*: WAWSA - R&T Battleview & McGregor Rural Distribution - Phase I

Sponsor(s)*: Western Area Water Supply Authority

County*: Williams

City*: Battleview & McGregor

Description of Request*: New

If Project/Program, What Type: Rural Water Supply

Specific Needs Addressed By the Project, Program or Study*: The purpose of the proposed project is to supply quality potable drinking water to new R&T Water District rural users and the citizens of the towns of Battleview and McGregor through the installation of a total of 36 miles of rural distribution pipeline to serve Phase 1 - 49 users. This project will also include the construction of a booster pump station and mainline to service full build out to 137 new customers.

Description of Problem or Need and How Project Addresses that Problem or Need:

The project will provide quality potable drinking water to the communities of Battleview, McGregor and the rural residences in the area. Currently all citizens are on private wells or haul water.
For this project,

Choose City, County or Water District*:

Water District

What is the Current Estimated Population?*:

7500

For this project,

What is the Benefited Population?*:

200

Has Feasibility Study Been Completed?*:

No

Has Engineering Design Been Completed?*:

No

Have Assessment Districts Been Formed?*:

No

Have Land or Easements Been Acquired?*:

No

Has Sediment Analysis For Reconstruction Of An Existing Drain Been Completed?*:

N/A

Extraterritorial Jurisdiction? *:

No

Have You Applied For Any Federal Permits?*:

No

If Yes or Ongoing, Please Explain (include type/number):

Have You Applied for any State Permits?*:

N/A

If Yes or Ongoing, Please Explain (include type/number):
Have You Applied for any Local Permits?*

No

If Yes or Ongoing, Please Explain
(include type/number):

Briefly explain the level of review the Project/Program/Study has undergone.

Level Review*:

The WAWSA service area has been extensively studied over the past decade. WAWSA was authorized by the legislature to expand rural water service in NW ND.

Do You Expect Any Obstacles To Implementation (i.e. problems with land acquisition, permits, funding, local opposition, environmental concerns, etc.)?

Obstacles*:

No

Have you received, or do you anticipate receiving federal funding?

Federal Funding*:

No

Implementation Timelines

Study*:

11/2022
Month/Year (00/0000)

Design*:

01/2023
Month/Year (00/0000)

Bid*:

07/2023
Month/Year (00/0000)

Construction Start*:

08/2023
Month/Year (00/0000)

Construction Completion*:

11/2024
Month/Year (00/0000)

Explain Additional Timeline Issues*:

No timeline issues anticipated.

Certification

Submitted by*:

Tami Madsen 08/29/2022
First Name Last Name Date

Address*:

1117 E. Broadway
Address Line 1
WebGranls - North Dakota

Address Line 2
Williston North Dakota 58801-0000
City State Zip Code

Telephone Number*: 701-609-0450
Sponsor Email*: tami.madsen@wawsp.com
Consulting Engineer*: Cory Chorne
Engineer Telephone Number*: 701-400-1744
Engineer Email*: Cory.Chorne@AE2S.com

This section needs to be completed by the project sponsor.
I certify that, to the best of my knowledge, the provided information is true and accurate.

Certify*: Yes
Authorized Individual*: Tami Madsen 08/29/2022
First Name Last Name Date

Documentation

Documentation

Project Specific Map
(Including an inset map of location within state.)
CLICK HERE to see examples.

Project Specific Map*: 02 RT_Battleview__McGregor_Map.pdf

Are You Seeking Department of Water Resources Cost-Share?*
CLICK HERE for SFN 61801 Delineation of Costs.

Delineation of Costs SFN 61801:

03_WAWSA_RT_BattleviewMcGregor_Phase_I_Delineation_Of_Cost_08.26.22.xlsx

Type of Request: Preconstruction

Water Supply Projects?: Yes
CLICK HERE for Life Cycle Cost Analysis Instructions.

Life Cycle Cost Analysis:

04_WAWSA_RT_BattleviewMcGregor_Life_Cycle_Cost_Analysis_Worksheet_08.26.22.xlsx
CLICK HERE for SFN 61938 Capital Improvement Plan.

Capital Improvement Plan
SFN 61938:

05_WAWSA_RT_BattleciewMcGregor_Capital_Improvement_Plan_08.26.22.xlsx

| Rural Flood Control?               | No          |
| Drain Reconstructions?             | No          |
| Flood Recovery Property Acquisition? | No          |
| Community Flood Control, Rural Flood Control, Bank Stabilization, or Snag & Clear Project With Total Cost of $200,000 or More? | No |
| Feasibility/Engineering Study for the Proposed Project or Other Applicable Documents: | Yes |
| Feasibility/Engineering Study Material or Other Applicable Document: | |
| Engineering Total Cost of $35,000 or More?: | Yes |
| Engineering Selection Documentation: | |

Sources

| Funding Amount Requested - Include Amount Requested for All State Funding Sources |
|---------------------------------|-----------------|------------------|-----------------|
| State FY1                  | State FY2   | Beyond State FY2 | Total Cost Source | Type | Term | Interest Rate |
| $318,750.00 | $0.00       | $0.00           | $318,750.00   | 0.00 | 0.00 |
| $318,750.00 | $0.00       | $0.00           | $318,750.00   | 0.00 | 0.00 |

Other Funding Sources
<table>
<thead>
<tr>
<th>Type Source</th>
<th>Grant or Loan</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local SRF</td>
<td>Loan</td>
<td>$106,250.00</td>
<td>$1,543,955.00</td>
<td>$0.00</td>
<td>$1,650,205.00</td>
</tr>
<tr>
<td>State SWC</td>
<td>Grant</td>
<td>$0.00</td>
<td>$4,631,868.00</td>
<td>$0.00</td>
<td>$4,631,868.00</td>
</tr>
</tbody>
</table>

**Project Total**

**Current Requested Amount:** $318,750.00  
**Other Funding Sources:** $6,282,073.00  
**Total Project:** $6,600,823.00
August 26, 2022

Ms. Andrea Travnicek, Ph. D., Director
North Dakota Department of Water Resources
900 E Boulevard Ave #770
Bismarck ND 58505-0850

Re: Western Area Water Supply Authority (WAWSA)
Ray & Tioga Water District (R&TWD)
Battleview & McGregor Rural Distribution Phase I
Preconstruction Cost Share Request for 2021-2023 Biennium

Dear Ms. Travnicek:

Over the past decade, WAWSA and its member entities have successfully used North Dakota Department of Water Resources (DWR) cost share funding to bring rural water service to over 2,000 new rural customers. WAWSA, in cooperation with the R&T Water District, continues working to expand rural service in Williams, Divide, Burk, and Mountrail Counties through a phased expansion project that would initially bring water service to 49 new customers, including direct service to residents in the communities of Battleview and McGregor.

The Battleview and McGregor project in total will service 137 new customers. Including 3,779 head of livestock at farm and ranching operations in the project area. An additional 17 new customers requested services to accommodate agricultural spray water.

The project costs for phase I of the project are estimated at $6,600,823.00 with a 5% contingecy as provided in the detailed cost estimate. **Currently, WAWSA is requesting approval of 75 percent of eligible pre-construction project costs equal to $318,750.00 for this project.**

Thank you very much for your assistance with this important project for northwest North Dakota. If you have any questions, please do not hesitate to contact me at 701-774-3060 or Cory Chorne with Advanced Engineering and Environmental Services, Inc. at 701-221-0530.

Respectfully submitted,

Tami Madsen, Executive Director
WAWSA
### DELINEATION OF COSTS
NORTH DAKOTA DEPARTMENT OF WATER RESOURCES
PLANNING AND EDUCATION
SF 445611 (SMALL)

**DWR Date Received**: August 29, 2022

**Project**: NAWSS - R&T Battlebue & McGregor Rural Distribution - Phase I
**Sponsor**: Western Area Water Supply Authority
**Contact**: Tami Madsen
**Phone**: 701-774-6660
**Engineer**: Cory Chorne, Advanced Engineering and Environmental Services
**Phone**: 701-221-0530

<table>
<thead>
<tr>
<th>Total Cost</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>$6,600,823</td>
<td>August 26, 2022</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost classification</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Mobilization</td>
<td>1 L3</td>
<td></td>
<td>239,000.00</td>
<td>239,000</td>
<td>75%</td>
<td>172,500</td>
</tr>
<tr>
<td>2. Bonding / Insurance</td>
<td>1 L3</td>
<td></td>
<td>115,000.00</td>
<td>115,000</td>
<td>75%</td>
<td>86,250</td>
</tr>
<tr>
<td>3. Water Main 2 in</td>
<td>61000 Lf</td>
<td></td>
<td>72.9</td>
<td>444,890</td>
<td>75%</td>
<td>333,518</td>
</tr>
<tr>
<td>4. Water Main 3 in</td>
<td>2000 Lf</td>
<td></td>
<td>9.13</td>
<td>26,477</td>
<td>75%</td>
<td>19,858</td>
</tr>
<tr>
<td>5. Water Main 4 in</td>
<td>24000 Lf</td>
<td></td>
<td>13.50</td>
<td>324,000</td>
<td>75%</td>
<td>243,000</td>
</tr>
<tr>
<td>6. Water Main 6 in</td>
<td>14200 Lf</td>
<td></td>
<td>15.85</td>
<td>191,700</td>
<td>75%</td>
<td>143,775</td>
</tr>
<tr>
<td>7. Water Main 8 in</td>
<td>50000 Lf</td>
<td></td>
<td>28.00</td>
<td>1,880,000</td>
<td>75%</td>
<td>1,410,000</td>
</tr>
<tr>
<td>8. Pipeline Appurtenances</td>
<td>1 L3</td>
<td>$ 580,060.10</td>
<td>$ 580,060</td>
<td>75%</td>
<td>435,045</td>
<td></td>
</tr>
<tr>
<td>9. Water / Frost Free</td>
<td>60 EA</td>
<td>4,020.00</td>
<td>160,000</td>
<td>75%</td>
<td>120,000</td>
<td></td>
</tr>
<tr>
<td>10. Pump Station</td>
<td>1 L4</td>
<td></td>
<td>450,000.00</td>
<td>450,000</td>
<td>75%</td>
<td>337,500</td>
</tr>
<tr>
<td>11. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>12. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>13. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>14. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>15. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>16. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>17. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>18. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>19. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>20. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>21. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>22. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>23. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>24. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>25. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>26. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Construction Sub-Total</td>
<td></td>
<td></td>
<td>$ 5,237,927</td>
<td>75%</td>
<td>3,928,445</td>
<td></td>
</tr>
<tr>
<td>5.0%</td>
<td></td>
<td></td>
<td>261,896</td>
<td>75%</td>
<td>196,404</td>
<td></td>
</tr>
<tr>
<td>83.3%</td>
<td></td>
<td></td>
<td>$ 4,999,023</td>
<td>75%</td>
<td>3,732,040</td>
<td></td>
</tr>
<tr>
<td>Preconstruction Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Preliminary Design</td>
<td>1 NA</td>
<td>85,000.00</td>
<td>$ 85,000</td>
<td>75%</td>
<td>63,750</td>
<td></td>
</tr>
<tr>
<td>27. Final Design</td>
<td>1 NA</td>
<td>285,000.00</td>
<td>$ 285,000</td>
<td>75%</td>
<td>213,750</td>
<td></td>
</tr>
<tr>
<td>28. Engineering / Geology</td>
<td>1 NA</td>
<td>25,000.00</td>
<td>$ 25,000</td>
<td>75%</td>
<td>18,750</td>
<td></td>
</tr>
<tr>
<td>29. Geophysical Study</td>
<td>1 NA</td>
<td>30,000.00</td>
<td>$ 30,000</td>
<td>75%</td>
<td>22,500</td>
<td></td>
</tr>
<tr>
<td>30. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>31. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Preconstruction Total</td>
<td></td>
<td></td>
<td>$ 425,000</td>
<td>75%</td>
<td>318,750</td>
<td></td>
</tr>
<tr>
<td>Construction Engineering Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. Construction Contract Management</td>
<td>1 NA</td>
<td>70,000.00</td>
<td>$ 70,000</td>
<td>75%</td>
<td>52,500</td>
<td></td>
</tr>
<tr>
<td>33. Construction Project</td>
<td>1 NA</td>
<td>425,000.00</td>
<td>$ 425,000</td>
<td>75%</td>
<td>318,750</td>
<td></td>
</tr>
<tr>
<td>34. Post-Construction Warranty</td>
<td>1 NA</td>
<td>55,000.00</td>
<td>$ 55,000</td>
<td>75%</td>
<td>41,250</td>
<td></td>
</tr>
<tr>
<td>35. Project Services</td>
<td>1 NA</td>
<td>30,000.00</td>
<td>$ 30,000</td>
<td>75%</td>
<td>22,500</td>
<td></td>
</tr>
<tr>
<td>36. Contingency</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>37. Construction Engineering Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Eligible Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. ALS For Construction</td>
<td>1 L3</td>
<td>1,000.00</td>
<td>$ 1,000</td>
<td>75%</td>
<td>750</td>
<td></td>
</tr>
<tr>
<td>39. Permit Fees</td>
<td>1 L3</td>
<td>20,000.00</td>
<td>$ 20,000</td>
<td>75%</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td>40. Miscellaneous</td>
<td>1 L3</td>
<td>75,000.00</td>
<td>$ 75,000</td>
<td>75%</td>
<td>56,250</td>
<td></td>
</tr>
<tr>
<td>Other Other Eligible Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**318,750**

| Eligible Total | $ 6,600,823 | 75% | $ 4,995,600 |

*The Cost-share estimate is purely for planning and informational purposes only and does not, in any way, guarantee a financial commitment to any degree, from the State Water Commission.*
**Life Cycle Cost Analysis Review**

**Sponsor:** Western Area Water Supply Authority  
**Project Title:** R&T Battleview & McGregor Rural Dist - Phase I  
**Date:** September 6, 2022

**Explanation of Alternatives:**
Battleview McGregor Rural Distribution Phase I (Preferred) - Includes the installation of a total of 36 miles of rural distribution pipeline to serve 49 rural users between Wildrose, McGregor, and Battleview. Service includes the cities of Battleview and McGregor. This project will also include the construction of a booster pump station and mainline to service full build out to 88 future customers for a total of 137 eventual new users.

Do Nothing - The Do Nothing alternative would eliminate the construction of the proposed project and prevent water service from being provided to the 137 users that have signed up as part of this phased project.

**Inputs:**

<table>
<thead>
<tr>
<th></th>
<th>Battleview McGregor Rural Distribution Phase I (Preferred)</th>
<th>Do Nothing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Cost</td>
<td>$6,600,900</td>
<td>$0</td>
</tr>
<tr>
<td>Annual O &amp; M</td>
<td>$10,000</td>
<td>$0</td>
</tr>
</tbody>
</table>

**Details:**

**LCCA Model Results:**

**Scenario Analysis - Present Value Life Cycle Cost Summary**

<table>
<thead>
<tr>
<th>Present Value</th>
<th>Battleview McGregor Rural Distribution</th>
<th>Do Nothing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Costs</td>
<td>$4,401,000</td>
<td>$0</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>$295,000</td>
<td>$0</td>
</tr>
<tr>
<td>Repair, Rehab, Replacement</td>
<td>$1,720,000</td>
<td>$0</td>
</tr>
<tr>
<td>Salvage Value</td>
<td>$155,000</td>
<td>$0</td>
</tr>
<tr>
<td>Total PVC</td>
<td>$6,261,000</td>
<td>$0</td>
</tr>
</tbody>
</table>

**PV Cost Per User**

|                         | $127,776 | $0 |

**Current Water Rate (Cost Per 5000g)**

|                | $39      |

**Comparable Water Rate**

|                  | $75      |

**Net Connections (New + Current)**

|                              | 49       | 49  |

**Cost-Share Percent**

|                  | 75%      | 75% |

**Local Share**

|                              | $1,100,250 | $0  |

**Other Funding**

|                              | $0        | $0  |

**Total Local**

|                              | $1,100,250 | $0  |

**Payment Per User With Cost-Share**

|                              | $113.59   | $0  |

**Local Share**

|                              | $4,401,000 | $0  |

**Other Funding**

|                              | $0        | $0  |

**Total Local**

|                              | $4,401,000 | $0  |

**Payment Per User Without Cost-Share**

|                              | $454.37   | $0  |

**Explanation of Results:**
The sponsor's preferred project is the "Battleview McGregor Rural Distribution Phase I" option. The present value cost of the preferred alternative is $6,261,000 and $0 for the "Do Nothing" alternative for comparison. The present value cost per user for the preferred alternative is $127,776. The monthly user cost of the local share with DWR 75% cost-share participation is $113.59 per month and $454.37 without DWR participation.

The economic model appears to have functioned properly. The results are deemed to be reliable and repeatable with the inputs provided by the project sponsor.

**LCCA Version**

Version 1.2022.07.08
### CAPITAL IMPROVEMENT PLAN (CIP)

**NORTH DAKOTA DEPARTMENT OF WATER RESOURCES**

**PLANNING AND EDUCATION DIVISION**

**SFN 61938 (7/2021)**

---

**System:** Western Area Water Supply - MCWRD System IV Part IV  
**Population:** 60,000  
**Date:** 08/09/22  
**Users:** 5

<table>
<thead>
<tr>
<th>ASSET</th>
<th>UNITS</th>
<th>UNIT COST</th>
<th>QTY</th>
<th>RESERVE</th>
<th>REPLACEMENT %</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Supply &amp; Treatment</td>
<td>1</td>
<td>$67,644,480</td>
<td>1</td>
<td>50.00%</td>
<td>50</td>
<td>$33,822,240</td>
<td>50</td>
<td>$676,445</td>
<td>$16,779.00</td>
</tr>
<tr>
<td>Transmission Pipelines</td>
<td>1</td>
<td>$76,679,176</td>
<td>1</td>
<td>50.00%</td>
<td>75</td>
<td>$38,339,584</td>
<td>75</td>
<td>$515,195</td>
<td>$20,608.00</td>
</tr>
<tr>
<td>Pump Stations</td>
<td>1</td>
<td>$15,936,030</td>
<td>1</td>
<td>50.00%</td>
<td>50</td>
<td>$6,968,015</td>
<td>50</td>
<td>$139,360</td>
<td>$11,831.00</td>
</tr>
<tr>
<td>Reservoirs</td>
<td>1</td>
<td>$14,196,872</td>
<td>1</td>
<td>50.00%</td>
<td>50</td>
<td>$7,098,436</td>
<td>50</td>
<td>$141,969</td>
<td>$11,121.00</td>
</tr>
<tr>
<td>Total Distribution</td>
<td>1</td>
<td>$50,393,830</td>
<td>1</td>
<td>50.00%</td>
<td>75</td>
<td>$46,286,517</td>
<td>75</td>
<td>$615,959</td>
<td>$11,274.00</td>
</tr>
</tbody>
</table>

**ASSET UNITS**

- **RESERVE REPLACEMENT %**
- **REPLACEMENT COST**
- **AVERAGE LIFE**
- **ANNUAL RESERVE**
- **MONTHLY RESERVE PER CUSTOMER**

<table>
<thead>
<tr>
<th>ASSET</th>
<th>UNITS</th>
<th>UNIT COST</th>
<th>QTY</th>
<th>RESERVE</th>
<th>REPLACEMENT %</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;T Battleview &amp; McGregor</td>
<td>1</td>
<td>$6,600,823.00</td>
<td>1</td>
<td>50.00%</td>
<td>75</td>
<td>$4,950,612</td>
<td>75</td>
<td>$66,667</td>
<td>$5,555.56</td>
</tr>
</tbody>
</table>

**New Project CIP Costs**

<table>
<thead>
<tr>
<th>ASSET</th>
<th>UNITS</th>
<th>UNIT COST</th>
<th>QTY</th>
<th>RESERVE</th>
<th>REPLACEMENT %</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;T Battleview &amp; McGregor</td>
<td>1</td>
<td>$6,600,823.00</td>
<td>1</td>
<td>50.00%</td>
<td>75</td>
<td>$4,950,612</td>
<td>75</td>
<td>$66,667</td>
<td>$5,555.56</td>
</tr>
</tbody>
</table>

**SUBTOTAL New CIP Costs**

<table>
<thead>
<tr>
<th>ASSET</th>
<th>UNITS</th>
<th>UNIT COST</th>
<th>QTY</th>
<th>RESERVE</th>
<th>REPLACEMENT %</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SUBTOTAL Existing CIP Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$132,425,164</td>
</tr>
<tr>
<td><strong>SUBTOTAL New CIP Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$3,300,412</td>
</tr>
</tbody>
</table>

**TOTAL Existing and New Project CIP**

<table>
<thead>
<tr>
<th>ASSET</th>
<th>UNITS</th>
<th>UNIT COST</th>
<th>QTY</th>
<th>RESERVE</th>
<th>REPLACEMENT %</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL Reserves</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$135,725,576</td>
</tr>
<tr>
<td><strong>ANNUAL RESERVE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$177,842.81</td>
</tr>
<tr>
<td><strong>MONTHLY RESERVE PER CUSTOMER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$11,274.00</td>
</tr>
</tbody>
</table>

**Notes:** The domestic rates charged by WAWSA are currently designed to cover all O&M associated with water production and delivery. For water sales to non-domestic commercial and industrial customers, WAWSA receives a rate equal to the cost of production and delivery in the location in which the water is sold. This commercial and industrial rate revenue is used to fund capital reserves for the domestic system. This reserve and rate-setting approach has been taken by the WAWSA Board of Directors from 2011 to 2021, and the Board is aware that the addition of a capital reserve component to the domestic rate may be needed in the future. In 2020, WAWSA contributed $1.25M to its capital renewal/replacement reserves, which translate to approximately $0.44/1,000 gallons of domestic water sold. In 2019, WAWSA contributed $3.72M to its capital renewal/replacement reserves. For 2021, the targeted capital renewal/reserve contribution is $1.77M. WAWSA reviews the cost of domestic service on an annual basis to evaluate the need for rate changes to reflect the actual costs of service and to evaluate the need for incorporating a capital reserve component into the domestic rate.

**Report Prepared by (Title):** Cory Chorne, PE - Program Manager

---

**Instructions**

1. Fill in colored items
2. Enter Existing asset project CIP costs
3. Enter New asset project CIP costs
4. Enter current total reserves and annual reserve
21351 - WAWSA - MCWRD Phase 2 Transmission Line

Application Details

Funding Opportunity:
19214-2022 Infrastructure Request
Funding Opportunity Due Date:
Program Area:
Funding for Infrastructure in ND - FIND
Status: Under Review
Stage: Final Application

Contact Information

Primary Contact Information
Active User*: Yes
Type: External User
Name: Salutation Tami
  First Name
Middle Name Madsen
Last Name
Title: Executive Director
Email*: tami.madsen@wawsp.com
Address*: 1117 E. Broadway

Organization Information
Status*: Approved
Name*:
Western Area Water Supply Authority
Organization Type*:
Municipal Government
Tax Id:
45-2909916
Organization Website:
Address*:
PO Box 2343
Williston North Dakota
City  State/Province
Postal Code/Zip
58801
Phone*: 701-609-0450 Ext.
Phone
###-####
Fax: ###-####
Comments:

Williston North Dakota
City  State/Province
Postal Code/Zip
58802-2343
Phone*: (701) 774-6605 Ext.
Fax: ###-####
Benefactor:
Vendor ID:
PeopleSoft Supplier ID:
Comments:
Location Code:
SAM.gov Entity ID:
SAM.gov Name:
SAM.gov Entity ID Expiration Date:
State Issued ID:
Category #:
Year Begin:
Year Closed:
NCES#:
Infrastructure Funding Request

**Infrastructure Funding Request**

**Project, Program, or Study**
WAWSA - MCWRD Phase 2 Transmission Line

**Name***:

**Sponsor(s)***:
Western Area Water Supply Authority

**County***:
McKenzie

**City***:
Watford City

**Description of Request***:
New

**If Study, What Type***:

**If Project/Program, What Type***:
Rural Water Supply

**Jurisdictions/Stakeholders Involved***:
Western Area Water Supply Authority, City of Williston, McKenzie County Water Resource District, Northwest Rural Water District, R&T Water District, BDW Rural Water

**Specific Needs Addressed By the Project, Program or Study***:
The proposed project will provide McKenzie County with a supplemental water delivery system through a parallel 20" pipeline from the Williston WTP to the Lewis & Clark Pump Station in McKenzie County. This project is the first phase of a multi-phase expansion of the water delivery system to Watford City. WAWSA and MCWRD have made improvements to expand capacity in the County, however, even with the improvements, we will exceed capacity by 2030 if population and demand growth patterns continue. Description of Problem or Need and How Project Addresses that Problem or Need.

**Description of Problem***:
Water demands in McKenzie County continue to expand with population growth, commercial and industrial
water demand growth, and as agricultural producers look for reliable water supplies. The existing system has a maximum delivery capacity of 7.5 million gallons per day. If current water use and growth patterns continue going forward, water demands in McKenzie County are projected to exceed the capacity of the existing water delivery system in McKenzie County by 2030.

For this project,

<table>
<thead>
<tr>
<th>Choose City, County or Water District*</th>
<th>Water District</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the Current Estimated Population?*</td>
<td>15000</td>
</tr>
<tr>
<td>For this project,</td>
<td></td>
</tr>
<tr>
<td>What is the Benefited Population?*</td>
<td>35000</td>
</tr>
<tr>
<td>Has Feasibility Study Been Completed?*</td>
<td>Yes</td>
</tr>
<tr>
<td>Has Engineering Design Been Completed?*</td>
<td>No</td>
</tr>
<tr>
<td>Have Assessment Districts Been Formed?*</td>
<td>No</td>
</tr>
<tr>
<td>Have Land or Easements Been Acquired?*</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Has Sediment Analysis For Reconstruction Of An Existing Drain Been Completed?*</td>
<td>N/A</td>
</tr>
<tr>
<td>Extraterritorial Jurisdiction?*</td>
<td>No</td>
</tr>
<tr>
<td>Have You Applied For Any Federal Permits?*</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

If Yes or Ongoing, Please Explain (include type/number):  
We are working on the NEPA review (an Environmental Assessment) for Right-of-Way and Corps approval for crossing Federal Lands. That is in progress. Once through that, it will require a Corps Nationwide Permit for Section 10/404 authorization. They typically won’t approve an application until the NEPA
process is done. A Sovereign Lands Permit will also be required for the bore under the River and this would occur after the NEPA process as well.

If Yes or Ongoing, Please Explain
(include type/number):

Have You Applied for any State Permits?*: No

If Yes or Ongoing, Please Explain
(include type/number):

Have You Applied for any Local Permits?*: Ongoing

If Yes or Ongoing, Please Explain
(include type/number):

Permit are only good for one year once submitted and will be submitted early 2023. Permits also need Contractor insurance documentation.

If Yes or Ongoing, Please Explain
(include type/number):

Briefly explain the level of review the Project/Program/Study has undergone.

Level Review*:
The WAWSA service area has been extensively studied over the past decade. WAWSA was authorized by the legislature to expand rural water service in NW ND.

Do You Expect Any Obstacles To Implementation (i.e. problems with land acquisition, permits, funding, local opposition, environmental concerns, etc.)?

Obstacles*: No

Have you received, or do you anticipate receiving federal funding?

Federal Funding*: No

Implementation Timelines

Study*: 10/2021
Month/Year (00/0000)
Design*: 08/2022
Month/Year (00/0000)

Bid*: 10/2022
Month/Year (00/0000)

Construction Start*: 10/2023
Month/Year (00/0000)

Construction Completion*: 10/2024
Month/Year (00/0000)

Explain Additional Timeline Issues*:
No timeline issues anticipated.

Certification

Submitted by*: Tami Madsen 08/25/2022
First Name Last Name Date

Address*: 1117 E. Broadway
Address Line 1
Address Line 2
Williston North Dakota 58801-0000
City State Zip Code

Telephone Number*: 701-609-0450

Sponsor Email*: tami.madsen@wawsp.com

Consulting Engineer*: Cory Chorne

Engineer Telephone Number*:
701-400-1744

Engineer Email*: Cory.Chorne@AE2S.com

This section needs to be completed by the project sponsor.
I certify that, to the best of my knowledge, the provided information is true and accurate.

Certify*: Yes

Authorized Individual*: Tami Madsen 08/25/2022
First Name Last Name Date

Documentation
Project Specific Map
(Including an inset map of location within state.)
CLICK HERE to see examples.

Project Specific Map*: 02 Location Map-MCWRD.pdf

Are You Seeking Department of Water Resources Cost-Share?*
CLICK HERE for SFN 61801 Delineation of Costs.

Delineation of Costs SFN 61801:
03 Delineation_of_cost.xlsx

Type of Request: Construction

Signed Plans and Specifications For Bidding:
04 Plans Cover Sheet.pdf

Water Supply Projects?: Yes
CLICK HERE for Life Cycle Cost Analysis Instructions.

Life Cycle Cost Analysis:
05 life_cycle_cost_analysis_worksheet.xlsx
CLICK HERE for SFN 61938 Capital Improvement Plan.

Capital Improvement Plan SFN 61938:
06 sfn_61938_capital_improvement_plan.xlsx

Rural Flood Control?: No

Drain Reconstructions?: No

Flood Recovery Property Acquisition?: No

Community Flood Control, Rural Flood Control, Bank Stabilization, or Snag & Clear Project With Total Cost of $200,000 or More?:

Feasibility/Engineering Study for the Proposed Project or Other Applicable Documents:
Yes

Feasibility/Engineering Study Material or Other Applicable Document:
07 WAWSA - MCWRD Phase 2 Transmission Line Cover Letter.pdf
Engineering Total Cost of $35,000 or More?: Yes
Engineering Selection Documentation:

Sources

**Funding Amount Requested - Include Amount Requested for All State Funding Sources**

<table>
<thead>
<tr>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Cost Source</th>
<th>Type</th>
<th>Term</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.00</td>
<td>$6,422,000.00</td>
<td>$0.00</td>
<td>$6,422,000.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Cost Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.00</td>
<td>$6,422,000.00</td>
<td>$0.00</td>
<td>$6,422,000.00</td>
</tr>
</tbody>
</table>

**Other Funding Sources**

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Grant or Loan</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Cash Reserves</td>
<td>N/A</td>
<td></td>
<td>$0.00</td>
<td>$6,422,000.00</td>
<td>$0.00</td>
<td>$6,422,000.00</td>
</tr>
</tbody>
</table>

|                   |                      |               | $0.00     | $6,422,000.00 | $0.00           | $6,422,000.00       |

**Project Total**

Current Requested Amount: $6,422,000.00
Other Funding Sources: $6,422,000.00
Total Project: $12,844,000.00
August 29, 2022

Ms. Andrea Travnicek, Ph. D., Director
North Dakota Department of Water Resources
900 E Boulevard Ave #770
Bismarck ND 58505-0850

Re: Western Area Water Supply Authority (WAWSA)
MCWRD Regional Water Service Phase II
Construction Cost Share Request for 2021-2023 Biennium

Dear Ms. Travnicek:

Over the past decade, WAWSA and its member entities have successfully used North Dakota Department of Water Resources (DWR) cost share funding to bring rural water service to over 2,000 new rural customers. Building on this success, the McKenzie County Water Resource District (MCWRD) is requesting cost share funding for the Regional Water Service Phase II Transmission Line Project. This project will provide MCWRD a supplemental pipeline to convey Missouri River for the domestic, agricultural, and commercial water needs in the County.

A second transmission pipeline across the Missouri River is essential to ensuring a reliable water service to McKenzie County. Water demands in McKenzie County are projected to exceed the capacity of the existing water delivery system in McKenzie County by 2030. This project is the first phase of a planned multi-phase expansion of the water delivery system in McKenzie County to ensure the water supply capacity stays ahead of demand.

The construction phase costs for this project are currently estimated at $12,843,000.00, as provided in the detailed cost estimate attached to the application. We plan to open bids in early October so that we have bids in hand by the October 13th commission meeting. Currently, WAWSA is requesting approval of 50 percent of eligible project costs at $6,422,000.00 for this project.

Thank you very much for your assistance with this important project for northwest North Dakota. If you have any questions, please do not hesitate to contact me at 701-774-3060 or Cory Chorne with Advanced Engineering and Environmental Services, LLC. at 701-221-0530.

Respectfully submitted,

Tami Madsen, Executive Director
WAWSA
## Delineation of Costs

**Western Area Water Supply Authority**

### Project: WAWASA - MCAWRD Phase 2 Transmission Line

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $ *</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mobilization</td>
<td>1</td>
<td>LS</td>
<td>500,000.00</td>
<td>$500,000</td>
<td>50%</td>
<td>$250,000</td>
</tr>
<tr>
<td>2</td>
<td>Bonding / Insurance</td>
<td>1</td>
<td>LS</td>
<td>305,000.00</td>
<td>$305,000</td>
<td>50%</td>
<td>$152,500</td>
</tr>
<tr>
<td>3</td>
<td>300 DR 21 - 24&quot; (Open Cut)</td>
<td>14902</td>
<td>LF</td>
<td>180.00</td>
<td>$2,681,360</td>
<td>50%</td>
<td>$1,340,680</td>
</tr>
<tr>
<td>4</td>
<td>HDO Bolt C900 DR 18 - 24&quot; PVC</td>
<td>7012</td>
<td>LF</td>
<td>800.00</td>
<td>$6,288,000</td>
<td>50%</td>
<td>$3,144,000</td>
</tr>
<tr>
<td>5</td>
<td>Steel Casing Pipe 36&quot;</td>
<td>837</td>
<td>LF</td>
<td>1,000.00</td>
<td>$837,000</td>
<td>50%</td>
<td>$418,500</td>
</tr>
<tr>
<td>6</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Connection to Existing Line</td>
<td>1</td>
<td>LS</td>
<td>345,500.00</td>
<td>$345,500</td>
<td>50%</td>
<td>$172,750</td>
</tr>
<tr>
<td>8</td>
<td>Gate Valve</td>
<td>1</td>
<td>EA</td>
<td>6,200.00</td>
<td>$6,200</td>
<td>50%</td>
<td>$3,100</td>
</tr>
<tr>
<td>9</td>
<td>Gate Valve</td>
<td>1</td>
<td>EA</td>
<td>7,135.00</td>
<td>$7,135</td>
<td>50%</td>
<td>$3,568</td>
</tr>
<tr>
<td>10</td>
<td>Gate Valve</td>
<td>2</td>
<td>EA</td>
<td>16,000.00</td>
<td>$32,000</td>
<td>50%</td>
<td>$16,000</td>
</tr>
<tr>
<td>11</td>
<td>Gate Valve</td>
<td>2</td>
<td>EA</td>
<td>21,350.00</td>
<td>$42,700</td>
<td>50%</td>
<td>$21,350</td>
</tr>
<tr>
<td>12</td>
<td>Fittings</td>
<td>1</td>
<td>LS</td>
<td>95,000.00</td>
<td>$95,000</td>
<td>50%</td>
<td>$47,500</td>
</tr>
<tr>
<td>13</td>
<td>Hydrant</td>
<td>1</td>
<td>EA</td>
<td>10,000.00</td>
<td>$10,000</td>
<td>50%</td>
<td>$5,000</td>
</tr>
<tr>
<td>14</td>
<td>Scoping</td>
<td>37</td>
<td>AC</td>
<td>690.00</td>
<td>$25,370</td>
<td>50%</td>
<td>$12,685</td>
</tr>
<tr>
<td>15</td>
<td>Design-Draw Contract</td>
<td>1</td>
<td>LS</td>
<td>17,262.00</td>
<td>$17,262</td>
<td>50%</td>
<td>$8,631</td>
</tr>
<tr>
<td>16</td>
<td>Pipe and Fence Removal</td>
<td>1</td>
<td>LS</td>
<td>23,734.00</td>
<td>$23,734</td>
<td>50%</td>
<td>$11,867</td>
</tr>
<tr>
<td>17</td>
<td>Sign Allowance</td>
<td>39</td>
<td>EA</td>
<td>17.00</td>
<td>$691</td>
<td>50%</td>
<td>$345.50</td>
</tr>
<tr>
<td>18</td>
<td>Temporary Road Gate</td>
<td>2</td>
<td>EA</td>
<td>806.00</td>
<td>$1,612</td>
<td>50%</td>
<td>$806</td>
</tr>
<tr>
<td>19</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>6.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>5.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Total

- **Construction Costs Total**: $12,844,000
- **Construction Sub-Total**: $12,094,000
- **Contingency**: $1,000,000
- **Construction Total**: $12,844,000
- **Preconstruction Total**: $6,422,000
- **Preconstruction Costs Total**: $6,047,000
- **Construction Engineering Costs Total**: $375,000
- **Other Eligible Costs Total**: $375,000
- **Ineligible Costs Total**: $0

### Other Costs

- **Federal or State Funds That Supplant Costs**: $6,422,000
- **Other Federal Costs Total**: $6,422,000

---

The Cost-share estimate is purely for planning and informational purposes only and does not, in any way, guarantee a financial commitment to any degree, from the State Water Commission.
Life Cycle Cost Analysis Review

Sponsor: Western Area Water Supply
Project Title: MCWRD Phase 2 Transmission Line
Date: September 6, 2022

Explanation of Alternatives:
McKenzie County Water Resource District (MCWRD) Phase 2 Transmission Line (Preferred) - There is an existing 20-inch fused PVC waterline that acts as the only water supply source to MCWRD. The proposed project would be to install a 24-inch HDPE pipeline for redundancy. This proposed pipeline would also help meet capacity issues when projecting water needs into the future. Current projections have the MCWRD service area exceeding capacity in the future.

Do Nothing – No redundancy.

Inputs:

<table>
<thead>
<tr>
<th></th>
<th>MCWRD Phase 2</th>
<th>Do Nothing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Cost</td>
<td>$12,843,400</td>
<td>$0</td>
</tr>
<tr>
<td>Annual O &amp; M</td>
<td>$5,000</td>
<td>$0</td>
</tr>
</tbody>
</table>

Details:
The cost per user is based on the current users who will be served from the redundant line. Impacts to water supply for MCWRD are not included but would also be considered redundant or a backup water supply.

LCCA Model Results:

<table>
<thead>
<tr>
<th>Present Value</th>
<th>MCWRD Phase 2 Transmission Line</th>
<th>Do Nothing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Costs</td>
<td>$12,843,000</td>
<td>$0</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>$149,000</td>
<td>$0</td>
</tr>
<tr>
<td>Repair, Rehab, Replacement</td>
<td>$144,000</td>
<td>$0</td>
</tr>
<tr>
<td>Salvage Value</td>
<td>$27,000</td>
<td>$0</td>
</tr>
<tr>
<td>Total PVC</td>
<td>$13,109,000</td>
<td>$0</td>
</tr>
<tr>
<td>PV Cost Per User</td>
<td>$285,599</td>
<td>$0</td>
</tr>
</tbody>
</table>

Current Water Rate (Cost Per 5000g) | $33
Comparable Water Rate             | $75

Cost-Share Percent:

<table>
<thead>
<tr>
<th></th>
<th>Local Share</th>
<th>Other Funding</th>
<th>Total Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Connections (New + Current)</td>
<td>$6,421,500</td>
<td>$0</td>
<td>$6,421,500</td>
</tr>
</tbody>
</table>

Payment Per User With Cost-Share:

<table>
<thead>
<tr>
<th></th>
<th>Local Share</th>
<th>Other Funding</th>
<th>Total Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment Per User Without Cost-Share</td>
<td>$12,843,000</td>
<td>$0</td>
<td>$12,843,000</td>
</tr>
</tbody>
</table>

Explanation of Results:
The sponsor’s preferred project is the “MCWRD Phase 2 Transmission Line” option. The present value cost of the preferred alternative is $13,109,000 and $0 for the “No Build” alternative for comparison. The present value cost per user for the preferred alternative is $258,599 as there are only 46 current users for this backup water supply. The monthly user cost of the local share with DWR 50% cost-share participation is $10.87 per month and $21.73 without DWR participation.

The economic model appears to have functioned properly. The results are deemed to be reliable and repeatable with the inputs provided by the project sponsor.
### Western Area Water Supply - MCWRD Phase 2 Transmission Line

**Population:** 60,000  
**Users:** 5  
**Date:** 08/22/22

<table>
<thead>
<tr>
<th>ASSET</th>
<th>UNITS</th>
<th>UNIT COST</th>
<th>QTY</th>
<th>RESERVE REPLACEMENT %</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE (YRS)</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Supply &amp; Treatment</td>
<td>1</td>
<td>$67,644,480</td>
<td>1</td>
<td>50.00%</td>
<td>$33,822,240</td>
<td>50</td>
<td>$676,445</td>
<td>$56,370</td>
<td>$12,774</td>
</tr>
<tr>
<td>Transmission Pipelines</td>
<td>1</td>
<td>$76,075,175</td>
<td>1</td>
<td>50.00%</td>
<td>$38,339,588</td>
<td>75</td>
<td>$511,195</td>
<td>$42,600</td>
<td>$8,520</td>
</tr>
<tr>
<td>Pump Stations</td>
<td>1</td>
<td>$13,936,030</td>
<td>1</td>
<td>50.00%</td>
<td>$6,968,015</td>
<td>50</td>
<td>$139,360</td>
<td>$11,613</td>
<td>$2,323</td>
</tr>
<tr>
<td>Reservoirs</td>
<td>1</td>
<td>$14,196,872</td>
<td>1</td>
<td>50.00%</td>
<td>$7,098,436</td>
<td>50</td>
<td>$141,969</td>
<td>$11,831</td>
<td>$2,366</td>
</tr>
<tr>
<td>Rural Distribution</td>
<td>1</td>
<td>$92,393,830</td>
<td>1</td>
<td>50.00%</td>
<td>$46,196,915</td>
<td>75</td>
<td>$615,959</td>
<td>$51,330</td>
<td>$10,266</td>
</tr>
</tbody>
</table>

**SUBTOTAL Existing CIP Costs**

$132,425,194  

$2,084,927  

$173,744  

$34,748.79

<table>
<thead>
<tr>
<th>ASSET</th>
<th>UNITS</th>
<th>UNIT COST</th>
<th>QTY</th>
<th>RESERVE REPLACEMENT %</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE (YRS)</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCWRD Phase 2 Transm.</td>
<td>1</td>
<td>$12,843,000</td>
<td>1</td>
<td>50.00%</td>
<td>$6,421,500</td>
<td>75</td>
<td>$85,620</td>
<td>$7,135</td>
<td>$1,427.00</td>
</tr>
</tbody>
</table>

**SUBTOTAL New CIP Costs**

$6,421,500  

$85,620  

$7,135  

$1,427.00

**TOTAL Existing and New Project CIP**

$138,846,694  

$2,170,547  

$180,879  

$36,175.79

### Notes:

The domestic rates charged by WAWSA are currently designed to cover all O&M associated with water production and delivery. For water sales to non-domestic commercial and industrial customers, WAWSA receives a rate equal to the cost of production and delivery in the location in which the water is sold. This commercial and industrial rate revenue is used to fund capital reserves for the domestic system. This reserve and rate-setting approach has been taken by WAWSA Board of Directors from 2011 to 2021, and the Board is aware that the addition of a capital reserve component to the domestic rates may be needed in the future. In 2020, WAWSA contributed $1,25M to its capital renewal/replacement reserves, which translates to approximately $0.44/1,000 gallons of domestic water sold. In 2019, WAWSA contributed $3.72M to its capital renewal/replacement reserves. For 2021, the targeted capital renewal/reserve contribution is $1.77M. WAWSA review the cost of domestic service on an annual basis evaluate the need for rate changes to reflect the actual costs of service and to evaluate the need for incorporating a capital reserve component into the domestic rate.

### Instructions:

1. PB in colored item
2. Enter Existing asset project CIP costs
3. Enter New asset project CIP costs
4. Enter current total reserves and annual reserve

---

**Report Prepared by (Title):** Abby Ritz (AE2S)

**Date:** 8/22/22

---

**Instructions**

2 - Enter Existing asset project CIP costs

3 - Enter New asset project CIP costs

4 - Enter current total reserves and annual reserve
20768 - 1st, 2nd, and 3rd Avenue Reconstruction - Elgin, ND

Application Details

Funding Opportunity: 19214-2022 Infrastructure Request
Funding Opportunity Due Date: Dec 31, 2022 3:00 PM
Program Area: Funding for Infrastructure in ND - FIND
Status: Under Review
Stage: Final Application
Initial Submit Date: Mar 16, 2022 7:46 AM
Initially Submitted By: Grant Dockter
Last Submit Date: Mar 29, 2022 8:31 AM
Last Submitted By: Grant Dockter

Contact Information

Primary Contact Information

Active User*: Yes
Type: External User
Name:  Salutation Grant Middle Name Dockter
        First Name Last Name
Title:  
Email*: grant.dockter@mooreengineeringinc.com
Address*: 4503 Coleman St - Suite 105

Bismarck North Dakota  58503
        City  State/Province  Postal Code/Zip
Phone*: 701-425-1842 Ext.
        Phone
        ###-####-#####
Fax:        ###-####-#####
Comments: 

Organization Information

Status*: Approved
Name*: City of Elgin
Organization Type*: Political Subdivision
Tax Id: 
Organization Website: 
Address*: 305 N Main St
Elgin North Dakota 58533-7109
City State/Province Postal Code/Zip

Phone*: (701) 584-3001 Ext.
Fax: ###-###-####

Benefactor:
Vendor ID:
PeopleSoft Supplier ID:
Comments:
Location Code:
SAM.gov Entity ID:
SAM.gov Name:
SAM.gov Entity ID Expiration Date:
State Issued ID:
Category #:
Year Begin:
Year Closed:
NCES#:

Restricted Indirect Cost Rate: 0.0%
Unrestricted Indirect Cost Rate: 0.0%

Infrastructure Funding Request

Infrastructure Funding Request

Project, Program, or Study Name*: 1st, 2nd, and 3rd Avenue Reconstruction
Sponsor(s)*: City of Elgin
County*: Grant
City*: Elgin
Description of Request*: New
If Study, What Type:
If Project/Program, What Type: Municipal Water Supply

Jurisdictions/Stakeholders Involved*:
This project involves the residents in the project area in Elgin North Dakota

Specific Needs Addressed By the Project, Program or Study*:
Elgin has remaining asbestos cement pipe in their municipal drinking water distribution system. This pipe has been susceptible to breaks in the past. The City would like to remove the asbestos cement pipe and upgrade the distribution system. The project will also include sanitary sewer replacement to replace aging sanitary sewer mains.
Description of Problem or Need and How Project Addresses that Problem or Need.

Description of Problem*:
Asbestos cement pipe (ACP) is a very brittle pipe. When it is disturbed it is more likely to break in the future. The City of Elgin has experienced breaks on their ACP in the past. The City is in the process of replacing all remaining ACP in town but in order to do that they will need funding for the projects. This project would replace 6 of the remaining blocks. The project also addresses aging sanitary sewer infrastructure in the area.

For this project,

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose City, County or Water District*:</td>
<td>City</td>
</tr>
<tr>
<td>What is the Current Estimated Population?*:</td>
<td>603</td>
</tr>
</tbody>
</table>

For this project,

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the Benefited Population?*:</td>
<td>300</td>
</tr>
<tr>
<td>Has Feasibility Study Been Completed?*:</td>
<td>N/A</td>
</tr>
<tr>
<td>Has Engineering Design Been Completed?*:</td>
<td>Yes</td>
</tr>
<tr>
<td>Have Assessment Districts Been Formed?*:</td>
<td>No</td>
</tr>
<tr>
<td>Have Land or Easements Been Acquired?*:</td>
<td>N/A</td>
</tr>
<tr>
<td>Has Sediment Analysis For Reconstruction Of An Existing Drain Been Completed?*:</td>
<td>N/A</td>
</tr>
<tr>
<td>Extraterritorial Jurisdiction?*:</td>
<td>No</td>
</tr>
<tr>
<td>Have You Applied For Any Federal Permits?*:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

If Yes or Ongoing, Please Explain (include type/number):

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have You Applied for any State Permits?*:</td>
<td>Yes</td>
</tr>
</tbody>
</table>

If Yes or Ongoing, Please Explain (include type/number):

Plans have been submitted to the NDDEQ for plan approval.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have You Been Approved for any State Permits?*:</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

If Yes or Ongoing, Please Explain (include type/number):

NDDEQ Plan Approval process is ongoing.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have You Applied for any Local Permits?*:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

If Yes or Ongoing, Please Explain (include type/number):

Briefly explain the level of review the Project/Program/Study has undergone.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level Review*:</td>
<td>The project underwent QA/QC within Moore Engineering. The project underwent Group leader and Project manager review. Do You Expect Any Obstacles To Implementation (i.e. problems with land acquisition, permits, funding, local opposition, environmental concerns, etc.)?</td>
</tr>
<tr>
<td>Obstacles*:</td>
<td>Yes</td>
</tr>
</tbody>
</table>

If Yes, Please Explain:

This project has been delayed to find more funding to make the project more affordable for the City of Elgin. Have you received, or do you anticipate receiving federal funding?

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Funding*:</td>
<td>No</td>
</tr>
</tbody>
</table>

Implementation Timelines
Table:

<table>
<thead>
<tr>
<th>Study*:</th>
<th>11/2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design*:</td>
<td>01/2022</td>
</tr>
<tr>
<td>Bid*:</td>
<td>07/2022 12/2022</td>
</tr>
<tr>
<td>Construction Start*:</td>
<td>04/2023 6/2023</td>
</tr>
<tr>
<td>Construction Completion*:</td>
<td>10/2023 9/2023</td>
</tr>
</tbody>
</table>

**Additional Timeline Issues***:
With the delay in funding and the current supply chain issues, this project will likely start in 2023.

**Certification**

<table>
<thead>
<tr>
<th>Submitted by*:</th>
<th>Reva Weekes 03/16/2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address*:</td>
<td>305 N Main St</td>
</tr>
<tr>
<td></td>
<td>Address Line 1</td>
</tr>
<tr>
<td></td>
<td>Address Line 2</td>
</tr>
<tr>
<td></td>
<td>Elgin North Dakota 58533-0000</td>
</tr>
<tr>
<td></td>
<td>City State Zip Code</td>
</tr>
<tr>
<td>Telephone Number*:</td>
<td>701-390-2573</td>
</tr>
<tr>
<td>Sponsor Email*:</td>
<td><a href="mailto:cityofelgin@westriv.com">cityofelgin@westriv.com</a></td>
</tr>
<tr>
<td>Consulting Engineer*:</td>
<td>Moore Engineering</td>
</tr>
<tr>
<td>Engineer Telephone Number*:</td>
<td>701-391-1041</td>
</tr>
<tr>
<td>Engineer Email*:</td>
<td><a href="mailto:aj.tuck@mooreengineeringinc.com">aj.tuck@mooreengineeringinc.com</a></td>
</tr>
</tbody>
</table>

This section needs to be completed by the project sponsor. I certify, to the best of my knowledge, the provided information is true and accurate.

**Certify***: Yes

**Authorized Individual***: Reva Weekes 03/16/2022

**Documentation**

**Project Specific Map**
(Including an inset map of location within state.)
CLICK HERE to see examples.

**Project Specific Map***: 22179SWC_1st_2nd_and_3rd_Ave_Street_and_Utility_Improvements.pdf

**Are You Seeking Department of Water Resources Cost-Share***?: Yes

**Delineation of Costs SFN 61801**:
CLICK HERE for SFN 61801 Delineation of Costs.

sfn_61801_delineation_of_cost-UPDATE.xlsx

**Type of Request***: Construction

**Signed Plans and Specifications For Bidding***: Please_DocuSign_1ST_2ND_AND_3RD_AVENUE_REC.pdf

**Water Supply Projects***: Yes
CLICK HERE for Life Cycle Cost Analysis Instructions.

**Life Cycle Cost Analysis***: 22179_life_cycle_cost_analysis_worksheet.xlsx
CLICK HERE for SFN 61938 Capital Improvement Plan.

Capital Improvement Plan SFN 61938: 22179 sfn_61938_capital_improvement_plan.xlsx

- Rural Flood Control?: No
- Drain Reconstructions?: No
- Flood Recovery Property Acquisition?: No
- Community Flood Control, Rural Flood Control, Bank Stabilization, or Snag & Clear Project With Total Cost of $200,000 or More?: No
- Feasibility/Engineering Study for the Proposed Project or Other Applicable Documents: Yes
- Feasibility/Engineering Study Material or Other Applicable Document: SWC Letter.pdf
- Engineering Total Cost of $35,000 or More?: No

Sources

**Funding Amount Requested - Include Amount Requested for All State Funding Sources**

<table>
<thead>
<tr>
<th></th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Cost Source</th>
<th>Type</th>
<th>Term</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$360,000.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$360,000.00 Department of Water Resources</td>
<td>Grant</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>$418,026.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$418,026.00 BND Infrastructure Revolving Loan Fund</td>
<td>Loan</td>
<td>0.00</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>$778,026.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$778,026.00</td>
<td>Watermain Grant</td>
<td>$38,839</td>
<td>$211,000</td>
</tr>
</tbody>
</table>

**Other Funding Sources**

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Grant or Loan</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>CDBG</td>
<td>Grant</td>
<td>$680,950.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$680,950.00</td>
</tr>
<tr>
<td>Federal</td>
<td>USDA RD Grant</td>
<td>Grant</td>
<td>$211,000.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$211,000.00</td>
</tr>
<tr>
<td>Federal</td>
<td>USDA RD Loan</td>
<td>Loan</td>
<td>$377,428.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$377,428.00</td>
</tr>
</tbody>
</table>

**Project Total**

- Current Requested Amount: $778,026.00
- Other Funding Sources: $1,264,378.00
- Total Project: $2,042,404.00
### Delineation of Costs

**Project Type:** Municipal Water Expansion/Improvement  
**Cost-share %:** 60%

<table>
<thead>
<tr>
<th>Item</th>
<th>%</th>
<th>Construction Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.0%</td>
<td>Mobilization</td>
</tr>
<tr>
<td>2</td>
<td>0.2%</td>
<td>Traffic Control</td>
</tr>
<tr>
<td>3</td>
<td>0.4%</td>
<td>Testing Alleviation</td>
</tr>
<tr>
<td>4</td>
<td>0.2%</td>
<td>Stormwater Management</td>
</tr>
<tr>
<td>5</td>
<td>0.2%</td>
<td>Removal Of Concrete</td>
</tr>
<tr>
<td>6</td>
<td>0.1%</td>
<td>Removal of Gut &amp; Val</td>
</tr>
<tr>
<td>7</td>
<td>0.4%</td>
<td>Removal of Hydrant</td>
</tr>
<tr>
<td>8</td>
<td>0.6%</td>
<td>Removal of Gate Valve</td>
</tr>
<tr>
<td>9</td>
<td>32.0%</td>
<td>Water Main - 6&quot;</td>
</tr>
<tr>
<td>10</td>
<td>1.8%</td>
<td>Connection to Existing Water Main</td>
</tr>
<tr>
<td>11</td>
<td>2.4%</td>
<td>Cist Bin &amp; Box - 1&quot;</td>
</tr>
<tr>
<td>12</td>
<td>1.2%</td>
<td>Water Service Connection - 1&quot;</td>
</tr>
<tr>
<td>13</td>
<td>6.2%</td>
<td>Water Service Line - 1&quot; - Directional Boring</td>
</tr>
<tr>
<td>14</td>
<td>8.2%</td>
<td>Gate Valve &amp; Box - 8&quot;</td>
</tr>
<tr>
<td>15</td>
<td>3.5%</td>
<td>Hydrant - 8&quot;</td>
</tr>
<tr>
<td>16</td>
<td>0.1%</td>
<td>Deactivatable Warning Panels</td>
</tr>
<tr>
<td>17</td>
<td>0.4%</td>
<td>Electromagnetic Locator</td>
</tr>
<tr>
<td>18</td>
<td>0.8%</td>
<td>Temporary Water Service</td>
</tr>
<tr>
<td>19</td>
<td>0.2%</td>
<td>Landscaping</td>
</tr>
<tr>
<td>20</td>
<td>19.7%</td>
<td>Parking</td>
</tr>
<tr>
<td>21</td>
<td>0.6%</td>
<td>Valley Ditch Special</td>
</tr>
<tr>
<td>22</td>
<td>0.0%</td>
<td>Adjust Manhole Casting</td>
</tr>
<tr>
<td>23</td>
<td>0.2%</td>
<td>Adjust Gate Valve Box</td>
</tr>
<tr>
<td>24</td>
<td>1.2%</td>
<td>Cist Bin &amp; Valve Type I</td>
</tr>
<tr>
<td>25</td>
<td>0.7%</td>
<td>Sidewalk Concrete</td>
</tr>
<tr>
<td>26</td>
<td>0.6%</td>
<td>Crayway Concrete I/B</td>
</tr>
<tr>
<td>27</td>
<td>7.4%</td>
<td>Water Service Line - 1&quot;</td>
</tr>
</tbody>
</table>

#### Construction Sub-Total

| Total | $722,558 | 66% | $463,551 |

#### Construction Engineering Costs

| Total | $849,895 | 66% | $510,670 |

#### Preconstruction Costs

| Total | $ - | 66% | $ - |

#### Ineligible Costs

| Total | $ - | 66% | $ - |

#### Other Eligible Costs

| Total | $ - | 66% | $ - |

#### Federal or State Funds That Supplant Costs

| Total | $249,839 | 66% | $161,550 |

#### Total Eligible Cost

| Total | $1,192,556 | 66% | $758,840 |

---

**The Cost-share estimate is purely for planning and informational purposes only and does not, in any way, guarantee a financial commitment to any degree, from the State Water Commission.**
Life Cycle Cost Analysis Review

Sponsor: City of Elgin
Project Title: 1st, 2nd, and 3rd Avenue Reconstruction
Date: May 4, 2022

Explanation of Alternatives:
Replace Asbestos Cement Pipe (ACP) – Open cut replacement includes street reconstruction and water main replacement to remove the ACP pipe. Line the ACP Pipe – It was determined this is not a feasible alternative because it decreases the inner diameter of the pipe leading to reduced water pressure.
Pipe Bursting - Pipe bursting is not a feasible alternative. The current water mains are asbestos cement pipe and are not allowed to be burst.
Do Nothing - This alternative would leave the existing asbestos cement pipe in place. As the pipe ages and becomes disturbed it will become more brittle leading to more watermain breaks.

Inputs:

<table>
<thead>
<tr>
<th></th>
<th>Replace Asbestos Cement Pipe</th>
<th>Line the ACP Pipe</th>
<th>Pipe Bursting</th>
<th>Do Nothing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users Served</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Construction Cost</td>
<td>$2,042,500</td>
<td>$1,585,700</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Annual O &amp; M</td>
<td>$1,500</td>
<td>$1,500</td>
<td>$0</td>
<td>$7,000</td>
</tr>
</tbody>
</table>

Details:
The reasoning for lining the pipes being infeasible due to reduced pressure was not addressed. It is likely due to fire suppression standards and 6-inch lines, more so, than household consumption issues.

Model Function:
The economic model appears to have functioned properly. The results are deemed to be reliable and repeatable with the inputs provided by the project sponsor.

LCCA Model Results:

<table>
<thead>
<tr>
<th></th>
<th>Replace Asbestos Cement Pipe</th>
<th>Line the ACP Pipe</th>
<th>Pipe Bursting</th>
<th>Do Nothing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Costs</td>
<td>$2,043,000</td>
<td>$1,586,000</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>$44,000</td>
<td>$44,000</td>
<td>$0</td>
<td>$203,000</td>
</tr>
<tr>
<td>Repair, Rehab, Replacement</td>
<td>$195,000</td>
<td>$69,000</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Salvage Value</td>
<td>$27,000</td>
<td>$18,000</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Total PVC</td>
<td>$2,255,000</td>
<td>$1,681,000</td>
<td>$0</td>
<td>$203,000</td>
</tr>
<tr>
<td>PV Cost Per User</td>
<td>$112,750</td>
<td>$84,050</td>
<td>$0</td>
<td>$10,150</td>
</tr>
</tbody>
</table>

Explanation of Results:
The sponsor’s preferred project is “Replace Asbestos Cement Pipe.” The present value cost of this alternative is $2,255,000 versus the “Do Nothing” which addresses increased cost to repair breaks as they occur at $203,000. The present value cost per user for the preferred alternative is $112,750 versus the alternative which is $10,150. The monthly user cost of the local share with DWR 60% cost-share participation is $206.70 per month and $516.76 without DWR participation.

ND Dept. of Commerce

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Population Growth Rate</th>
<th>Average Annual Population Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>642</td>
<td>-0.9%</td>
</tr>
<tr>
<td>2020</td>
<td>583</td>
<td>-6</td>
</tr>
</tbody>
</table>
# Capital Improvement Plan (CIP)

**North Dakota Department of Water Resources**

**Planning and Education Division**

*SFN 61938 (7/2021)*

---

### Existing Project CIP Costs

<table>
<thead>
<tr>
<th>ASSET</th>
<th>UNITS</th>
<th>UNIT COST</th>
<th>QTY</th>
<th>RESERVE</th>
<th>REPLACEMENT %</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE (YRS)</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Side Watermain Improvements</td>
<td>LSUM</td>
<td>$ 2,278,875</td>
<td>1</td>
<td>75.00%</td>
<td></td>
<td>$1,709,156</td>
<td>50</td>
<td>$34,183</td>
<td>$2,849</td>
<td>$11.87</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUBTOTAL Existing CIP Costs**

- $1,709,156
- $34,183
- $2,849
- $11.87

### New Project CIP Costs

<table>
<thead>
<tr>
<th>ASSET</th>
<th>UNITS</th>
<th>UNIT COST</th>
<th>QTY</th>
<th>RESERVE</th>
<th>REPLACEMENT %</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE (YRS)</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Main</td>
<td>LSUM</td>
<td>$356,500.00</td>
<td>1</td>
<td>75.00%</td>
<td></td>
<td>$267,375</td>
<td>50</td>
<td>$5,248</td>
<td>$446</td>
<td>$1.86</td>
</tr>
<tr>
<td>Appurtenances</td>
<td>LSUM</td>
<td>$100,000.00</td>
<td>1</td>
<td>75.00%</td>
<td></td>
<td>$75,000</td>
<td>50</td>
<td>$1,500</td>
<td>$125</td>
<td>$0.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUBTOTAL New CIP Costs**

- $342,375
- $6,848
- $571
- $2.38

**TOTAL Existing and New Project CIP**

- $2,051,531
- $41,031
- $3,419
- $14.25

---

**Notes:**

- Adjustments:
  - **Required:** 5,000 @ $2.85
  - **Current:** 5,000 @ $1.74
  - **Adjustment:** 5,000 @ $1.11

**Report Prepared by:**

---

**Instructions**

1. Fill colored items
2. Enter Existing asset project CIP costs
3. Enter New asset project CIP costs
4. Enter current total reserves and annual reserve
Memorandum

Date: April 21, 2022

Prepared By: Grant Dockter, Project Engineer

Project: Elgin, North Dakota
1st, 2nd, and 3rd Ave Reconstruction

Subject: DWR State Water Commission Funding Update

Narrative:

Upon request of the DWR staff, Moore Engineering broke down the project costs for Elgin’s upcoming reconstruction project. The total project cost is estimated to be $2.042M. Of the total project cost, water mains and water appurtenances account for 30% of the total project cost ($532,200).

The remaining water items were calculated based on the work associated with installation of water main and appurtenances. The cost estimate assumes a 10-foot-wide trench to install all water mains. This pertains to asphalt, subgrade preparation, class 5, geosynthetic material, curb and gutter, and removal items. Taking into account the work associated with the water main and appurtenance installation, the water portion of the project accounts for just over 41% ($845,000)
Dear Commissioners,

The City of Elgin is working to replace aging asbestos cement pipe throughout their town. They have identified three streets (6 total blocks) that are in need of water and sewer replacement.

The city has secured $680,950.00 in grant money from CDBG. These funds will be applied to the sanitary sewer items of the project and the remaining money will fund a portion of the water items.

Sanitary sewer project costs - $431,128.50
Remaining CDBG grant dollars - $249,821.50

Water project costs - $838,709.00
Water costs after CDBG grant applied - $588,887.50

The city is kindly requesting that the water commission approve a 60% grant for the remaining $588,887.50 of water costs on the project to keep it affordable for the residents.

Sincerely,

AJ Tuck, PE
City Engineer

Attachment
- Cost Estimate
21327 - 8th Ave W and 31st St Improvements Project

Application Details

Funding Opportunity: 19214-2022 Infrastructure Request
Funding Opportunity Due Date: Dec 31, 2022 3:00 PM
Program Area: Funding for Infrastructure in ND - FIND
Status: Under Review
Stage: Final Application

Initial Submit Date: Aug 19, 2022 10:15 AM
Initially Submitted By: Abby Ritz

Contact Information

Primary Contact Information

Active User*: Yes
Type: External User
Name: 
Salutation Abby 
First Name Ritz 
Last Name
Title:
Email*: abby.ritz@ae2s.com
Address*: 1815 Schafer Street, Suite 301

AE2S
Bismarck North Dakota 58501
City State/Province Postal Code/Zip
Phone*: 701-221-0530 Ext.
Phone 
Fax: 

Comments:

Organization Information

Status*: Approved
Name*: City of Williston
Organization Type*: Political Subdivision
Tax Id: 
Organization Website: 
Address*: 1121 5th St E
Infrastructure Funding Request

**Project, Program, or Study Name**: 8th Ave W and 31st St Improvements Project

**Sponsor(s)**: City of Williston

**County**: Williams

**City**: Williston

**Description of Request**: New

**If Study, What Type**: Municipal Water Supply

**Jurisdictions/Stakeholders Involved**: City of Williston

**Specific Needs Addressed By the Project, Program or Study**: Inadequate capacity and distribution infrastructure to serve redevelopments

**Description of Problem or Need and How Project Addresses that Problem or Need**: The City is in the process of redeveloping its former airport property (Slouin Field). The existing watermains were installed to serve the single airport facility and do not have the capacity or distribution infrastructure to serve the extended and increased demand that will come with the
redevelopment. To support redevelopment of the site, watermains and appurtenances need to be installed along 8th Avenue W and 31st Street.

For this project,

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose City, County or Water District?</td>
<td>City</td>
</tr>
<tr>
<td>What is the Current Estimated Population?</td>
<td>29160</td>
</tr>
<tr>
<td>What is the Benefited Population?</td>
<td>920</td>
</tr>
<tr>
<td>Has Feasibility Study Been Completed?</td>
<td>Yes</td>
</tr>
<tr>
<td>Has Engineering Design Been Completed?</td>
<td>Yes</td>
</tr>
<tr>
<td>Have Assessment Districts Been Formed?</td>
<td>N/A</td>
</tr>
<tr>
<td>Have Land or Easements Been Acquired?</td>
<td>N/A</td>
</tr>
<tr>
<td>Has Sediment Analysis For Reconstruction Of An Existing Drain Been Completed?</td>
<td>N/A</td>
</tr>
<tr>
<td>Extraterritorial Jurisdiction?</td>
<td>No</td>
</tr>
<tr>
<td>Have You Applied For Any Federal Permits?</td>
<td>No</td>
</tr>
</tbody>
</table>

If Yes or Ongoing, Please Explain (include type/number):

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have You Applied for any State Permits?</td>
<td>No</td>
</tr>
<tr>
<td>Have You Applied for any Local Permits?</td>
<td>No</td>
</tr>
</tbody>
</table>

If Yes or Ongoing, Please Explain (include type/number):

Briefly explain the level of review the Project/Program/Study has undergone.

**Level Review**:  
This project is part of a larger Williston Square Master Plan that was completed in 2019.

Do You Expect Any Obstacles To Implementation (i.e. problems with land acquisition, permits, funding, local opposition, environmental concerns, etc.)?  
**Obstacles**: No

Have you received, or do you anticipate receiving federal funding?  
**Federal Funding**: No

**Implementation Timelines**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study*</td>
<td>02/2019</td>
</tr>
<tr>
<td>Design*</td>
<td>05/2022</td>
</tr>
<tr>
<td>Bid*</td>
<td>06/2022</td>
</tr>
<tr>
<td>Construction Start*</td>
<td>08/2022</td>
</tr>
<tr>
<td>Construction Completion*</td>
<td>10/2023</td>
</tr>
</tbody>
</table>
**Additional Timeline Issues**:  
The current material and labor shortage could affect the completion timeline of the project. Note that construction has started for general items. Water-related improvements aren't anticipated until November 2022.

**Certification**

**Submitted by**: David Juma 08/29/2022  
First Name: Last Name: Date:  
**Address**:  
1121 5th Street East  
Address Line 1  
PO Box 2437  
Address Line 2  
Williston North Dakota 58802-2437  
City: State: Zip Code:  
**Telephone Number**: 701-577-6368  
**Sponsor Email**: davjd@ci.williston.us  
**Consulting Engineer**: Lawrence Stubbs  
**Engineer Telephone Number**: 701-609-0073  
**Engineer Email**: LS@allianceconsulting.us  
This section needs to be completed by the project sponsor. I certify that, to the best of my knowledge, the provided information is true and accurate.  
**Certify**: Yes  
**Authorized Individual**: David Juma 08/29/2022  
First Name: Last Name: Date:  

**Documentation**

**Project Specific Map**  
(Including a inset map of location within state.)  
CLICK HERE to see examples.  
**Project Specific Map**: Williston 8th-31st Project Location Map.pdf  
**Are You Seeking Department of Water Resources Cost-Share?**: Yes  
**CLICK HERE** for SFN 61801 Delineation of Costs.  
**Delineation of Costs SFN 61801**: 3 sfn_61801_delineation_of_cost.xlsx  
**Type of Request**: Construction  
**Signed Plans and Specifications For Bidding**:  
4 Bid Tab - 33rd-9th Roadway Improvements 6-7-22.xlsx  
**Water Supply Projects?**: Yes  
**CLICK HERE** for Life Cycle Cost Analysis Instructions.  
**Life Cycle Cost Analysis**: 5 life_cycle_cost_analysis_worksheet.xlsx  
**CLICK HERE** for SFN 61938 Capital Improvement Plan.  
**Capital Improvement Plan SFN 61938**: 6 sfn_61938_capital_improvement_plan.xlsx  
**Rural Flood Control?**: No  
**Drain Reconstructions?**: No  
**Flood Recovery Property Acquisition?**: No
Community Flood Control, Rural Flood Control, Bank Stabilization, or Snag & Clear Project With Total Cost of $200,000 or More?: No

Feasibility/Engineering Study for the Proposed Project or Other Applicable Documents: No

Engineering Total Cost of $35,000 or More?: Yes

Engineering Selection Documentation:

Sources

### Funding Amount Requested - Include Amount Requested for All State Funding Sources

<table>
<thead>
<tr>
<th>Type</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Cost Source</th>
<th>Type</th>
<th>Term</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$133,200.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$133,200.00 Department of Water Resources</td>
<td>Grant</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>$133,200.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$133,200.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Other Funding Sources

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Source Type</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>Cash Reserves or Bonding</td>
<td>Loan</td>
<td>$1,013,348.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$1,013,348.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$1,013,348.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$1,013,348.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$1,013,348.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$1,013,348.00</td>
</tr>
</tbody>
</table>

### Project Total

Current Requested Amount: $133,200.00

Other Funding Sources: $1,013,348.00

Total Project: $1,146,548.00
**DELINEATION OF COSTS**

**NORTH DAKOTA DEPARTMENT OF WATER RESOURCES**

**PLANNING AND EDUCATION**

**BPA051515**

---

<table>
<thead>
<tr>
<th>Project:</th>
<th>8th Avenue and 31st Street Improvement Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sponsor:</td>
<td>City of Williston</td>
</tr>
<tr>
<td>Contact:</td>
<td>Lawrence Stubbs, Alliance Consulting</td>
</tr>
<tr>
<td>Phone:</td>
<td>701-609-0073</td>
</tr>
</tbody>
</table>

---

**DWR Date Received: August 19, 2022**

---

<table>
<thead>
<tr>
<th>Cost Classification</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $ *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>54.3%</td>
<td>Water Main 10 in</td>
<td>1150</td>
<td>LF</td>
<td>104.00</td>
<td>$ 120,640</td>
</tr>
<tr>
<td>2</td>
<td>18.1%</td>
<td>Gate Valve</td>
<td>7</td>
<td>EA</td>
<td>5,750.00</td>
<td>$ 40,256</td>
</tr>
<tr>
<td>3</td>
<td>7.2%</td>
<td>Fillings</td>
<td>1</td>
<td>LF</td>
<td>6,000.00</td>
<td>$ 18,000</td>
</tr>
<tr>
<td>4</td>
<td>4.2%</td>
<td>Hydrant</td>
<td>1</td>
<td>EA</td>
<td>9,400.00</td>
<td>$ 9,400</td>
</tr>
<tr>
<td>5</td>
<td>7.0%</td>
<td>Mobilization</td>
<td>1</td>
<td>LF</td>
<td>15,537.12</td>
<td>$ 15,537</td>
</tr>
<tr>
<td>6</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>12</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>13</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>15</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>17</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>18</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>19</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>20</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>21</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>22</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>23</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>24</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>25</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>26</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Construction Sub-Total</td>
<td></td>
<td>$ 261,877</td>
<td>60%</td>
<td>$ 121,126</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.0%</td>
<td>Contingency</td>
<td>$ 20,188</td>
<td>60%</td>
<td>$ 12,113</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.4%</td>
<td>Construction Total</td>
<td>$ 222,065</td>
<td>60%</td>
<td>$ 133,239</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Preconstruction Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ -</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Construction Engineering Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ -</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Other Eligible Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ -</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Ineligible Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ -</td>
</tr>
</tbody>
</table>

---

**Total** | $ 1,146,548 | 60% | $ 133,329 |

---

**Federal or State Funds That Supplant Costs** | $ - | 60% | $ - |

---

* The Cost-share estimate is purely for planning and informational purposes only and does not, in any way, guarantee a financial commitment to any degree, from the State Water Commission.
Life Cycle Cost Analysis Review

Sponsor: City of Williston  
Project Title: Airport Redevelopment 8th-31st St Infrastructure  
Date: August 31, 2022

Explanation of Alternatives:

Infrastructure Expansion (Preferred) - This alternative will install new watermains and appurtenances (along with other ineligible infrastructure) to support the redevelopment of the City's former airport property.

No Build – The No Build alternative would result in no improvements to the former airport property. This would not result in any additional costs for the city, however it would hinder the City's efforts to encourage growth and new developments.

Regionalization - Williston is a member entity of the Western Area Water Supply Authority (WAWSA).

Inputs:

<table>
<thead>
<tr>
<th></th>
<th>Infrastructure Expansion (Preferred)</th>
<th>No Build</th>
<th>Regionalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Cost</td>
<td>$1,146,600</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Annual O &amp; M</td>
<td>$2,000</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

Details:

There are no current or new users added with this project. This is speculative development funding where the capacity for 230 potential future users are the focus.

LCCA Model Results:

Scenario Analysis - Present Value Life Cycle Cost Summary

<table>
<thead>
<tr>
<th>Current Water Rate (Cost Per 5000g)</th>
<th>$26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparable Water Rate</td>
<td>$47</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Future Connections Served</th>
<th>230</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost-Share Percent</td>
<td>60%</td>
</tr>
<tr>
<td>Local Share</td>
<td>$458,800</td>
</tr>
<tr>
<td>Other Funding</td>
<td>$0</td>
</tr>
<tr>
<td>Total Local</td>
<td>$458,800</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Payment Per User With Cost-Share</th>
<th>$10.09</th>
<th>$0.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Share</td>
<td>$1,147,000</td>
<td>$0</td>
</tr>
<tr>
<td>Other Funding</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Total Local</td>
<td>$1,147,000</td>
<td>$0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Payment Per User Without Cost-Share</th>
<th>$25.32</th>
<th>$0.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Share</td>
<td>$1,147,000</td>
<td>$0</td>
</tr>
<tr>
<td>Other Funding</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Total Local</td>
<td>$1,147,000</td>
<td>$0</td>
</tr>
</tbody>
</table>

Explanation of Results:

The sponsor’s preferred project is the “Infrastructure Expansion” option. The present value cost of the preferred alternative is $1,237,000 and $0 for the “No Build” alternative for comparison. The present value cost per user for the preferred alternative is nonexistent as there are no current users. The present value cost per potential user is $5,378. The monthly user cost of the local share per user are not relevant given nonexistent users upon whom to distribute the cost. How the local share will be sourced by the city is unknown.

ND Dept. of Commerce

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Population Growth Rate</th>
<th>Average Annual Population Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>14,716</td>
<td>1,503</td>
</tr>
<tr>
<td>2020</td>
<td>29,749</td>
<td>10.2%</td>
</tr>
</tbody>
</table>

Other Comments:

The economic model appears to have functioned properly. The results are deemed to be reliable and repeatable with the inputs provided by the project sponsor.

LCCA Version

Version 1.2022.07.08
### System: City of Williston
**Date:** 08/15/22

<table>
<thead>
<tr>
<th>ASSET</th>
<th>UNITS</th>
<th>UNIT COST</th>
<th>QTY</th>
<th>RESERVE REPLACEMENT %</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE (YRS)</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE</th>
<th>PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th Ave and 31st St Watermains</td>
<td>Ea.</td>
<td>$249,618.00</td>
<td>1</td>
<td>50.00%</td>
<td>$124,809</td>
<td>50</td>
<td>$2,496</td>
<td>$208</td>
<td>$0.03</td>
</tr>
<tr>
<td><strong>SUBTOTAL Existing CIP Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$124,809</td>
<td></td>
<td>$2,496</td>
<td>$208</td>
<td>$0.03</td>
</tr>
</tbody>
</table>

**TOTAL Existing and New Project CIP**

<table>
<thead>
<tr>
<th><strong>CURRENT RESERVES</strong></th>
<th><strong>ANNUAL RESERVE</strong></th>
<th><strong>MONTHLY RESERVE</strong></th>
<th><strong>PER CUSTOMER</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>$3,350,898</td>
<td>$0</td>
<td>$0.00</td>
</tr>
<tr>
<td>Adjustment</td>
<td></td>
<td>$2,496</td>
<td>$208</td>
</tr>
</tbody>
</table>

**Notes:**
- Enter Existing asset project CIP costs
- Enter New asset project CIP costs
- Enter current total reserves and annual reserve
- Monthly Ave Gal/user: $0.01
- Monthly $/gal: $0.00

Report Prepared by (Title): Abby Ritz, Funding Programs Specialist
**Date:** 8/15/22
## Application Details

**Funding Opportunity:** 19214-2022 Infrastructure Request  
**Funding Opportunity Due Date:** Dec 31, 2022 3:00 PM  
**Program Area:** Funding for Infrastructure in ND - FIND  
**Status:** Under Review  
**Stage:** Final Application  

**Initial Submit Date:** Jun 20, 2022 12:06 PM  
**Initially Submitted By:** Michael Gorder  
**Last Submit Date:** Aug 22, 2022 11:38 AM  
**Last Submitted By:** Michael Gorder

### Contact Information

**Primary Contact Information**

<table>
<thead>
<tr>
<th>Active User*</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type:</strong></td>
<td>External User</td>
</tr>
<tr>
<td><strong>Name:</strong></td>
<td>Salutation Michael Middle Name Gorder First Name Last Name</td>
</tr>
<tr>
<td><strong>Title:</strong></td>
<td>Project Engineer</td>
</tr>
<tr>
<td><strong>Email</strong>:</td>
<td><a href="mailto:michael.gorder@mooreengineeringinc.com">michael.gorder@mooreengineeringinc.com</a></td>
</tr>
<tr>
<td><strong>Address</strong>:</td>
<td>4503 Coleman Street - Suite 105</td>
</tr>
<tr>
<td><strong>Phone</strong>:</td>
<td>701-751-8377 Ext.</td>
</tr>
<tr>
<td><strong>Fax</strong>:</td>
<td>####-####-####</td>
</tr>
</tbody>
</table>

**Organization Information**

<table>
<thead>
<tr>
<th>Status*</th>
<th>Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong>:</td>
<td>City of Lincoln</td>
</tr>
<tr>
<td><strong>Organization Type</strong>:</td>
<td>Municipal Government</td>
</tr>
<tr>
<td><strong>Tax Id</strong>:</td>
<td>45-0345241</td>
</tr>
<tr>
<td><strong>Organization Website</strong>:</td>
<td></td>
</tr>
<tr>
<td><strong>Address</strong>:</td>
<td>74 Santee Road</td>
</tr>
</tbody>
</table>
Infrastructure Funding Request

**Project, Program, or Study Name**: Water Storage Upgrades

**Sponsor(s)**: City of Lincoln

**County**: Burleigh

**City**: Lincoln

**Description of Request**: Updated (previously submitted)

**If Study, What Type**: Municipal Water Supply

**Jurisdictions/Stakeholders Involved**: City of Lincoln

**Specific Needs Addressed By the Project, Program or Study**: The City of Lincoln's existing 549,000 gallon water storage tank No. 1 was installed in 1985 and has had settlement issues and ice damage over the last 10 years that has caused the condition of the tank to degrade. An inspection was performed in April of 2018 identifying issues. Improper emergency work in 2013 cause delamination of the glass coating of the steel during installation of a new floor. Extensive corrosion has been identified on the base ring of the tank.

**Description of Problem or Need and How Project Addresses that Problem or Need**.
**Description of Problem**: The proposed project would be to to install a new 16” water main to connect the tanks to the city increasing available flow for fire demand; remove the existing 549,000 gallon water tank and replace it with a new 1,000,000 gallon tank to meet storage requirements now and for future growth, prevent potential catastrophic failure of the existing tank; and adds capacity to the cities water infrastructure.

For this project,

**Choose City, County or Water District**: City

**What is the Current Estimated Population?**: 4257

For this project,

**What is the Benefited Population?**: 4257

**Has Feasibility Study Been Completed?**: Yes

**Has Engineering Design Been Completed?**: No

**Have Assessment Districts Been Formed?**: N/A

**Have Land or Easements Been Acquired?**: No

**Has Sediment Analysis For Reconstruction Of An Existing Drain Been Completed?**: N/A

**Extraterritorial Jurisdiction?**: No

**Have You Applied For Any Federal Permits?**: N/A

If Yes or Ongoing, Please Explain (include type/number):

**Have You Applied for any State Permits?**: No

If Yes or Ongoing, Please Explain (include type/number):

**Have You Applied for any Local Permits?**: No

If Yes or Ongoing, Please Explain (include type/number):

Briefly explain the level of review the Project/Program/Study has undergone.

**Level Review**: We finished on a supplemental report (Amendment #1) to the Preliminary Engineering Report that SEH completed in 2018, which will consist of our report findings, a revised cost estimate, and 30% plan set. Now design is taking place. Final Plans and Specs will be done Sept. 16th. City of Lincoln Approval Oct. 6th. Final Plans for Oct. 13th for State Water Commission

Do You Expect Any Obstacles To Implementation (i.e. problems with land acquisition, permits, funding, local opposition, environmental concerns, etc.)?

**Obstacles**: No

Have you received, or do you anticipate receiving federal funding?

**Federal Funding**: No

**Implementation Timelines**

**Study**: 06/2022

Month/Year (00/0000)

**Design**: 08/2022

Month/Year (00/0000)

**Bid**: 12/2022

Month/Year (00/0000)
Construction Start*: 05/2023  
Month/Year (00/0000)

Construction Completion*: 10/2023  
Month/Year (00/0000)

Explain Additional Timeline Issues*: N/A

Certification

Submitted by*: Lisa Aune 06/20/2022  
First Name Last Name Date

Address*: 74 Santee Road  
Address Line 1
Address Line 2
Lincoln North Dakota 58504-0000  
City State Zip Code

Telephone Number*: 701-256-7969

Sponsor Email*: cityoflincoln@midconnetwork.com

Consulting Engineer*: AJ Tuck - Moore Engineering

Engineer Telephone Number*: 701-751-8371

Engineer Email*: aj.tuck@mooreengineeringinc.com

This section needs to be completed by the project sponsor.  
I certify that, to the best of my knowledge, the provided information is true and accurate.

Certify*: Yes

Authorized Individual*: Lisa Aune 06/20/2022  
First Name Last Name Date

Documentation

Project Specific Map  
(Including an inset map of location within state.)  
CLICK HERE to see examples.

Project Specific Map*: 22446_Water_Tower_SWC_Exhibit_Alt_1_v104.pdf

Are You Seeking Department of Water Resources Cost-Share?*: Yes

CLICK HERE for SN 61801 Delineation of Costs.

Delineation of Costs SFN 61801: 22446_Delineation of Costs.xlsx

Type of Request: Preconstruction

Water Supply Projects*: Yes

CLICK HERE for Life Cycle Cost Analysis Instructions.

Life Cycle Cost Analysis: life_cycle_cost_analysis_worksheet.xlsx

CLICK HERE for SN 61938 Capital Improvement Plan.

Capital Improvement Plan SFN 61938: sfn_61938_capital_improvement_plan.xlsx

Rural Flood Control?*: No

Drain Reconstructions?*: No

Flood Recovery Property Acquisition?*: No
Rural Flood Control?: No

Drain Reconstructions?: No

Flood Recovery Property Acquisition?: No

Community Flood Control, Rural Flood Control, Bank Stabilization, or Snag & Clear Project With Total Cost of $200,000 or More?: No

Feasibility/Engineering Study for the Proposed Project or Other Applicable Documents: Yes


Engineering Total Cost of $35,000 or More?: Yes

Engineering Selection Documentation: 4-7-22 Meeting Minutes.pdf

Sources

Funding Amount Requested - Include Amount Requested for All State Funding Sources

<table>
<thead>
<tr>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Cost</th>
<th>Source</th>
<th>Type</th>
<th>Term</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,467,000.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$1,467,000.00 Department of Water Resources</td>
<td>Grant</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>$1,063,234.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$1,063,234.00 Drinking Water State Revolving Fund</td>
<td>Loan</td>
<td>30.00</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>$2,530,234.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$2,530,234.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Funding Sources

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Grant or Loan</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>DWR previous approval 2/13/2020</td>
<td>Grant</td>
<td>$1,268,000.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$1,268,000.00</td>
</tr>
<tr>
<td>State</td>
<td>Previous SRF Loan</td>
<td>Loan</td>
<td>$845,300.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$845,300.00</td>
</tr>
</tbody>
</table>

Project Total

Current Requested Amount: $2,530,234.00

Other Funding Sources: $2,113,300.00

Total Project: $4,643,534.00
### DELINEATION OF COSTS
**NORTH DAKOTA DEPARTMENT OF WATER RESOURCES**

**PLANNING AND EDUCATION**

**Dept. #161 (15281)**

**Project:** Lincoln Water Storage Upgrades

<table>
<thead>
<tr>
<th>Sponsor:</th>
<th>City of Lincoln</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact:</td>
<td>Lisa Aune, Auditor</td>
</tr>
<tr>
<td>Phone:</td>
<td>701.751.8371</td>
</tr>
</tbody>
</table>

**Post Construction/Warranty Services**

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost Classification</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share</th>
<th>Cost-Share $</th>
<th>Original Estimate</th>
<th>Cost Share %</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART A - BASE BID</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Mobilization</td>
<td>1</td>
<td>LS</td>
<td>264,600.00</td>
<td>264,600.00</td>
<td>60%</td>
<td>158,760</td>
<td>80,000.00</td>
<td>48,000.00</td>
</tr>
<tr>
<td>2</td>
<td>1,000,000 Gallon Pre-Stressed Concrete</td>
<td>1</td>
<td>LS</td>
<td>1,510,000.00</td>
<td>1,510,000.00</td>
<td>60%</td>
<td>906,000</td>
<td>1,025,000.00</td>
<td>615,000.00</td>
</tr>
<tr>
<td>3</td>
<td>Water Main 16”</td>
<td>600'</td>
<td>LF</td>
<td>150,000</td>
<td>930,000</td>
<td>60%</td>
<td>558,000</td>
<td>421,986.00</td>
<td>192,930.00</td>
</tr>
<tr>
<td>4</td>
<td>Connection to Existing Line</td>
<td>3</td>
<td>LS</td>
<td>10,000.00</td>
<td>30,000</td>
<td>60%</td>
<td>18,000</td>
<td>11,980.00</td>
<td>7,140.00</td>
</tr>
<tr>
<td>5</td>
<td>Testing Allowance</td>
<td>1</td>
<td>ALLOW</td>
<td>16,000.00</td>
<td>16,000</td>
<td>60%</td>
<td>9,600</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>Ground Water Tank Removal</td>
<td>1</td>
<td>LS</td>
<td>32,000.00</td>
<td>32,000</td>
<td>60%</td>
<td>19,200</td>
<td>50,000.00</td>
<td>30,000.00</td>
</tr>
<tr>
<td>7</td>
<td>Site Work</td>
<td>1</td>
<td>LS</td>
<td>56,000.00</td>
<td>56,000</td>
<td>60%</td>
<td>33,600</td>
<td>82,280.00</td>
<td>46,380.00</td>
</tr>
<tr>
<td>8</td>
<td>6.4% Deep Foundation (if necessary)</td>
<td>1</td>
<td>LS</td>
<td>250,000.00</td>
<td>250,000.00</td>
<td>60%</td>
<td>150,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>Electrical</td>
<td>1</td>
<td>LS</td>
<td>122,000.00</td>
<td>122,000</td>
<td>60%</td>
<td>73,200</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>Directional Drill Water Main - 16”</td>
<td>100’</td>
<td>LF</td>
<td>225.00</td>
<td>22,500</td>
<td>60%</td>
<td>13,500</td>
<td>21,980.00</td>
<td>12,960.00</td>
</tr>
<tr>
<td>11</td>
<td>Water Valve</td>
<td>19</td>
<td>EA</td>
<td>8,567.89</td>
<td>164,500</td>
<td>60%</td>
<td>98,700</td>
<td>36,000.00</td>
<td>22,080.00</td>
</tr>
<tr>
<td>12</td>
<td>Hydrant</td>
<td>3</td>
<td>EA</td>
<td>6,000.00</td>
<td>18,000</td>
<td>60%</td>
<td>10,800</td>
<td>10,000.00</td>
<td>6,000.00</td>
</tr>
<tr>
<td>13</td>
<td>Earlwook</td>
<td>2,500</td>
<td>CY</td>
<td>15.00</td>
<td>37,500</td>
<td>60%</td>
<td>22,500</td>
<td>15,880.00</td>
<td>9,588.00</td>
</tr>
<tr>
<td>14</td>
<td>Gravel</td>
<td>1,000</td>
<td>CY</td>
<td>15.00</td>
<td>50,000</td>
<td>60%</td>
<td>30,000</td>
<td>44,976.00</td>
<td>26,985.00</td>
</tr>
<tr>
<td>15</td>
<td>Removal of Vault</td>
<td>2</td>
<td>EA</td>
<td>15,000.00</td>
<td>30,000</td>
<td>60%</td>
<td>18,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>Seeding</td>
<td>1</td>
<td>LS</td>
<td>10,000.00</td>
<td>10,000.00</td>
<td>60%</td>
<td>6,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>17</td>
<td>Tree</td>
<td>19</td>
<td>EA</td>
<td>400.00</td>
<td>6,000</td>
<td>60%</td>
<td>3,600</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>18</td>
<td>Driveway</td>
<td>1</td>
<td>LS</td>
<td>10,000.00</td>
<td>10,000.00</td>
<td>60%</td>
<td>6,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>19</td>
<td>Other Eligible Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Construction Sub-Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,143,260</td>
<td>1,700,885.80</td>
<td>1,020,051.00</td>
</tr>
<tr>
<td>32</td>
<td>Contingency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>214,340</td>
<td>170,138.50</td>
<td>102,081.00</td>
</tr>
<tr>
<td>33</td>
<td>Construction Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,357,600</td>
<td>1,870,221.30</td>
<td>1,122,132.00</td>
</tr>
</tbody>
</table>

**Preconstruction Costs**

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost Classification</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share</th>
<th>Cost-Share $</th>
<th>Original Estimate</th>
<th>Cost Share %</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>Site Development</td>
<td>1</td>
<td>LS</td>
<td>257,500.00</td>
<td>257,500.00</td>
<td>60%</td>
<td>154,500</td>
<td>112,250.00</td>
<td>67,325.00</td>
</tr>
<tr>
<td>35</td>
<td>Other Eligible Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Construction Within City Limits</td>
<td>1</td>
<td>LS</td>
<td>125,000.00</td>
<td>125,000</td>
<td>60%</td>
<td>75,000</td>
<td>130,896.55</td>
<td>-</td>
</tr>
<tr>
<td>37</td>
<td>Construction-Eng</td>
<td>1</td>
<td>LS</td>
<td>200,000.00</td>
<td>200,000</td>
<td>60%</td>
<td>120,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>38</td>
<td>Plat Construction/Warranty Services</td>
<td>1</td>
<td>LS</td>
<td>26,500.00</td>
<td>26,500</td>
<td>60%</td>
<td>15,900</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>39</td>
<td>Other Eligible Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Construction Sub-Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>277,500</td>
<td>166,500</td>
<td>112,250.00</td>
</tr>
<tr>
<td>41</td>
<td>Other Eligible Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Other Eligible Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Construction Engineering Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost Classification</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share</th>
<th>Cost-Share $</th>
<th>Original Estimate</th>
<th>Cost Share %</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td>Construction Eng</td>
<td>1</td>
<td>LS</td>
<td>26,500.00</td>
<td>26,500</td>
<td>60%</td>
<td>15,900</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>44</td>
<td>Construction Eng-RPR Inspection/Slab</td>
<td>1</td>
<td>LS</td>
<td>200,000.00</td>
<td>200,000</td>
<td>60%</td>
<td>120,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>45</td>
<td>Post Construction/Warranty Services</td>
<td>1</td>
<td>LS</td>
<td>26,500.00</td>
<td>26,500</td>
<td>60%</td>
<td>15,900</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>46</td>
<td>Other Eligible Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>Construction Sub-Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>351,500</td>
<td>210,300</td>
<td>130,896.55</td>
</tr>
</tbody>
</table>

### Federal or State Funds That Supplant Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost Classification</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share</th>
<th>Cost-Share $</th>
<th>Original Estimate</th>
<th>Cost Share %</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>Legal Expenses</td>
<td>1</td>
<td>LS</td>
<td>5,000.00</td>
<td>5,000.00</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>49</td>
<td>Property Acquisitions</td>
<td>1</td>
<td>LS</td>
<td>80,000.00</td>
<td>80,000.00</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>50</td>
<td>Other Ineligible Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>Other Eligible Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total**

<table>
<thead>
<tr>
<th></th>
<th>Cost Classification</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share</th>
<th>Cost-Share $</th>
<th>Original Estimate</th>
<th>Cost Share %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lincoln Water Storage Upgrades</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Municipal Water Expansion/Improvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>60%</td>
</tr>
</tbody>
</table>

*Note: The Cost-share estimate is purely for planning and informational purposes only and does not, in any way, guarantee a financial commitment to any degree, from the State Water Commission.*
Life Cycle Cost Analysis Review

Sponsor: City of Lincoln  
Project Title: Lincoln Water Storage Upgrades  
Date: September 1, 2022

Explanation of Alternatives:

- **Water Tower** – Build an elevated 1 million gallon tower.
- **Ground Storage Tank (Preferred)** – Build a 1 million gallon concrete ground water storage tank, install 6,000 feet of 16-inch main, and connect to city distribution sections.

Inputs:

<table>
<thead>
<tr>
<th></th>
<th>Water Tower</th>
<th>Ground Storage Tank</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Connections Served</td>
<td>0</td>
<td>1,703</td>
</tr>
<tr>
<td>Future Connections Served</td>
<td>0</td>
<td>1,703</td>
</tr>
<tr>
<td>Current Connections Served</td>
<td>1,703</td>
<td>1,703</td>
</tr>
<tr>
<td>Net Connections (New + Current)</td>
<td>1,703</td>
<td>1,703</td>
</tr>
<tr>
<td>Construction Cost</td>
<td>$5,366,100</td>
<td>$4,643,500</td>
</tr>
<tr>
<td>Annual O &amp; M</td>
<td>$10,000</td>
<td>$10,000</td>
</tr>
</tbody>
</table>

Details:

The proposed project would be to:
- Install a new 16-inch water main to connect the tanks to the city - increasing available flow for fire demand.
- Remove the existing 549,000 gallon tank and replace it with a new 1 million gallon tank to meet storage requirements now and for future growth.
- Prevent potential catastrophic failure of the existing tank.
- Add capacity to the city’s water infrastructure.

LCCA Model Results:

<table>
<thead>
<tr>
<th></th>
<th>Water Tower</th>
<th>Ground Storage Tank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Costs</td>
<td>$5,307,000</td>
<td>$4,593,000</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>$285,000</td>
<td>$285,000</td>
</tr>
<tr>
<td>Repair, Rehab, Replacement</td>
<td>$2,066,000</td>
<td>$883,000</td>
</tr>
<tr>
<td>Salvage Value</td>
<td>$537,000</td>
<td>$355,000</td>
</tr>
<tr>
<td><strong>Total PVC</strong></td>
<td><strong>$7,121,000</strong></td>
<td><strong>$5,406,000</strong></td>
</tr>
</tbody>
</table>

**PV Cost Per User**

<table>
<thead>
<tr>
<th></th>
<th>Water Tower</th>
<th>Ground Storage Tank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Water Rate (Cost Per 5000g)</td>
<td>$56</td>
<td>$47</td>
</tr>
<tr>
<td>Comparable Water Rate</td>
<td>$47</td>
<td>$47</td>
</tr>
<tr>
<td>Net Connections (New + Current)</td>
<td>1,703</td>
<td>1,703</td>
</tr>
<tr>
<td>Cost-Share Percent</td>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>Local Share</td>
<td>$2,122,800</td>
<td>$1,837,200</td>
</tr>
<tr>
<td>Other Funding</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Total Local</td>
<td>$2,122,800</td>
<td>$1,837,200</td>
</tr>
<tr>
<td>Payment Per User With Cost-Share</td>
<td>$6.31</td>
<td>$5.46</td>
</tr>
<tr>
<td>Local Share</td>
<td>$5,307,000</td>
<td>$4,593,000</td>
</tr>
<tr>
<td>Other Funding</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Total Local</td>
<td>$5,307,000</td>
<td>$4,593,000</td>
</tr>
<tr>
<td>Payment Per User Without Cost-Share</td>
<td>$15.76</td>
<td>$13.64</td>
</tr>
</tbody>
</table>

Explanation of Results:

The sponsor’s preferred project is the “Ground Storage Tank” option. The present value cost of the preferred alternative is $5,406,000 and $7,121,000 for the “Water Tower” alternative for comparison. The present value cost per user for the preferred alternative is $3,174. The monthly user cost of the local share with DWR 60% cost-share participation is $13.64 per month and $15.76 without DWR participation.

<table>
<thead>
<tr>
<th>ND Dept. of Commerce</th>
<th>Year</th>
<th>Annual Population Growth Rate</th>
<th>Average Annual Population Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population &amp; Trends</td>
<td>2010</td>
<td>3,825</td>
<td>5.9%</td>
</tr>
</tbody>
</table>

Other Comments:

This project was previously approved in 2019 and is returning for additional funding.

The economic model appears to have functioned properly. The results are deemed to be reliable and repeatable with the inputs provided by the project sponsor.

LCCA Version Version 1.2022.07.08
### CAPITAL IMPROVEMENT PLAN (CIP)

**NORTH DAKOTA DEPARTMENT OF WATER RESOURCES**  
**PLANNING AND EDUCATION DIVISION**  
**SN 61938 (7/2021)**

**System:**  City of Lincoln  - Water Storage Upgrades  
**Population:** 4,257  
**Users:** 1,703  
**Date:** 08/22/22

<table>
<thead>
<tr>
<th>ASSET</th>
<th>UNITS</th>
<th>UNIT COST</th>
<th>QTY</th>
<th>REPLACE %</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE (YRS)</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Main</td>
<td>Feet</td>
<td>$10.00</td>
<td>76,495</td>
<td>75.00%</td>
<td>$573,713</td>
<td>50</td>
<td>$11,474</td>
<td>$955</td>
</tr>
<tr>
<td>Water Tank</td>
<td>Each</td>
<td>$700.00</td>
<td>2</td>
<td>50.00%</td>
<td>$700,000</td>
<td>50</td>
<td>$14,000</td>
<td>$1,167</td>
</tr>
<tr>
<td>Water Appurtenances</td>
<td>Each</td>
<td>$1,500.00</td>
<td>250</td>
<td>100.00%</td>
<td>$250,000</td>
<td>20</td>
<td>$26,250</td>
<td>$2,188</td>
</tr>
<tr>
<td>Bismarck Water Fee</td>
<td>mCF</td>
<td>$4.06</td>
<td>165,280</td>
<td>100.00%</td>
<td>$674,342</td>
<td>1</td>
<td>$674,342</td>
<td>$56,195</td>
</tr>
<tr>
<td>Water Main Pumps</td>
<td>Each</td>
<td>$15,000.00</td>
<td>3</td>
<td>80.00%</td>
<td>$36,000</td>
<td>10</td>
<td>$3,600</td>
<td>$300</td>
</tr>
</tbody>
</table>

**ASSET UNITS**

<table>
<thead>
<tr>
<th>UNIT COST</th>
<th>QTY</th>
<th>REPLACE %</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE (YRS)</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feet</td>
<td>76,495</td>
<td>75.00%</td>
<td>$573,713</td>
<td>50</td>
<td>$11,474</td>
<td>$955</td>
</tr>
<tr>
<td>Each</td>
<td>2</td>
<td>50.00%</td>
<td>$700,000</td>
<td>50</td>
<td>$14,000</td>
<td>$1,167</td>
</tr>
<tr>
<td>Each</td>
<td>250</td>
<td>100.00%</td>
<td>$250,000</td>
<td>20</td>
<td>$26,250</td>
<td>$2,188</td>
</tr>
<tr>
<td>mCF</td>
<td>165,280</td>
<td>100.00%</td>
<td>$674,342</td>
<td>1</td>
<td>$674,342</td>
<td>$56,195</td>
</tr>
<tr>
<td>Each</td>
<td>3</td>
<td>80.00%</td>
<td>$36,000</td>
<td>10</td>
<td>$3,600</td>
<td>$300</td>
</tr>
</tbody>
</table>

**SUBTOTAL Existing CIP Costs**

| Water Main       | Feet  | $10.00    | 76,495 | 75.00%    | $573,713         | 50                 | $11,474        | $955                        |
| Water Tank       | Each  | $700.00   | 2    | 50.00%    | $700,000         | 50                 | $14,000        | $1,167                      |
| Water Appurtenances | Each  | $1,500.00 | 250  | 100.00%   | $250,000         | 20                 | $26,250        | $2,188                      |
| Bismarck Water Fee | mCF  | $4.06    | 165,280 | 100.00% | $674,342         | 1                  | $674,342       | $56,195                     |
| Water Main Pumps | Each  | $15,000.00 | 3    | 80.00%    | $36,000          | 10                 | $3,600         | $300                        |

**New Project CIP Costs**

| Water Tank | L SUM | $4,643,534.00 | 1 | 75.00% | $2,482,851 | 50 | $50,853 | $5,804 | $3.41 |

**SUBTOTAL New CIP Costs**

| Water Tank | L SUM | $4,643,534.00 | 1 | 75.00% | $2,482,851 | 50 | $50,853 | $5,804 | $3.41 |

**TOTAL Existing and New Project CIP**

| Water Main       | Feet  | $10.00    | 76,495 | 75.00%    | $573,713         | 50                 | $11,474        | $955                        |
| Water Tank       | Each  | $700.00   | 2    | 50.00%    | $700,000         | 50                 | $14,000        | $1,167                      |
| Water Appurtenances | Each  | $1,500.00 | 250  | 100.00%   | $250,000         | 20                 | $26,250        | $2,188                      |
| Bismarck Water Fee | mCF  | $4.06    | 165,280 | 100.00% | $674,342         | 1                  | $674,342       | $56,195                     |
| Water Main Pumps | Each  | $15,000.00 | 3    | 80.00%    | $36,000          | 10                 | $3,600         | $300                        |
| Water Tank       | Each  | $700.00   | 2    | 50.00%    | $700,000         | 50                 | $14,000        | $1,167                      |
| Water Appurtenances | Each  | $1,500.00 | 250  | 100.00%   | $250,000         | 20                 | $26,250        | $2,188                      |
| Bismarck Water Fee | mCF  | $4.06    | 165,280 | 100.00% | $674,342         | 1                  | $674,342       | $56,195                     |
| Water Main Pumps | Each  | $15,000.00 | 3    | 80.00%    | $36,000          | 10                 | $3,600         | $300                        |

**Notes:** The annual reserve includes the estimated budget with the new billing rate $6.96/1000 gal and a base rate of $21.50 per user per month.

**Report Prepared by:**  AJ Tuck (Moore Engineering)

**Date:** 8/22/22

**Instructions**

1. Fill in colored items
2. Enter Existing asset project CIP costs
3. Enter New asset project CIP costs
4. Enter current total reserves and annual reserve
20834 - Washburn Raw Water Intake Project

Application Details

- Funding Opportunity: 19214-2022 Infrastructure Request
- Funding Opportunity Due Date: Dec 31, 2022 3:00 PM
- Program Area: Funding for Infrastructure in ND - FIND
- Status: Under Review
- Stage: Final Application
- Initial Submit Date: Apr 19, 2022 10:37 PM
- Initially Submitted By: Abby Ritz
- Last Submit Date: Aug 29, 2022 3:47 PM
- Last Submitted By: Abby Ritz

Contact Information

- Active User*: Yes
- Type: External User
- Name: Salutation Abby Middle Name Ritz
- Title:
- Email*: abby.ritz@ae2s.com
- Address*: 1815 Schafer Street, Suite 301
- AE2S
- Bismarck North Dakota 58501
  City State/Province Postal Code/Zip
- Phone*: 701-221-0530 Ext.
  Phone
  Ext.
- Fax:
- Comments:

Organization Information

- Status*: Approved
- Name*: City of Washburn
- Organization Type*: Political Subdivision
- Tax Id:
- Organization Website:
- Address*: 907 Main Ave
Infrastructure Funding Request

Project, Program, or Study Name*: Washburn Raw Water Intake
Sponsor(s)*: City of Washburn
County*: McLean
City*: Washburn
Description of Request*: Updated (previously submitted)
If Study, What Type: 
If Project/Program, What Type: Municipal Water Supply
Jurisdictions/Stakeholders Involved*:
City of Washburn, McLean Sheridan Rural Water District
Specific Needs Addressed By the Project, Program or Study*:
Improve source water reliability and quality for the City of Washburn and McLean Sheridan Rural Water District.
Description of Problem or Need and How Project Addresses that Problem or Need.
Description of Problem*:
The City has experienced problems with the water intake for decades due to periodical low river flows and changing river conditions. Low flow events degrade and sometimes prevent access to source water and the City's ability to make clean water. Flooding and runoff events like those in...
2011 and 2018 caused sediment deposit around the existing intake and the main river channel to migrate further away. This project will increase the reliability and resiliency of the City's treatment capability.

For this project,

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Choose City, County or Water District?</strong></td>
<td>City</td>
</tr>
<tr>
<td><strong>What is the Current Estimated Population?</strong></td>
<td>1356</td>
</tr>
<tr>
<td><strong>What is the Benefited Population?</strong></td>
<td>1666</td>
</tr>
<tr>
<td><strong>Has Feasibility Study Been Completed?</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Has Engineering Design Been Completed?</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Have Assessment Districts Been Formed?</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Have Land or Easements Been Acquired?</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Has Sediment Analysis For Reconstruction Of An Existing Drain Been Completed?</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Extraterritorial Jurisdiction?</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Have You Applied For Any Federal Permits?</strong></td>
<td>Yes</td>
</tr>
</tbody>
</table>

If Yes or Ongoing, Please Explain (include type/number):

USACE NW 13 - Needed to install rip rap below the ordinary high water mark to prevent erosion of the river bank adjacent to the project site.
USACE NW 58 - Needed to install intake screen, protective structure, and support pilings in the river to collect raw water for the Washburn Water Treatment Plant.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Have You Been approved for any Federal Permits?</strong></td>
<td>Yes</td>
</tr>
</tbody>
</table>

If Yes or Ongoing, Please Explain (include type/number):

USACE NW 13 & NW 58

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Have You Applied for any State Permits?</strong></td>
<td>Yes</td>
</tr>
</tbody>
</table>

If Yes or Ongoing, Please Explain (include type/number):

ND Sovereign Lands

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Have You Been Approved for any State Permits?</strong></td>
<td>Yes</td>
</tr>
</tbody>
</table>

If Yes or Ongoing, Please Explain (include type/number):

ND Sovereign Lands

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Have You Applied for any Local Permits?</strong></td>
<td>No</td>
</tr>
</tbody>
</table>

If Yes or Ongoing, Please Explain (include type/number):

Briefly explain the level of review the Project/Program/Study has undergone.

**Level Review**: City has evaluated the need for the project and affordability since 2010. The project has been designed and reviewed pre-2011 flood, post-2011 flood, and in 2022.

**Do You Expect Any Obstacles To Implementation (i.e. problems with land acquisition, permits, funding, local opposition, environmental concerns, etc.)?**
### Obstacles:

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you received, or do you anticipate receiving federal funding?</td>
<td>No</td>
</tr>
</tbody>
</table>

### Federal Funding:

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Funding Contact</td>
<td>Todd Joersz</td>
</tr>
<tr>
<td>Federal Funding Contact Number</td>
<td>701-328-8261</td>
</tr>
<tr>
<td>Federal Funding Email</td>
<td><a href="mailto:tjoersz@nd.gov">tjoersz@nd.gov</a></td>
</tr>
</tbody>
</table>

### Implementation Timelines

<table>
<thead>
<tr>
<th>Question</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study</td>
<td>08/2017</td>
</tr>
<tr>
<td>Design</td>
<td>12/2022</td>
</tr>
<tr>
<td>Bid</td>
<td>03/2023</td>
</tr>
<tr>
<td>Construction Start</td>
<td>04/2023</td>
</tr>
<tr>
<td>Construction Completion</td>
<td>07/2024</td>
</tr>
</tbody>
</table>

### Explain Additional Timeline Issues:

No timeline issues anticipated. All matching funds secured.

### Certification

<table>
<thead>
<tr>
<th>Question</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitted by</td>
<td>Chelsey Brandt 08/29/2022</td>
</tr>
<tr>
<td>Address</td>
<td>901 Main Avenue 58577-0467</td>
</tr>
<tr>
<td>Telephone Number</td>
<td>701-462-8658</td>
</tr>
<tr>
<td>Sponsor Email</td>
<td><a href="mailto:washaud@westriv.com">washaud@westriv.com</a></td>
</tr>
<tr>
<td>Consulting Engineer</td>
<td>Eric Lothspeich</td>
</tr>
<tr>
<td>Engineer Telephone Number</td>
<td>701-221-0530</td>
</tr>
<tr>
<td>Engineer Email</td>
<td><a href="mailto:Eric.Lothspeich@AE2S.com">Eric.Lothspeich@AE2S.com</a></td>
</tr>
</tbody>
</table>

This section needs to be completed by the project sponsor.

I certify that, to the best of my knowledge, the provided information is true and accurate.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certify</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Documentation

#### Project Specific Map

(Including an inset map of location within state.)

CLICK HERE to see examples.

<table>
<thead>
<tr>
<th>Question</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Specific Map</td>
<td>Washburn Intake Project Vicinity Map1.pdf</td>
</tr>
</tbody>
</table>
**Are You Seeking Department of Water Resources Cost-Share?:**
Yes

CLICK HERE for SN 61801 Delineation of Costs.

**Delineation of Costs SFN 61801:**
3 sfn_61801_delineation_of_cost_v2.xlsx

**Type of Request:**
Construction

**Signed Plans and Specifications For Bidding:**
SERVICE TO BFEP - WASHBURN RWI 90.pdf

**Water Supply Projects?:**
Yes

CLICK HERE for Life Cycle Cost Analysis Instructions.

**Life Cycle Cost Analysis:**
4 life_cycle_cost_analysis_worksheet_9_EL.xlsx

CLICK HERE for SN 61938 Capital Improvement Plan.

**Capital Improvement Plan SFN 61938:**
5 sfn_61938_capital_improvement_plan_8.xlsx

**Rural Flood Control?:**
No

**Drain Reconstructions?:**
No

**Flood Recovery Property Acquisition?:**
No

**Community Flood Control, Rural Flood Control, Bank Stabilization, or Snag & Clear Project With Total Cost of $200,000 or More?:**

**Feasibility/Engineering Study for the Proposed Project or Other Applicable Documents:**
Yes

**Feasibility/Engineering Study Material or Other Applicable Document:**
Water Intake Letter3.pdf

**Engineering Total Cost of $35,000 or More?:**
Yes

**Engineering Selection Documentation:**

### Sources

**Funding Amount Requested - Include Amount Requested for All State Funding Sources**

<table>
<thead>
<tr>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Cost</th>
<th>Source</th>
<th>Type</th>
<th>Term</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.00</td>
<td>$2,331,050.00</td>
<td>$0.00</td>
<td>$2,331,050.00</td>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>$0.00</td>
<td>$2,331,050.00</td>
<td>$0.00</td>
<td>$2,331,050.00</td>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

**Other Funding Sources**

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Grant or Loan</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>FEMA</td>
<td>Grant</td>
<td>$0.00</td>
<td>$1,026,025.00</td>
<td>$0.00</td>
<td>$1,026,025.00</td>
</tr>
<tr>
<td>State</td>
<td>SWC (Approved)</td>
<td>Grant</td>
<td>$745,179.00</td>
<td>$1,589,071.00</td>
<td>$0.00</td>
<td>$2,334,250.00</td>
</tr>
<tr>
<td>Local</td>
<td>Cash Reserves or Bonding</td>
<td>N/A</td>
<td>$248,393.00</td>
<td>$355,682.00</td>
<td>$0.00</td>
<td>$604,075.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$993,572.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$2,970,778.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$3,964,350.00</td>
</tr>
</tbody>
</table>

**Project Total**

**Current Requested Amount:**
$2,331,050.00

**Other Funding Sources:**
$3,964,350.00
July 1, 2022

North Dakota Department of Water Resources
Attn: Andrea Travnicek, Ph.D., Director
900 East Boulevard Avenue
Bismarck, ND 58505

RE: Washburn Raw Water Intake Funding – 75% Cost Share Request

Dear Members,

As most or all of you know, the City of Washburn, ND (City) is in dire need of a new Water Intake Source. The City has been dealing with water intake issues for decades. (Low dam releases, ice clogging the intake pipe, sand overtaking the water inlet, usage of portable pumps). As a regional water supplier, the City is requesting a 75% cost share request for the City’s currently planned and designed intake.

Without a long history lesson, the City has been pursuing a new intake since 2014. We were excited when the Blue Flint Ethanol water supply project would have provided an intake and WTP expansion. As you know, this project was cancelled.

Recently the City has been approached by Garrison Diversion to possibly connect to the RRVWSP intake south of Washburn. The option to connect the City to the RRVWSP intake is estimated to cost between $5,900,000 and $6,400,000 depending on pipeline routing, while a City owned stand-alone intake across the river from Washburn is roughly $6,300,000.

It is important to note that the stand-alone intake project is bid ready, while the Garrison Diversion option is in the pre-engineering stage.

As things appear right now, the RRVWSP intake will qualify for 75% SWC grant leaving approximately $1,600,000 for the local match, which Garrison Diversion is asking the City to fund. This option would involve a 7-to-10-mile pipeline to bring water to the existing treatment plant with an uncertain timeline for the completion of the RRVWSP intake. Additionally, the FEMA grant funding that is currently approved for a City owned intake is not guaranteed for this option.

On the stand-alone intake, you require our FEMA grant of $1,020,000 to come off the entire cost of the project before providing state cost-share, leaving $5,280,000 that qualifies for a 65% SWC grant of $3,432,000. This leaves $1,848,000 for the local match.
A significant amount of money has already been spent on the intake project. The City has already used $485,607.84 of their SWC grant and spent $248,392.89 in local funding on the stand-alone intake option. This only leaves $1,848,642.16 left in the current allocated SWC grant.

If the 75% grant is increased for the stand-alone intake and the FEMA grant was allowed to be used totally towards the local share, this would decrease Washburn’s funding share to $555,000.

SWC Pre-Commission Meeting on May 12, 2022; REGIONAL WATER SUPPLY:

“Pat also clarified that “up to” 65 and 75 percent is written to allow for some flexibility to the Commission to award cost-share amounts on a case-by-case basis. Commissioner Johnson stated that municipalities that provide water supply and infrastructure to rural systems should qualify for the same amount of cost-share rural systems receive.”

The City has 1,300 residents as well as supplying water to McLean Sheridan Rural Water. We are also anticipating growth in the city and rural now that Rainbow Energy has purchased the Coal Creek Station with their projected infrastructure additions.

Funding has always been a major issue with moving this project forward. Due to inflation and a large service debt, the only way for the City to continue with this needed project is your continued assistance and additional funding.

As water is the lifeblood of a community and all existence, the City of Washburn requests a 75% grant and allowing our FEMA grant to be used as local share dollars, regardless of which option is selected. The final decision has not been made on which option we will pursue.

I respectfully submit this request for your review and consideration. We are hopeful you will decide favorably on our request and hope to meet with you in the near future to discuss.

Sincerely,

Larry Thomas
President, Washburn City Commission
Cell Phone: 701-315-0011
### CITY OF WASHBURN, NORTH DAKOTA
New Conventional Intake
Engineers Opinion of Probable Costs
July 2022

<table>
<thead>
<tr>
<th>ITEM DESCRIPTION</th>
<th>QTY</th>
<th>UNIT</th>
<th>COST</th>
<th>INSTALLED COST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. General Conditions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Mobilization, Bonds, Insurance, Etc.</td>
<td>1</td>
<td>LS</td>
<td>$523,500.00</td>
<td>$523,500</td>
</tr>
<tr>
<td><strong>B. Site Work</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Demo, Clearing, and Grubbing</td>
<td>1</td>
<td>LS</td>
<td>$50,000.00</td>
<td>$50,000</td>
</tr>
<tr>
<td>2 Earthwork and Grading</td>
<td>1</td>
<td>LS</td>
<td>$75,000.00</td>
<td>$75,000</td>
</tr>
<tr>
<td>3 Site Access and Road</td>
<td>1</td>
<td>LS</td>
<td>$50,000.00</td>
<td>$50,000</td>
</tr>
<tr>
<td>4 Erosion and Sediment Control</td>
<td>1</td>
<td>LS</td>
<td>$50,000.00</td>
<td>$50,000</td>
</tr>
<tr>
<td>5 Rip Rap (River Bank Stabilization)</td>
<td>1</td>
<td>LS</td>
<td>$175,000.00</td>
<td>$175,000</td>
</tr>
<tr>
<td>6 Valve Vault, Piping, and Appurtenances</td>
<td>1</td>
<td>LS</td>
<td>$175,000.00</td>
<td>$0</td>
</tr>
<tr>
<td>7 Concrete and Asphalt</td>
<td>1</td>
<td>LS</td>
<td>$50,000.00</td>
<td>$50,000</td>
</tr>
<tr>
<td>8 Temporary and Permanent Fencing</td>
<td>1</td>
<td>LS</td>
<td>$50,000.00</td>
<td>$50,000</td>
</tr>
<tr>
<td>9 Restoration and Seeding</td>
<td>1</td>
<td>LS</td>
<td>$35,000.00</td>
<td>$35,000</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td>$535,000</td>
<td></td>
</tr>
<tr>
<td><strong>C. Transmission Piping</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 12&quot; DI</td>
<td>200</td>
<td>LF</td>
<td>$200.00</td>
<td>$40,000</td>
</tr>
<tr>
<td>2 12&quot; HDPE via HDD</td>
<td>1,450</td>
<td>LF</td>
<td>$500.00</td>
<td>$725,000</td>
</tr>
<tr>
<td>3 Misc. Valves and Fittings</td>
<td>1</td>
<td>LS</td>
<td>$20,000.00</td>
<td>$20,000</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td>$785,000</td>
<td></td>
</tr>
<tr>
<td><strong>D. River Intake</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Caisson Construction</td>
<td>40</td>
<td>LF</td>
<td>$18,000.00</td>
<td>$720,000</td>
</tr>
<tr>
<td>2 Dewatering</td>
<td>1</td>
<td>LS</td>
<td>$80,000.00</td>
<td>$80,000</td>
</tr>
<tr>
<td>3 Caisson Misc. Fittings</td>
<td>1</td>
<td>LS</td>
<td>$20,000.00</td>
<td>$20,000</td>
</tr>
<tr>
<td>4 Barge Rental, Diver Work, Cofferdam Construction</td>
<td>1</td>
<td>LS</td>
<td>$500,000.00</td>
<td>$500,000</td>
</tr>
<tr>
<td>5 Intake Support Structure and Piling</td>
<td>1</td>
<td>LS</td>
<td>$150,000.00</td>
<td>$150,000</td>
</tr>
<tr>
<td>6 Intake Screen</td>
<td>1</td>
<td>EA</td>
<td>$50,000.00</td>
<td>$50,000</td>
</tr>
<tr>
<td>7 Intake Protective Structure</td>
<td>1</td>
<td>EA</td>
<td>$50,000.00</td>
<td>$50,000</td>
</tr>
<tr>
<td>8 Inlet Pipe</td>
<td>250</td>
<td>LF</td>
<td>$550.00</td>
<td>$137,500</td>
</tr>
<tr>
<td>9 Air Backwash Piping</td>
<td>250</td>
<td>LF</td>
<td>$200.00</td>
<td>$50,000</td>
</tr>
<tr>
<td>10 Inlet Misc. Fittings</td>
<td>1</td>
<td>LS</td>
<td>$30,000.00</td>
<td>$30,000</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td>$1,787,500</td>
<td></td>
</tr>
<tr>
<td><strong>E. Pumphouse</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Pumphouse</td>
<td>1</td>
<td>LS</td>
<td>$275,000.00</td>
<td>$275,000</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td>$275,000</td>
<td></td>
</tr>
<tr>
<td><strong>F. Equipment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Raw Water Pumps</td>
<td>2</td>
<td>EA</td>
<td>$95,000.00</td>
<td>$190,000</td>
</tr>
<tr>
<td>2 Process Piping</td>
<td>1</td>
<td>LS</td>
<td>$70,000.00</td>
<td>$70,000</td>
</tr>
<tr>
<td>3 Process Equipment - Meters, Transducers, Floats</td>
<td>1</td>
<td>LS</td>
<td>$35,000.00</td>
<td>$35,000</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td>$295,000</td>
<td></td>
</tr>
<tr>
<td><strong>G. Mechanical</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 All HVAC and plumbing</td>
<td>1</td>
<td>LS</td>
<td>$35,000.00</td>
<td>$35,000</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td>$35,000</td>
<td></td>
</tr>
<tr>
<td><strong>H. Electrical and I&amp;C</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 All Electrical</td>
<td>1</td>
<td>LS</td>
<td>$140,000.00</td>
<td>$140,000</td>
</tr>
<tr>
<td>2 Instrumentation and SCADA</td>
<td>1</td>
<td>LS</td>
<td>$65,000.00</td>
<td>$65,000</td>
</tr>
<tr>
<td>3 Backup Generator</td>
<td>1</td>
<td>LS</td>
<td>$325,000.00</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td>$205,000</td>
<td></td>
</tr>
</tbody>
</table>

| **Subtotal Estimated Construction Cost**       |     |      | $4,441,000 |                |
| **Contingencies**                             |     |      | $445,000   |                |
| **Total Estimated Construction Costs**         |     |      | $4,886,000 |                |

- Property Acquisition / Easements
- Engineering, Legal, and Administration

**TOTAL ESTIMATED PROJECT COST**

- $6,296,300
### Cost Classification Table

<table>
<thead>
<tr>
<th>Item</th>
<th>%</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $</th>
<th>Total Cost</th>
<th>Cost-Share at Existing 65%</th>
<th>Original Estimate 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5.4%</td>
<td>Mobilization</td>
<td>1 LS</td>
<td>261,750.00 $</td>
<td>261,750</td>
<td>75%</td>
<td>$ 196,137</td>
<td>261,750</td>
<td>75%</td>
<td>196,137</td>
</tr>
<tr>
<td>2</td>
<td>5.4%</td>
<td>Bonding &amp; Insurance</td>
<td>1 LS</td>
<td>261,750.00 $</td>
<td>261,750</td>
<td>75%</td>
<td>$ 196,137</td>
<td>261,750</td>
<td>75%</td>
<td>196,137</td>
</tr>
<tr>
<td>3</td>
<td>0%</td>
<td>Site Work</td>
<td>1 LS</td>
<td>533,000.00 $</td>
<td>533,000</td>
<td>75%</td>
<td>$ 401,250</td>
<td>533,000</td>
<td>75%</td>
<td>401,250</td>
</tr>
<tr>
<td>4</td>
<td>20.3%</td>
<td>Laboratory Services</td>
<td>1 LS</td>
<td>992,000.00 $</td>
<td>992,000</td>
<td>75%</td>
<td>$ 744,000</td>
<td>992,000</td>
<td>75%</td>
<td>744,000</td>
</tr>
<tr>
<td>5</td>
<td>33.8%</td>
<td>Inspection</td>
<td>1 LS</td>
<td>1,050,000.00 $</td>
<td>1,050,000</td>
<td>75%</td>
<td>$ 802,500</td>
<td>1,050,000</td>
<td>75%</td>
<td>802,500</td>
</tr>
<tr>
<td>6</td>
<td>5.6%</td>
<td>Mechanical</td>
<td>1 LS</td>
<td>730,000.00 $</td>
<td>730,000</td>
<td>75%</td>
<td>$ 547,500</td>
<td>730,000</td>
<td>75%</td>
<td>547,500</td>
</tr>
<tr>
<td>7</td>
<td>4.2%</td>
<td>Electrical</td>
<td>1 LS</td>
<td>205,000.00 $</td>
<td>205,000</td>
<td>75%</td>
<td>$ 153,750</td>
<td>205,000</td>
<td>75%</td>
<td>153,750</td>
</tr>
<tr>
<td>8</td>
<td>11.0%</td>
<td>Piping Equipment</td>
<td>1 LS</td>
<td>190,000.00 $</td>
<td>190,000</td>
<td>75%</td>
<td>$ 142,500</td>
<td>190,000</td>
<td>75%</td>
<td>142,500</td>
</tr>
<tr>
<td>9</td>
<td>1.4%</td>
<td>Plumbing</td>
<td>1 LS</td>
<td>70,000.00 $</td>
<td>70,000</td>
<td>75%</td>
<td>$ 52,500</td>
<td>70,000</td>
<td>75%</td>
<td>52,500</td>
</tr>
</tbody>
</table>

### Construction Costs

<table>
<thead>
<tr>
<th>Construction Costs</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $</th>
<th>Total Cost</th>
<th>Cost-Share at Existing 65%</th>
<th>Original Estimate 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Sub-Total</td>
<td>$ 4,441,000</td>
<td>75%</td>
<td>$ 3,330,750</td>
<td>$ 4,441,000</td>
<td>75%</td>
<td>$ 2,886,500</td>
<td>$ 2,815,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingency</td>
<td>$ 444,100</td>
<td>75%</td>
<td>$ 333,075</td>
<td>$ 444,100</td>
<td>75%</td>
<td>$ 288,665</td>
<td>$ 200,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Total</td>
<td>$ 4,885,100</td>
<td>75%</td>
<td>$ 3,663,825</td>
<td>$ 4,885,100</td>
<td>75%</td>
<td>$ 3,175,150</td>
<td>$ 3,015,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Preconstruction Costs

<table>
<thead>
<tr>
<th>Preconstruction Costs</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $</th>
<th>Total Cost</th>
<th>Cost-Share at Existing 65%</th>
<th>Original Estimate 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Design</td>
<td>1 LS</td>
<td>53,500.00 $</td>
<td>53,500</td>
<td>75%</td>
<td>$ 40,125</td>
<td>53,500</td>
<td>34,775</td>
<td>$ 812,600</td>
<td></td>
</tr>
<tr>
<td>Total Preliminary Design</td>
<td>1 LS</td>
<td>438,000.00 $</td>
<td>438,000</td>
<td>75%</td>
<td>$ 327,000</td>
<td>438,000</td>
<td>283,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Engineering Costs</td>
<td>0.0%</td>
<td>$ 580,000</td>
<td>75%</td>
<td>$ 435,000</td>
<td>580,000</td>
<td>377,000</td>
<td>234,400</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Other Eligible Costs

<table>
<thead>
<tr>
<th>Other Eligible Costs</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $</th>
<th>Total Cost</th>
<th>Cost-Share at Existing 65%</th>
<th>Original Estimate 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property Adjustments</td>
<td>1 NA</td>
<td>75,000.00 $</td>
<td>75,000</td>
<td>0%</td>
<td>$ -</td>
<td>75,000</td>
<td>$ -</td>
<td>$ 50,000</td>
<td></td>
</tr>
<tr>
<td>Other Eligible Total</td>
<td>0.0%</td>
<td>$ -</td>
<td>75%</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td></td>
</tr>
</tbody>
</table>

### Ineligible Costs

<table>
<thead>
<tr>
<th>Ineligible Costs</th>
<th>Quantities</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $</th>
<th>Total Cost</th>
<th>Cost-Share at Existing 65%</th>
<th>Original Estimate 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>$ 6,295,400</td>
<td>75%</td>
<td>$ 4,665,300</td>
<td>$ 6,220,400</td>
<td>75%</td>
<td>$ 4,043,260</td>
<td>$ 4,066,000</td>
<td></td>
</tr>
</tbody>
</table>

### Washington Application Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost-share %</th>
<th>Project Type:</th>
<th>Rural Water - Expansion/Improvement</th>
<th>Municipal</th>
<th>65%</th>
</tr>
</thead>
</table>
Life Cycle Cost Analysis Review

Sponsor: Washburn Raw Water Intake

Date: September 9, 2022

**Explanation of Alternatives:**

Conventional Intake (Preferred) - Improvements include a new surface water intake and pumphouse on the west side of the river, and a transmission main to the Water Treatment Plant (WTP) on the east side of the river.

RRVWSP w/ Fed - Includes a new pumphouse, pipeline, and appurtenances to connect the Washburn WTP to the Red River Valley Water Supply Project (RRVWSP) intake. It assumes the Federal Emergency Management Agency (FEMA) grant Washburn has been approved to receive is eligible to be applied to this alternative. Column 4 provides this alternative without the FEMA assistance.

Angle Wells - Improvements are new angle wells (3), wet well, pumphouse on the west side of the river, and a transmission main to the WTP on the east side of the river. The City of Washburn eliminated this alternative.

**Inputs:**

<table>
<thead>
<tr>
<th></th>
<th>Users Served</th>
<th>Construction Cost</th>
<th>Annual O &amp; M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Intake</td>
<td>735</td>
<td>$6,295,400</td>
<td>$50,341</td>
</tr>
<tr>
<td>(Preferred)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RRVWSP w/ Fed (Unlikely)</td>
<td></td>
<td>$6,400,000</td>
<td>$30,700</td>
</tr>
<tr>
<td>Angle Wells</td>
<td></td>
<td>$7,485,000</td>
<td>0</td>
</tr>
<tr>
<td>RRVWSP w/o Fed</td>
<td></td>
<td>$6,400,000</td>
<td>$30,700</td>
</tr>
</tbody>
</table>

**Details:**

See alternatives outlined above.

**Model Function:**

The economic model appears to have functioned properly. The results are deemed to be reliable and repeatable with the inputs provided by the project sponsor.

**LCCA Model Results:**

<table>
<thead>
<tr>
<th></th>
<th>Present Value</th>
<th>Conventional Intake (Preferred)</th>
<th>RRVWSP w/ Fed (Unlikely)</th>
<th>Angle Wells</th>
<th>RRVWSP w/o Fed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Costs</td>
<td>$6,226,000</td>
<td>$6,330,000</td>
<td>$7,403,000</td>
<td>$6,330,000</td>
<td></td>
</tr>
<tr>
<td>O&amp;M</td>
<td>$1,436,000</td>
<td>$876,000</td>
<td>$0</td>
<td>$876,000</td>
<td></td>
</tr>
<tr>
<td>Repair, Rehab, Replacement</td>
<td>$1,801,000</td>
<td>$703,000</td>
<td>$4,961,000</td>
<td>$703,000</td>
<td></td>
</tr>
<tr>
<td>Salvage Value</td>
<td>$275,000</td>
<td>$121,000</td>
<td>$475,000</td>
<td>$121,000</td>
<td></td>
</tr>
<tr>
<td>Total PVC</td>
<td>$9,188,000</td>
<td>$7,788,000</td>
<td>$11,889,000</td>
<td>$7,788,000</td>
<td></td>
</tr>
<tr>
<td>PV Cost Per User</td>
<td>$12,501</td>
<td>$10,596</td>
<td>$16,176</td>
<td>$10,596</td>
<td></td>
</tr>
</tbody>
</table>

**Current Water Rate (Cost Per 5000g)** $52

**Comparable Water Rate** $47

<table>
<thead>
<tr>
<th></th>
<th>Year</th>
<th>Annual Population Growth Rate</th>
<th>Average Annual Population Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>ND Dept. of Commerce</td>
<td>2010</td>
<td>1,246</td>
<td>0.0%</td>
</tr>
<tr>
<td>Population &amp; Trends</td>
<td>2020</td>
<td>1,247</td>
<td>0</td>
</tr>
</tbody>
</table>

Explanation of Results:

The least cost alternative for the city is connecting to the RRVWSP. This alternative also meets the goal of the SWC to capitalize on economies of scale and reduction in infrastructure facilities. This alternative is the least cost alternative whether FEMA contributes or not to the local share and would result in a cost savings of ~$237,500 for Washburn.

LCCA Version 1.2022.04.04
### ASSET UNITS

<table>
<thead>
<tr>
<th>ASSET</th>
<th>UNITS</th>
<th>UNIT COST</th>
<th>QTY</th>
<th>REPLACEMENT %</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE (YRS)</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Project CIP Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buildings and Infrastructure</td>
<td>Lump Sum</td>
<td>$10,991,351.00</td>
<td>1</td>
<td>50.00%</td>
<td>$5,495,676</td>
<td>50</td>
<td>$109,914</td>
<td>$9,199 $15.79</td>
</tr>
<tr>
<td>Machinery and Equipment</td>
<td>Lump Sum</td>
<td>$66,674.00</td>
<td>1</td>
<td>50.00%</td>
<td>$33,337</td>
<td>30</td>
<td>$1,111</td>
<td>$93 $0.16</td>
</tr>
<tr>
<td><strong>SUBTOTAL Existing CIP Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$5,529,013 $9,252 $15.95</td>
</tr>
<tr>
<td><strong>New Project CIP Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raw Water Intake</td>
<td>LS</td>
<td>$6,295,400.00</td>
<td>1</td>
<td>50.00%</td>
<td>$3,147,700</td>
<td>50</td>
<td>$62,954</td>
<td>$5,246 $9.05</td>
</tr>
<tr>
<td><strong>SUBTOTAL New CIP Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$3,147,700 $5,246 $9.05</td>
</tr>
<tr>
<td><strong>TOTAL Existing and New Project CIP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$8,676,713 $173,894 $25.09</td>
</tr>
</tbody>
</table>

**Notes:**

- **CAPITAL IMPROVEMENT PLAN (CIP)**
- **NORTH DAKOTA DEPARTMENT OF WATER RESOURCES**
- **PLANNING AND EDUCATION DIVISION**

**Instructions:**

1. Fill in colored items
2. Enter Existing asset project CIP costs
3. Enter New asset project CIP costs
4. Enter current total reserves and annual reserve

Report Prepared by (Title): Abby Ritz (AE2S)

Date: 8/29/22
20469 - Service to Galesburg

Application Details

Funding Opportunity: 19214-2022 Infrastructure Request
Funding Opportunity Due Date: Dec 31, 2022 3:00 PM
Program Area: Funding for Infrastructure in ND - FIND
Status: Under Review
Stage: Final Application

Initial Submit Date: Aug 29, 2022 3:47 PM
Initially Submitted By: Abby Ritz
Last Submit Date: Last Submitted By: 

Contact Information

Primary Contact Information

Active User*: Yes
Type: External User
Name: Salutation Abby Middle Name Ritz
First Name Last Name
Title:

Email*: abby.ritz@ae2s.com
Address*: 1815 Schafer Street, Suite 301

AE2S
Bismarck North Dakota 58501
City State/Province Postal Code/Zip

Phone*: 701-221-0530 Ext.
Phone 
Fax: 

Comments:

Organization Information

Status*: Approved
Name*: East Central Regional Water District
Organization Type*: Political Subdivision
Tax Id:
Organization Website:
Address*: 1401 7th Ave NE
Infrastructure Funding Request

Project, Program, or Study Name*: Service to Galesburg Project

Sponsor(s)*: East Central Regional Water District

County*: Trail

City*: Hatton

Description of Request*: New

If Study, What Type:

If Project/Program, What Type: Rural Water Supply

Jurisdictions/Stakeholders Involved*:
ECRWD, City of Galesburg

Specific Needs Addressed By the Project, Program or Study*:

Galesburg’s existing water distribution system is in significant need of replacement. The current system was constructed in the 1960s and is now well beyond its service life, increasing the occurrence of expensive and time-consuming leaks. Galesburg is also becoming more concerned with the ability to staff licensed operators for their water system. Operation and maintenance of such a small system does not require a full time operator which makes it difficult and costly to find staff.

Description of Problem or Need and How Project Addresses that Problem or Need.
Description of Problem:
This project will address the above problems by replacing all distribution waterlines with new waterlines of similar size. The project also includes improvements to and simplification of water facility infrastructure within Galesburg. This project will also transition Galesburg water customers to individual customers of ECRWD, eliminating operation and maintenance costs for the City.

For this project,

Choose City, County or Water District: Water District

What is the Current Estimated Population?: 16540

For this project,

What is the Benefited Population?: 118

Has Feasibility Study Been Completed?: Yes

Has Engineering Design Been Completed?: No

Have Assessment Districts Been Formed?: N/A

Have Land or Easements Been Acquired?: N/A

Has Sediment Analysis For Reconstruction Of An Existing Drain Been Completed?: N/A

Extraterritorial Jurisdiction?: No

Have You Applied For Any Federal Permits?: N/A

If Yes or Ongoing, Please Explain (include type/number):

Have You Applied for any State Permits?: N/A

If Yes or Ongoing, Please Explain (include type/number):

Have You Applied for any Local Permits?: N/A

If Yes or Ongoing, Please Explain (include type/number):

Briefly explain the level of review the Project/Program/Study has undergone.

Level Review:
The project is listed on the 2022 Drinking Water Intended Use Plan and a feasibility study has been completed and submitted to NDDEQ for approval.

Do You Expect Any Obstacles To Implementation (i.e. problems with land acquisition, permits, funding, local opposition, environmental concerns, etc.)? Yes

Obstacles:

If Yes, Please Explain:
Outside funding is essential for making this project affordability to the impacted users. This request is for preconstruction cost-share so the full construction-phase cost-share is unsecured and uncertain until project design is complete.

Have you received, or do you anticipate receiving federal funding?

Federal Funding: No

Implementation Timelines

Study: 05/2022
Month/Year (00/0000)

Design: 10/2022
Month/Year (00/0000)
Bid*: 03/2023
Month/Year (00/0000)

Construction Start*: 05/2023
Month/Year (00/0000)

Construction Completion*: 11/2023
Month/Year (00/0000)

Explain Additional Timeline Issues*: The project engineer hopes to complete design in Fall 2022 to avoid the new BABA requirements. The project design timeline may be extended if BABA must be incorporated.

Certification
Submitted by*: Neil Breidenbach 08/12/2022
First Name Last Name Date

Address*: 1401 7th Ave NE
Address Line 1
Address Line 2
Thompson North Dakota 58201—____
City State Zip Code

Telephone Number*: 701-599-2963

Sponsor Email*: Neilbre@yahoo.com

Consulting Engineer*: Geoffrey Slick

Engineer Telephone Number*: 701-746-8087

Engineer Email*: geoffrey.slick@au2s.com

This section needs to be completed by the project sponsor.
I certify that, to the best of my knowledge, the provided information is true and accurate.

Certify*: Yes

Authorized Individual*: Neil Breidenbach 08/12/2022
First Name Last Name Date

Documentation

Project Specific Map
(Include an inset map of location within state.)
CLICK HERE to see examples.

Project Specific Map*: Project Location Map.pdf

Are You Seeking Department of Water Resources Cost-Share?*: Yes

CLICK HERE for SFN 61801 Delineation of Costs.

Delineation of Costs SFN 61801*: sfn_61801_delineation_of_cost 10.xlsx

Type of Request: Preconstruction

Water Supply Projects?: Yes

CLICK HERE for Life Cycle Cost Analysis Instructions.

Life Cycle Cost Analysis: life_cycle_cost_analysis_worksheet 10.xlsx

CLICK HERE for SFN 61938 Capital Improvement Plan.

Capital Improvement Plan SFN 61938*: sfn_61938_capital_improvement_plan 9.xlsx

Rural Flood Control?: No

Drain Reconstructions?: No
Flood Recovery Property Acquisition?: No
Community Flood Control, Rural Flood Control, Bank Stabilization, or Snag & Clear Project With Total Cost of $200,000 or More?: No
Feasibility/Engineering Study for the Proposed Project or Other Applicable Documents: Yes
Feasibility/Engineering Study Material or Other Applicable Document: 02 Feasibility Report Galesburg-SRFv2.pdf
Engineering Total Cost of $35,000 or More?: Yes
Engineering Selection Documentation:

Sources

**Funding Amount Requested - Include Amount Requested for All State Funding Sources**

<table>
<thead>
<tr>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Cost Source</th>
<th>Type</th>
<th>Term</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>$119,800.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$119,800.00 Department of Water Resources</td>
<td>Grant</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>$119,800.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$119,800.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Other Funding Sources**

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Grant or Loan</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>SWC (Construction)</td>
<td>Grant</td>
<td>$1,214,000.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$1,214,000.00</td>
</tr>
<tr>
<td>State</td>
<td>DWSRF</td>
<td>Loan</td>
<td>$42,250.00</td>
<td>$402,390.00</td>
<td>$0.00</td>
<td>$444,640.00</td>
</tr>
</tbody>
</table>

$1,256,250.00  $402,390.00  $0.00  $1,658,640.00

**Project Total**

Current Requested Amount: $119,800.00  $120,000
Other Funding Sources: $1,658,640.00
Total Project: $1,778,440.00
Information depicted may include data unverified by AE25. Any reliance upon such data is at the user's own risk. AE25 does not warrant this map or its features are either spatially or temporally accurate.

Coordinate System: NAD 1983 2011 Contiguous USA Albers

Edited by: cclauson
W:\G\Galesburg\00218-2020-001\GIS\City of Galesburg Infrastructure Improvements - Mapping and Analysis.aprx

Date: 4/28/2022

DWR Date Received: 8/29/22
### DELINEATION OF COSTS

**NORTH DAKOTA DEPARTMENT OF WATER RESOURCES**

**PLANNING AND EDUCATION**

**SPN (DWR/ME) 1155**

#### Project:
Saltesburg Infrastructure Improvements Project

#### Sponsor:
East Central Regional Water District

#### Contact:
Neil Breidenbach, Manager

#### Phone:
701-599-2963

#### Engineer:
Chris Clauson, AE2S

#### Phone:
701-746-8087

---

#### Financial Commitment:
- **State Water Commission:** 
  - **Total Cost:** $1,778,666
  - **Cost-Share %:** 100%

---

**Item** | **Description** | **Quantities** | **Unit Price** | **Total** | **Cost-Share %** | **Cost-Share $** |
---|---|---|---|---|---|---|
1 | Mobilization | 1 | LB | $100,000.00 | $100,000 | 75% | $75,000 |
2 | Water Main 6 in | 400 | LF | $25.00 | $10,000 | 75% | $7,500 |
3 | Water Main 8 in | 3000 | LF | $30.00 | $90,000 | 75% | $67,500 |
4 | Boring - Cased | 1 | LB | $50,000.00 | $50,000 | 75% | $37,500 |
5 | Fitting | 7 | EA | $1,200.00 | $8,400 | 75% | $6,300 |
6 | Gate Valve | 1 | EA | $3,000.00 | $3,000 | 75% | $2,250 |
7 | Hydrant | 16 | EA | $12,500.00 | $192,000 | 75% | $144,000 |
8 | Water Service Line | 57 | EA | $7,000.00 | $399,000 | 75% | $299,250 |
9 | Building | 1 | LB | $200,000.00 | $200,000 | 75% | $150,000 |
10 | Seeding | 10 | AC | $600.00 | $6,000 | 75% | $4,500 |
11 | Gravel | 650 | TON | $20.00 | $13,000 | 75% | $9,750 |
12 | Other Ineligible | 0 | - | - | - | - | - |
13 | Other Eligible | 0 | - | - | - | - | - |
14 | Total Construction Costs | | | | $1,778,666 | 75% | $1,334,000 |

#### Preconstruction Costs:
- **Final Design** | 1 | NA | $146,000.00 | $146,000 | 75% | $109,500 |
- **Archaeological Study** | 1 | NA | $3,750.00 | $3,750 | 75% | $2,812 |
- **Construction Engineering Total** | | | | $1,449,690 | 75% | $1,087,666 |

#### Construction Engineering Costs:
- **Project Inspection** | 1 | NA | $168,976.00 | $168,976 | 75% | $126,732 |
- **Construction Engineering Total** | | | | $168,976 | 75% | $126,732 |

#### Other Eligible Costs:
- **Other Eligible Total** | | | | $1,778,666 | 75% | $1,334,000 |

#### Federal or State Funds That Supplant Costs:
- **Eligible Cost Total** | | | | $1,778,666 | 75% | $1,334,000 |

---

*The Cost-share estimate is purely for planning and informational purposes only and does not, in any way, guarantee a financial commitment to any degree, from the State Water Commission.*
**Life Cycle Cost Analysis Review**

**Sponsor:** East Central Regional Water District  
**Project Title:** Galesburg Infrastructure Improvements  
**Date:** September 7, 2022

### Explanation of Alternatives:

**Trenchless System Replacement (Preferred) -** This involves replacement of the pipeline network by trenchless construction methods, along with improvements to the existing facilities. This alternative would use horizontal-directional drilling (HDD) and pipe bursting to replace the existing pipe networks with similarly sized pipes made of newer high-density polyethylene (HDPE).

**Open Cut System Replacement -** This alternative considers replacement of the pipeline network by open cut construction methods, along with improvements to the existing facilities. This alternative would involve excavating and replacing the existing pipe network with similarly sized pipes made of newer high-density polyethylene (HDPE) or polyvinyl chloride (PVC) pipes through open-cut methods.

### Inputs:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Connections Served</td>
<td>0</td>
</tr>
<tr>
<td>Future Connections Served</td>
<td>0</td>
</tr>
<tr>
<td>Current Connections Served</td>
<td>57</td>
</tr>
<tr>
<td>Net Connections (New + Current)</td>
<td>57</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Construction Cost</th>
<th>Annual O &amp; M</th>
<th>Repair, Rehab, Replacement</th>
<th>Salvage Value</th>
<th>Total PVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trenchless System (Preferred)</td>
<td>$2,049,000</td>
<td>$92,793</td>
<td>$458,000</td>
<td>$135,000</td>
<td>$5,113,000</td>
</tr>
<tr>
<td>Open Cut System Replacement</td>
<td>$1,848,000</td>
<td>$85,308</td>
<td>$458,000</td>
<td>$135,000</td>
<td>$4,688,000</td>
</tr>
</tbody>
</table>

### Details:

In this assimilation of Galesburg to a direct East Central customer system the reservoir booster will be taken over and repurposed for broader use within the East Central service area. The open cut scenario does not include the additional cost that would be incurred with road cuts to replace the lines.

### LCCA Model Results:

#### Scenario Analysis - Present Value Life Cycle Cost Summary

<table>
<thead>
<tr>
<th>Present Value</th>
<th>Trenchless System Replacement</th>
<th>Open Cut System Replacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Costs</td>
<td>$2,049,000</td>
<td>$1,848,000</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>$2,741,000</td>
<td>$2,517,000</td>
</tr>
<tr>
<td>Repair, Rehab, Replacement</td>
<td>$458,000</td>
<td>$458,000</td>
</tr>
<tr>
<td>Salvage Value</td>
<td>$135,000</td>
<td>$135,000</td>
</tr>
<tr>
<td>Total PVC</td>
<td>$5,113,000</td>
<td>$4,688,000</td>
</tr>
</tbody>
</table>

#### PV Cost Per User

- **Trenchless System Replacement (Preferred):** $89,702
- **Open Cut System Replacement:** $82,246

#### Current Water Rate (Cost Per 5000g)

- **Trenchless System Replacement (Preferred):** $45
- **Open Cut System Replacement:** $75

#### Comparable Water Rate

- **Net Connections (New + Current):** 57
- **Trenchless System Replacement (Preferred):** 75%
- **Open Cut System Replacement:** 75%

#### Cost-Share Percent

- **Local Share:** $512,250
- **Other Funding:** $0
- **Total Local:** $512,250

#### Payment Per User With Cost-Share

- **Local Share:** $2,049,000
- **Other Funding:** $0
- **Total Local:** $2,049,000

#### Payment Per User Without Cost-Share

- **Local Share:** $1,848,000
- **Other Funding:** $0
- **Total Local:** $1,848,000

### Explanation of Results:

The sponsor's preferred project is the “Trenchless System Replacement” option. The present value cost of the preferred alternative is $5,113,000 and $4,688,000 for the “Open Cut System Replacement” alternative for comparison. The present value cost per user for the preferred alternative is $89,702. The monthly user cost of the local share with DWR 75% cost-share participation is $45.46 per month and $181.85 without DWR participation. The preferred alternative would likely be the least cost alternative if road repair costs are added into the open cut process.

### ND Dept. of Commerce

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Population Growth</th>
<th>Average Annual Population Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>108</td>
<td>-0.6%</td>
</tr>
<tr>
<td>2020</td>
<td>101</td>
<td>-1</td>
</tr>
</tbody>
</table>

The economic model appears to have functioned properly. The results are deemed to be reliable and repeatable with the inputs provided by the project sponsor.

**LCCA Version:** Version 1.2022.07.08
### Capital Improvement Plan (CIP)

**System:** East Central Regional Water District  
**Date:** 07/28/22

<table>
<thead>
<tr>
<th>ASSET</th>
<th>UNITS</th>
<th>UNIT COST</th>
<th>QTY</th>
<th>RESERVE REPLACEMENT %</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE (YRS)</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Distribution System</td>
<td>Feet</td>
<td>$177.50</td>
<td>10,400</td>
<td>25.02%</td>
<td>$461,500</td>
<td>50</td>
<td>$9,230</td>
<td>$769</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$769</td>
</tr>
<tr>
<td><strong>SUBTOTAL Existing CIP Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$769</td>
</tr>
<tr>
<td><strong>TOTAL Existing and New Project CIP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$769</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>TOTAL RESERVES</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE</th>
<th>PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>$500,000</td>
<td>$24,000</td>
<td>$2,000.00</td>
<td>$0.30</td>
</tr>
<tr>
<td>Adjustment</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

**Report Prepared by (Title):** Abby Ritz (AE2S)  
**Date:** 8/9/22

**Notes:**

**Instructions:**
1. Fill in colored items
2. Enter Existing asset project CIP costs
3. Enter New asset project CIP costs
4. Enter current total reserves and annual reserve

**CAPITAL IMPROVEMENT PLAN (CIP)**  
**NORTH DAKOTA DEPARTMENT OF WATER RESOURCES**  
**PLANNING AND EDUCATION DIVISION**  
**SPN 41088 (7/2021)**
19435 - Hawktree Tank

Application Details

Funding Opportunity: 19214-2022 Infrastructure Request
Funding Opportunity Due Date: Dec 31, 2022 3:00 PM
Program Area: Funding for Infrastructure in ND - FIND
Status: Under Review
Stage: Final Application
Initial Submit Date: Dec 29, 2021 9:25 AM
Initially Submitted By: Philip Markwed
Last Submit Date: 
Last Submitted By: 

Contact Information

Primary Contact Information

Active User*: Yes
Type: External User
Name: Salutation Philip Middle Name Markwed
First Name Last Name
Title: 
Email*: pmarkwed@southcentralwaternd.com
Address*: 10700 Highway 1804 N

Phone*: 701-258-6710 Ext.
Fax: 
Comments:

Organization Information

Status*: Approved
Name*: South Central Regional Water District
Organization Type*: Political Subdivision
Tax Id: 
Organization Website: 
Address*: 10700 Highway 1804 N
Infrastructure Funding Request

**Project, Program, or Study Name**: Hawktree Tank

**Sponsor(s)**: South Central Regional Water District

**County**: Burleigh

**City**: Bismarck

**Description of Request**: New

**If Study, What Type**:  
**If Project/Program, What Type**: Rural Water Supply

**Jurisdictions/Stakeholders Involved**: Burleigh County

**Specific Needs Addressed By the Project, Program or Study**:  
Project will address water storage and pressure issues caused by recent growth in the north Bismarck service area.

**Description of Problem or Need and How Project Addresses that Problem or Need**:  
The area north of Bismarck, ND which is served by South Central Regional Water District (SCWD) has experienced significant growth over recent years. This growth has increased demand, resulting in issues with water storage and pressures in the system. The addition of a new finished water
storage tank would provide water reserves in the event of a power failure or other emergency and would reduce pressure fluctuations in the distribution system.

For this project,

<table>
<thead>
<tr>
<th><strong>Choose City, County or Water District</strong></th>
<th>Water District</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What is the Current Estimated Population?</strong></td>
<td>10400</td>
</tr>
</tbody>
</table>

For this project,

<table>
<thead>
<tr>
<th><strong>What is the Benefited Population?</strong></th>
<th>2500</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Has Feasibility Study Been Completed?</strong></td>
<td>Ongoing</td>
</tr>
<tr>
<td><strong>Has Engineering Design Been Completed?</strong></td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Have Assessment Districts Been Formed?</strong></th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Have Land or Easements Been Acquired?</strong></td>
<td>Ongoing</td>
</tr>
<tr>
<td><strong>Has Sediment Analysis For Reconstruction Of An Existing Drain Been Completed?</strong></td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Extraterritorial Jurisdiction?</strong></th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Have You Applied For Any Federal Permits?</strong></td>
<td>No</td>
</tr>
</tbody>
</table>

If Yes or Ongoing, Please Explain (include type/number):

<table>
<thead>
<tr>
<th><strong>Have You Applied for any State Permits?</strong></th>
<th>No</th>
</tr>
</thead>
</table>

If Yes or Ongoing, Please Explain (include type/number):

<table>
<thead>
<tr>
<th><strong>Have You Applied for any Local Permits?</strong></th>
<th>No</th>
</tr>
</thead>
</table>

If Yes or Ongoing, Please Explain (include type/number):

Briefly explain the level of review the Project/Program/Study has undergone.

**Level Review**: Preliminary engineering has been completed to determine tank type, size and height. An area has been identified for the potential project site and coordination with the land owner is ongoing.

**Do You Expect Any Obstacles To Implementation (i.e. problems with land acquisition, permits, funding, local opposition, environmental concerns, etc.)?**

<table>
<thead>
<tr>
<th><strong>Obstacles</strong></th>
<th>No</th>
</tr>
</thead>
</table>

**Have you received, or do you anticipate receiving federal funding?**

<table>
<thead>
<tr>
<th><strong>Federal Funding</strong></th>
<th>No</th>
</tr>
</thead>
</table>

**Implementation Timelines**

<table>
<thead>
<tr>
<th><strong>Study</strong></th>
<th>04/2022</th>
<th><strong>Fall 2022</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Month/Year (00/0000)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Design</strong></th>
<th>07/2022</th>
<th><strong>Spring 2023</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Month/Year (00/0000)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Bid</strong></th>
<th>10/2022</th>
<th><strong>Summer 2023</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Month/Year (00/0000)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Construction Start</strong></th>
<th>04/2023</th>
<th><strong>Spring 2024</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Month/Year (00/0000)</td>
<td></td>
</tr>
</tbody>
</table>
**Construction Completion**: 09/2023   Fall 2024  
Month/Year (00/0000)

**Explain Additional Timeline Issues**:  
No timeline issues anticipated.

**Certification**

**Submitted by**: Philip Markwed 12/29/2021  
First Name Last Name Date

**Address**:  
10700 Highway 1804 N  
Address Line 1

Address Line 2  
Bismarck North Dakota 58502-4182  
City State Zip Code

**Telephone Number**: 701-258-8710

**Sponsor Email**: pmarkwed@southcentralwaternd.com

**Consulting Engineer**: Bartlett & West

**Engineer Telephone Number**: 701-221-8345

**Engineer Email**: tyson.decker@barwest.com

This section needs to be completed by the project sponsor.  
I certify that, to the best of my knowledge, the provided information is true and accurate.

**Certify**: Yes

**Authorized Individual**: Philip Markwed 12/29/2021  
First Name Last Name Date

**Documentation**

**Project Specific Map**  
( Including an inset map of location within state. )  
CLICK HERE to see examples.

**Project Specific Map**  
Project Specific Map - Hawktree Tank.pdf

**Are You Seeking Department of Water Resources Cost-Share**?: Yes

**CLICK HERE for SFN 61801 Delineation of Costs.**

**Delineation of Costs SFN 61801**:  
sfn_01801_delineation_of_cost.xlsx

**Type of Request**: Preconstruction

**Water Supply Projects**?: Yes

**CLICK HERE for Life Cycle Cost Analysis Instructions.**

**Life Cycle Cost Analysis**: SCWD Hawktree Tank life_cycle_cost_analysis_worksheet.xlsx

**CLICK HERE for SFN 61938 Capital Improvement Plan.**

**Capital Improvement Plan SFN 61938**: SCWD Capital Improvement Plan.xlsx

**Rural Flood Control**?: No

**Drain Reconstructions**?: No

**Flood Recovery Property Acquisition**?: No

**Community Flood Control, Rural Flood Control, Bank Stabilization, or Snag & Clear Project With Total Cost of $200,000 or More**?: No

4 of 5
Feasibility/Engineering Study for the Proposed Project: No
Engineering Total Cost of $35,000 or More?: Yes
Engineering Selection Documentation: Engineering Selection Documentation - RFQ Board Meeting Minutes.pdf

Sources

<table>
<thead>
<tr>
<th>Funding Amount Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>State FY1</td>
</tr>
<tr>
<td>$120,375.00</td>
</tr>
<tr>
<td>$120,375.00</td>
</tr>
</tbody>
</table>

Other Funding Sources

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Grant or Loan</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>DWSRF Loan</td>
<td>Loan</td>
<td>$46,125.00</td>
<td>$530,375.00</td>
<td>$0.00</td>
<td>$576,500.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$46,125.00</td>
<td>$530,375.00</td>
<td>$0.00</td>
<td>$576,500.00</td>
</tr>
</tbody>
</table>

Project Total

Current Requested Amount: $1,711,500.00
Other Funding Sources: $576,500.00
Total Project: $2,288,000.00
### 19435 - Hawktree Tank

#### Version Details

- **Funding Opportunity:** 19214-2022 Infrastructure Request
- **Funding Opportunity Close Date:** Dec 31, 2022 3:00 PM
- **Program Area:** Funding for Infrastructure in ND - FIND
- **Document Status:** Under Review
- **Initial Submit Date:**
- **Initially Submitted By:** Philip Markwed
- **Last Submit Date:**
- **Last Submitted By:**

#### Version Information

- **Component Name:** Sources
- **Version Number:** Current
- **Comments:** Allocation for Preconstruction Can copy application and reapply for construction.
- **Created Date:** Dec 30, 2021 2:35 PM
- **Created By:** Kylee Merkel
- **Last Edited Date:** Dec 30, 2021 2:37 PM
- **Last Edited By:** Kylee Merkel

#### Sources

**Funding Amount Requested - Include Amount Requested for All State Funding Sources**

<table>
<thead>
<tr>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Cost</th>
<th>Source</th>
<th>Type</th>
<th>Term</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>$120,000.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$120,000.00</td>
<td>Department of Water Resources</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>$120,000.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$120,000.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Other Funding Sources**

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Grant or Loan</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>Local Share</td>
<td>N/A</td>
<td>$40,000.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$40,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$40,000.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$40,000.00</td>
</tr>
</tbody>
</table>

**Project Total**

- **Current Requested Amount:** $120,000.00
- **Other Funding Sources:** $40,000.00
- **Total Project:** $160,000.00
### Delineation of Costs

**Project:** Hawktree Tank  
**Sponsor:** South Central Regional Water District  
**Contact:** Philip Markwed, Operations Manager  
**Phone:** 701-258-8710  
**Engineer:** Tyson Decker, Bartlett & West  
**Phone:** 701-258-1110  

| Item | 4.0% | Mobilization | 1 | LS | 75,000.00 | $75,000 | 75% | $75,000 | 56,250 |  
| 1 | 1.6% | Site Work | 1 | LS | 30,000.00 | $30,000 | 75% | $22,500 |  
| 2 | 1.9% | SiteOutlet and Overflow Piping | 1 | LS | 35,000.00 | $35,000 | 75% | $26,250 |  
| 3 | 11.3% | Tank Foundation & Subbase Preparation | 1 | LS | 210,000.00 | $210,000 | 75% | $157,500 |  
| 4 | 9.6% | Retaining and Intake - Metal | 1 | LS | 30,000.00 | $30,000 | 75% | $22,500 |  
| 5 | 11.3% | Coating System | 1 | LS | 210,000.00 | $210,000 | 75% | $157,500 |  
| 6 | 2.2% | Control Room | 1 | LS | 40,000.00 | $40,000 | 75% | $30,000 |  
| 7 | 1.6% | Supervisory Control and Data Acquisition | 1 | LS | 30,000.00 | $30,000 | 75% | $22,500 |  
| 8 | 0.3% | Testing, Cleaning, and Disinfection | 1 | LS | 5,000.00 | $5,000 | 75% | $3,750 |  
| 9 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 10 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 11 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 12 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 13 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 14 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 15 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 16 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 17 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 18 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 19 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 20 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 21 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 22 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 23 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 24 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 25 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  
| 26 | 0.0% | Other Eligible Costs | 0 | - | - | - | - | - |  

**Construction Sub-Total**  
**Total Cost:** $2,288,000  
**Cost-Share %** 75%  
**Cost-Share $** $1,711,000

**Preconstruction**  
**Total Cost:** $2,281,333  
**Cost-Share %** 75%  
**Cost-Share $** $1,711,000

**Construction Engineering Total**  
**Total Cost:** $2,871,333  
**Cost-Share %** 75%  
**Cost-Share $** $2,153,500

**Other Eligible Costs**  
**Total Cost:** $2,288,000  
**Cost-Share %** 75%  
**Cost-Share $** $1,711,000

* The Cost-share estimate is purely for planning and informational purposes only and does not, in any way, guarantee a financial commitment to any degree, from the State Water Commission.
**Life Cycle Cost Analysis Review**

**Sponsor:** South Central Regional Water District (SCRWD)  
**Project Title:** Hawktree Tank  
**Date:** September 7, 2022

**Explanation of Alternatives:**

<table>
<thead>
<tr>
<th>SCRWD Hawktree Tank</th>
<th>Do Nothing Alternative</th>
<th>Hawktree Reservoir/Booster</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Users Served</strong></td>
<td>2,500</td>
<td>2,500</td>
</tr>
<tr>
<td><strong>Construction Cost</strong></td>
<td>$2,281,500</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Annual O &amp; M</strong></td>
<td>$500</td>
<td>$0</td>
</tr>
</tbody>
</table>

**Details:**

SCRWD Hawktree Tank - Construct an elevated 250,000 gallon finished water storage tank to provide water reserves in the event of a power failure or other emergency. The tank would also reduce pressure fluctuations in the distribution system.

Do Nothing - Without the storage, SCRWD would not be able to correct the storage and pressure issues within the system. This may also limit potential growth within this area of the system.

Hawktree Reservoir/Booster - This option would use a below grade concrete reservoir with a booster to provide the additional storage and pressure which would reduce pressure fluctuations in the distribution system.

**Model Function:**

The economic model appears to have functioned properly. The results are deemed to be reliable and repeatable with the inputs provided by the project sponsor.

**LCCA Model Results:**

**Scenario Analysis - Present Value Life Cycle Cost Summary**

<table>
<thead>
<tr>
<th>Present Value</th>
<th>SCRWD Hawktree</th>
<th>Do Nothing Alternative</th>
<th>Hawktree Reservoir/Booster</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital Costs</strong></td>
<td>$2,254,000</td>
<td>$0</td>
<td>$2,714,000</td>
</tr>
<tr>
<td><strong>O&amp;M</strong></td>
<td>$0</td>
<td>$0</td>
<td>$69,000</td>
</tr>
<tr>
<td><strong>Repair, Rehab, Replacement</strong></td>
<td>$264,000</td>
<td>$0</td>
<td>$1,095,000</td>
</tr>
<tr>
<td><strong>Salvage Value</strong></td>
<td>$274,000</td>
<td>$0</td>
<td>$35,000</td>
</tr>
<tr>
<td><strong>Total PVC</strong></td>
<td>$2,244,000</td>
<td>$0</td>
<td>$3,846,000</td>
</tr>
<tr>
<td><strong>PV Cost Per User</strong></td>
<td>$898</td>
<td>$0</td>
<td>$1,538</td>
</tr>
</tbody>
</table>

**Current Water Rate (Cost Per 5000g)**  

| Comparable Water Rate | $68  
|------------------------|-----|
| **Total Municipal Service Users** | 2,500  
| **Cost-Share Percent** | 75%  
| **Local Share** | $563,500  
| **Other Funding** | $0  
| **Total Local** | $563,500  
| **Payment Per User With Cost-Share** | $1.14  
| **Local Share** | $2,254,000  
| **Other Funding** | $0  
| **Total Local** | $2,254,000  
| **Payment Per User Without Cost-Share** | $4.56  
| **Local Share** | $2,254,000  
| **Other Funding** | $0  
| **Total Local** | $2,254,000  

**Explanation of Results:**

The net present value of the preferred alternative, or the Hawktree Tank is $2,244,000, which is $1,602,000 less than the Hawktree Reservoir/Booster alternative. The present value per user of the preferred alternative is $898, which equates to $1.14 per user per month with SWC cost-share participation and $4.56 without SWC participation.
### CAPITAL IMPROVEMENT PLAN (CIP)

**System:** South Central Regional Water District - Hawktree Elevated Tank  
**Population:** 10,400  
**Users:** 4,590  
**Date:** 12/28/21

<table>
<thead>
<tr>
<th>ASSET</th>
<th>UNITS</th>
<th>UNIT COST</th>
<th>QTY</th>
<th>REPLACEMENT %</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE (YRS)</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Project CIP Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Booster Station</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment Replacement</td>
<td></td>
<td>$100,000.00</td>
<td>7</td>
<td>50%</td>
<td>$350,000.00</td>
<td>30</td>
<td>$11,667</td>
<td>$972</td>
</tr>
<tr>
<td>Ground Storage Reservoir</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coating Rehabilitation</td>
<td></td>
<td>$70,000.00</td>
<td>6</td>
<td>100%</td>
<td>$420,000.00</td>
<td>20</td>
<td>$21,000</td>
<td>$1,750</td>
</tr>
<tr>
<td>Elevated Water Tower</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coating Rehabilitation</td>
<td></td>
<td>$120,000.00</td>
<td>2</td>
<td>100%</td>
<td>$240,000.00</td>
<td>20</td>
<td>$12,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Water Treatment Plant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process Maintenance</td>
<td></td>
<td>$3,000,000.00</td>
<td>1</td>
<td>70%</td>
<td>$2,100,000.00</td>
<td>50</td>
<td>$42,000</td>
<td>$3,500</td>
</tr>
<tr>
<td>Water Source</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well Replacement</td>
<td></td>
<td>$225,000.00</td>
<td>9</td>
<td>50%</td>
<td>$1,012,500.00</td>
<td>20</td>
<td>$50,625</td>
<td>$4,218.75</td>
</tr>
<tr>
<td>N. Burleigh WTP Pretreatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment Replacement</td>
<td></td>
<td>$300,000.00</td>
<td>1</td>
<td>70%</td>
<td>$210,000.00</td>
<td>30</td>
<td>$7,000</td>
<td>$568</td>
</tr>
<tr>
<td><strong>New Project CIP Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawktree Elevated Tank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coating Rehabilitation</td>
<td></td>
<td>$150,000.00</td>
<td>1</td>
<td>100%</td>
<td>$150,000.00</td>
<td>20</td>
<td>$7,500</td>
<td>$625</td>
</tr>
<tr>
<td><strong>Total CIP Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SUBTOTAL Existing CIP Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$4,332,500</td>
</tr>
<tr>
<td><strong>SUBTOTAL New CIP Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$150,000</td>
</tr>
<tr>
<td><strong>Total Existing and New Project CIP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$4,482,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>TOTAL RESERVES</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current:</td>
<td>$1,200,000.00</td>
<td>$144,000.00</td>
<td>$12,000.00</td>
<td>$2.61</td>
</tr>
<tr>
<td>Adjustment:</td>
<td>$3,282,500.00</td>
<td>$370,292.00</td>
<td>$31,700.00</td>
<td>$2.61</td>
</tr>
</tbody>
</table>

Report Prepared by (Title): Bryan Ziegler (Bartlett & West)  
Date: 12/28/21

**Notes:**

- Fill in colored items
- Enter Existing asset project CIP costs
- Enter New asset project CIP costs
- Enter current total reserves and annual reserve

**Instructions:**

1. Enter existing project CIP costs.
2. Enter new project CIP costs.
3. Enter current total reserves and annual reserve.
20659 - Well #6609 Wellfield Expansion Project

Application Details

Funding Opportunity: 19214-2022 Infrastructure Request

Due Date: Dec 31, 2022 3:00 PM

Program Area: Funding for Infrastructure in ND - FIND

Status: Under Review

Stage: Final Application

Initial Submit Date: Apr 20, 2022 3:52 PM

Initial Submitted By: Jesse Hewson

Contact Information

Primary Contact Information

Active User*: Yes

Type: External User

Name: Salutation Jesse

First Name: Hewson

Middle Name: Hewson

Last Name: Title: Distribution Manager

Email*: jessesrwdistrict@daktel.com

Address*: 1812 Highway 281 N

Organization Information

Status*: Approved

Name*: Stutsman Rural Water District

Type*: Political Subdivision

Tax Id: 45-0454647

Organization Website: https://www.stutsmanruralwater.com

Address*: 1812 Highway 281 N
Infrastructure Funding Request

**Infrastructure Funding Request**

**Project, Program, or Study Name***: SRWD Well and Raw Water Facilities

**Sponsor(s)**: Stutsman Rural Water District

**County***: Stutsman

**City***: Jamestown

**Description of Request***: Updated (previously submitted)

**If Study, What Type**: 

**If Project/Program, What Type**: Rural Water Supply

**Jurisdictions/Stakeholders Involved***: Stutsman Rural Water District

**Specific Needs Addressed By the Project, Program or Study***:

Additional flows are required to keep up with the demands of the distribution system during peak usage periods. Increased usage and peak demand on the system due to the recently completed Phase 6 and Phase 7 of the SRWD Expansion project, as well as the continued growth in rural residential users and increased demand for water for agricultural purposes and livestock usage. The increased demand for agricultural and livestock water has intensified due to recent drought conditions.

**Description of Problem or Need and How Project Addresses that Problem or Need**:

The proposed project would complete the construction of a new ground water well that was previously installed. The new well is located approximately 4 miles south of SRWD's WTP. The project would include approximately 4 miles of 16" pipeline and improvements and upgrades at the WTP. Additional flows are required to keep up with the demands of the distribution system during peak usage periods. The new well is required to be located 4 miles south of SRWD's WTP to spread out the diversion point for this project.
Choose City, County or Water District*:

What is the Current Estimated Population*:

For this project,

What is the Benefited Population*:

Has Feasibility Study Been Completed*:

Has Engineering Design Been Completed*:

Have Assessment Districts Been Formed*:

Have Land or Easements Been Acquired*:

Has Sediment Analysis For Reconstruction Of An Existing Drain Been Completed*:

Extraterritorial Jurisdiction*:

Have You Applied For Any Federal Permits*:

If Yes or Ongoing, Please Explain (include type/number):

Have You Applied for any State Permits*:

If Yes or Ongoing, Please Explain (include type/number):

Water Permit - No. 6609

Water District

6700

6700

Ongoing

Ongoing

N/A

Ongoing

N/A

No

N/A

Yes
Have You Been Approved for any State Permits?: Yes

If Yes or Ongoing, Please Explain (include type/number):
The NDDWR Appropriations Division has granted a time extension and change of use for Conditional water permit #6609. Water shall be beneficially used on or before September 30, 2024.

Have You Applied for any Local Permits?: No

If Yes or Ongoing, Please Explain (include type/number):

Briefly explain the level of review the Project/Program/Study has undergone.

Level Review*:
An extensive aquifer study was done cooperatively between Stutsman Rural Water District/NDDWR/Leggette, Brashears and Graham Inc., in 2014/15. The water district was directed to this area of the Spiritwood Aquifer for a future well location which is approximately 4 miles south of its current well field and treatment facility. There has been limited review on the project.

Do You Expect Any Obstacles To Implementation (i.e. problems with land acquisition, permits, funding, local opposition, environmental concerns, etc.)?

Obstacles*:
No

Have you received, or do you anticipate receiving federal funding?

Federal Funding*:
No

Implementation Timelines

Study*:
09/2022
Month/Year (00/0000)

Design*:
10/2022
Month/Year (00/0000)

Bid*:
11/2022  02/2023
Month/Year (00/0000)

Construction Start*:
05/2023  04/2023
Month/Year (00/0000)
Construction Completion*: 11/2023 12/2023
Month/Year (00/0000)

Explain Additional Timeline Issues*:
No timeline issues seen past when funding is in place

Certification
Submitted by*: Jesse Hewson 04/20/2022
First Name Last Name Date
Address*: 1812 Hwy 281 North
Address Line 1
Address Line 2
Jamestown North Dakota 58401-1812
City State Zip Code
Telephone Number*: 701-252-7727
Sponsor Email*: jessesrwdistrict@daktel.com
Consulting Engineer*: Bartlett & West - Bryan Ziegler
Engineer Telephone Number*: 701-258-1110
Engineer Email*: bryan.ziegler@bartwest.com
This section needs to be completed by the project sponsor.
I certify that, to the best of my knowledge, the provided information is true and accurate.
Certify*: Yes
Authorized Individual*: Jesse Hewson 04/20/2022
First Name Last Name Date

Documentation

Documentation
Project Specific Map
(Including an inset map of location within state.)
CLICK HERE to see examples.
Project Specific Map*: Stutsman Raw Water Facilities Improvements.pdf
Are You Seeking Department of Water Resources Cost-Share?*: Yes

CLICK HERE for SFN 61801 Delineation of Costs.

Delineation of Costs SFN 61801: sfn_61801_delineation_of_cost Raw Water Facilities.xlsx

Type of Request: Preconstruction

Water Supply Projects?: Yes

CLICK HERE for Life Cycle Cost Analysis Instructions.


CLICK HERE for SFN 61938 Capital Improvement Plan.

Capital Improvement Plan SFN 61938: Capital Improvement Plan 2022.xlsx

Rural Flood Control?: No

Drain Reconstructions?: No

Flood Recovery Property Acquisition?: No

Community Flood Control, Rural Flood Control, Bank Stabilization, or Snag & Clear Project With Total Cost of $200,000 or More?: No

Feasibility/Engineering Study for the Proposed Project or Other Applicable Documents: No

Engineering Total Cost of $35,000 or More?: Yes

Engineering Selection Documentation:

Sources

Funding Amount Requested - Include Amount Requested for All State Funding Sources
CLICK HERE for SFN 61938 Capital Improvement Plan.

Capital Improvement Plan SFN 61938: Capital Improvement Plan 2022.xlsx

Rural Flood Control?: No
Drain Reconstructions?: No
Flood Recovery Property Acquisition?: No
Community Flood Control, Rural Flood Control, Bank Stabilization, or Snag & Clear Project With Total Cost of $200,000 or More?: No
Feasibility/Engineering Study for the Proposed Project or Other Applicable Documents: No
Engineering Total Cost of $35,000 or More?: Yes
Engineering Selection Documentation:

Sources

| Funding Amount Requested - Include Amount Requested for All State Funding Sources |
|-----------------------------------------------|----------|----------------|---------|----------------|
| State FY1 | State FY2 | Beyond State FY2 | Total Cost Source | Type | Term | Interest Rate |
| $250,000.00 | $0.00 | $0.00 | $250,000.00 Department of Water Resources | Grant | 0.00 | 0.00 |
| $250,000.00 | $0.00 | $0.00 | $250,000.00 |

Other Funding Sources

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Grant or Loan</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>SRF</td>
<td>Loan</td>
<td>$213,550.00</td>
<td>$854,200.00</td>
<td>$0.00</td>
<td>$1,067,750.00</td>
</tr>
<tr>
<td>State</td>
<td>DWR Future Construction</td>
<td>Grant</td>
<td>$2,953,000.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$2,953,000.00</td>
</tr>
</tbody>
</table>

$3,166,550.00 | $854,200.00 | $0.00 | $4,020,750.00 |

Project Total

Current Requested Amount: $250,000.00
Other Funding Sources: $4,020,750.00
Total Project: $4,270,750.00
## Delineation of Costs

**Project:** Rural Water Facility Improvements  
**Sponsor:** Stutsman Rural Water District  
**Contact:** Jesse Hewson, Distribution Manager  
**Phone:** 701-252-7737  
**Engineer:** Bryan Ziegler, Bartlett & West  
**Phone:** 701-258-1110

### Cost Classification

<table>
<thead>
<tr>
<th>Item</th>
<th>%</th>
<th>Cost-Share $ *</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.5%</td>
<td>Eligible Cost: $249,000</td>
</tr>
<tr>
<td>2</td>
<td>48.7%</td>
<td>Construction: $2,933,000</td>
</tr>
<tr>
<td>3</td>
<td>14.6%</td>
<td>Preconstruction: $220,000</td>
</tr>
<tr>
<td>4</td>
<td>3.3%</td>
<td>Mobilization: $50,000</td>
</tr>
<tr>
<td>5</td>
<td>8.0%</td>
<td>Preconstruction/ Construction: $3,368,100</td>
</tr>
<tr>
<td>6</td>
<td>14.7%</td>
<td>Construction Sub-Total: $3,015,000</td>
</tr>
<tr>
<td>7</td>
<td>0.0%</td>
<td>Contingency: $305,100</td>
</tr>
<tr>
<td>8</td>
<td>0.0%</td>
<td>Construction Total: $3,320,100</td>
</tr>
<tr>
<td>9</td>
<td>0.0%</td>
<td>Preconstruction Total: $333,333</td>
</tr>
<tr>
<td>10</td>
<td>0.0%</td>
<td>Construction Engineering Total: $495,000</td>
</tr>
<tr>
<td>11</td>
<td>78.6%</td>
<td>Other Costs: $39,000</td>
</tr>
<tr>
<td>12</td>
<td>1.0%</td>
<td>Other Eligible Costs: $36,000</td>
</tr>
<tr>
<td>13</td>
<td>0.1%</td>
<td>Other Ineligible Costs: $0</td>
</tr>
<tr>
<td>14</td>
<td>0.0%</td>
<td>Other Total: $0</td>
</tr>
<tr>
<td>15</td>
<td>10.0%</td>
<td>Construction: $2,933,000</td>
</tr>
<tr>
<td>16</td>
<td>0.0%</td>
<td>Preconstruction: $220,000</td>
</tr>
</tbody>
</table>

### Total

<table>
<thead>
<tr>
<th>Item</th>
<th>%</th>
<th>Cost-Share $ *</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>0.0%</td>
<td>Eligible Cost: $249,000</td>
</tr>
<tr>
<td>18</td>
<td>0.0%</td>
<td>Construction: $2,933,000</td>
</tr>
<tr>
<td>19</td>
<td>0.0%</td>
<td>Preconstruction: $220,000</td>
</tr>
<tr>
<td>20</td>
<td>0.0%</td>
<td>Mobilization: $50,000</td>
</tr>
<tr>
<td>21</td>
<td>0.0%</td>
<td>Preconstruction/ Construction: $3,368,100</td>
</tr>
<tr>
<td>22</td>
<td>0.0%</td>
<td>Construction Sub-Total: $3,015,000</td>
</tr>
<tr>
<td>23</td>
<td>0.0%</td>
<td>Contingency: $305,100</td>
</tr>
<tr>
<td>24</td>
<td>0.0%</td>
<td>Construction Total: $3,320,100</td>
</tr>
<tr>
<td>25</td>
<td>0.0%</td>
<td>Preconstruction Total: $333,333</td>
</tr>
<tr>
<td>26</td>
<td>0.0%</td>
<td>Construction Engineering Total: $495,000</td>
</tr>
<tr>
<td>27</td>
<td>1.2%</td>
<td>Other Costs: $39,000</td>
</tr>
<tr>
<td>28</td>
<td>0.0%</td>
<td>Other Eligible Costs: $36,000</td>
</tr>
<tr>
<td>29</td>
<td>0.0%</td>
<td>Other Ineligible Costs: $0</td>
</tr>
<tr>
<td>30</td>
<td>0.0%</td>
<td>Other Total: $0</td>
</tr>
<tr>
<td>31</td>
<td>78.6%</td>
<td>Construction: $2,933,000</td>
</tr>
<tr>
<td>32</td>
<td>0.0%</td>
<td>Preconstruction: $220,000</td>
</tr>
<tr>
<td>33</td>
<td>0.0%</td>
<td>Mobilization: $50,000</td>
</tr>
<tr>
<td>34</td>
<td>0.0%</td>
<td>Preconstruction/ Construction: $3,368,100</td>
</tr>
<tr>
<td>35</td>
<td>0.0%</td>
<td>Construction Sub-Total: $3,015,000</td>
</tr>
<tr>
<td>36</td>
<td>0.0%</td>
<td>Contingency: $305,100</td>
</tr>
<tr>
<td>37</td>
<td>10.0%</td>
<td>Construction Total: $3,320,100</td>
</tr>
<tr>
<td>38</td>
<td>1.0%</td>
<td>Preconstruction Total: $333,333</td>
</tr>
<tr>
<td>39</td>
<td>0.0%</td>
<td>Construction Engineering Total: $495,000</td>
</tr>
<tr>
<td>40</td>
<td>0.0%</td>
<td>Other Costs: $39,000</td>
</tr>
<tr>
<td>41</td>
<td>0.0%</td>
<td>Other Eligible Costs: $36,000</td>
</tr>
<tr>
<td>42</td>
<td>0.0%</td>
<td>Other Ineligible Costs: $0</td>
</tr>
<tr>
<td>43</td>
<td>0.0%</td>
<td>Other Total: $0</td>
</tr>
<tr>
<td>44</td>
<td>0.0%</td>
<td>Construction: $2,933,000</td>
</tr>
<tr>
<td>45</td>
<td>0.0%</td>
<td>Preconstruction: $220,000</td>
</tr>
</tbody>
</table>

### Federal or State Funds That Supplied Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>%</th>
<th>Cost-Share $ *</th>
</tr>
</thead>
<tbody>
<tr>
<td>46</td>
<td>0.0%</td>
<td>Eligible Cost: $3,203,000</td>
</tr>
<tr>
<td>47</td>
<td>0.0%</td>
<td>Construction: $2,933,000</td>
</tr>
<tr>
<td>48</td>
<td>0.0%</td>
<td>Preconstruction: $220,000</td>
</tr>
<tr>
<td>49</td>
<td>0.0%</td>
<td>Mobilization: $50,000</td>
</tr>
<tr>
<td>50</td>
<td>0.0%</td>
<td>Preconstruction/ Construction: $3,368,100</td>
</tr>
<tr>
<td>51</td>
<td>0.0%</td>
<td>Construction Sub-Total: $3,015,000</td>
</tr>
<tr>
<td>52</td>
<td>0.0%</td>
<td>Contingency: $305,100</td>
</tr>
<tr>
<td>53</td>
<td>100.0%</td>
<td>Construction Total: $3,320,100</td>
</tr>
<tr>
<td>54</td>
<td>0.0%</td>
<td>Preconstruction Total: $333,333</td>
</tr>
<tr>
<td>55</td>
<td>0.0%</td>
<td>Construction Engineering Total: $495,000</td>
</tr>
<tr>
<td>56</td>
<td>0.0%</td>
<td>Other Costs: $39,000</td>
</tr>
<tr>
<td>57</td>
<td>0.0%</td>
<td>Other Eligible Costs: $36,000</td>
</tr>
<tr>
<td>58</td>
<td>0.0%</td>
<td>Other Ineligible Costs: $0</td>
</tr>
<tr>
<td>59</td>
<td>0.0%</td>
<td>Other Total: $0</td>
</tr>
<tr>
<td>60</td>
<td>0.0%</td>
<td>Construction: $2,933,000</td>
</tr>
<tr>
<td>61</td>
<td>0.0%</td>
<td>Preconstruction: $220,000</td>
</tr>
</tbody>
</table>

The cost-share estimate is purely for planning and informational purposes only and does not, in any way, guarantee a financial commitment to any degree, from the State Water Commission.
**Life Cycle Cost Analysis Review**

**Sponsor:** Stutsman Rural Water District (SRWD)  
**Project Title:** Raw Water Facilities Improvements  
**Date:** September 7, 2022

**Explanation of Alternatives:**

Well Completion and Raw Water Line - The proposed project will finish a ground water production well in place of a successful exploratory well approximately 4 miles south of SRWD's Water Treatment Plant (WTP). The project will include approximately 4 miles of 16-inch pipeline and improvements and upgrades at the WTP. Additional flows are required to keep up with the demands of the distribution system during peak usage periods. The new well is required to be located 4 miles south of SRWD's WTP to spread out the diversion points of SRWD's wells to prevent depletion of the Spiritwood Aquifer.

Do Nothing Alternative - If SRWD does not complete the well and water line construction, the supply of water during peak times may be inadequate for the needs of the system.

**Inputs:**

<table>
<thead>
<tr>
<th></th>
<th>Well Completion and Raw Water Line</th>
<th>Do Nothing Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users Served</td>
<td>2550</td>
<td>0</td>
</tr>
<tr>
<td>Construction Cost</td>
<td>$4,271,000</td>
<td>$0</td>
</tr>
<tr>
<td>Annual O &amp; M</td>
<td>$300</td>
<td>$0</td>
</tr>
</tbody>
</table>

**Details:**

Growth in water demand is creating a need for SRWD to increase raw water capacity. Increased usage and peak demand on the system are expected due to: completion of Phase 6 and Phase 7 of the SRWD expansion project; growth in rural residential users; increased demand for water for agricultural purposes; and increased demand for livestock usage. The increased demand for agricultural and livestock water has intensified due to recent drought conditions.

**Model Function:**

The economic model appears to have functioned properly. The results are deemed to be reliable and repeatable with the inputs provided by the project sponsor.

**LCCA Model Results:**

<table>
<thead>
<tr>
<th>Present Value</th>
<th>Well Completion and Raw Water Line</th>
<th>Do Nothing Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Costs</td>
<td>$4,271,000</td>
<td>$0</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Repair, Rehab, Replacement</td>
<td>$845,000</td>
<td>$0</td>
</tr>
<tr>
<td>Salvage Value</td>
<td>$163,000</td>
<td>$0</td>
</tr>
<tr>
<td>Total PVC</td>
<td>$4,953,000</td>
<td>$0</td>
</tr>
<tr>
<td>PV Cost Per User</td>
<td>$1,942</td>
<td>$0</td>
</tr>
</tbody>
</table>

**Current Water Rate (Cost Per 5000g)**  
$73

**Comparable Water Rate**  
$47

| Current Water Rate (Cost Per 5000g) | $73  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparable Water Rate</td>
<td>$47</td>
</tr>
</tbody>
</table>

| Total Municipal Service Users        | 2,550 | 2,550 |
| Cost-Share Percent                   | 75%   | 75%   |
| Local Share                          | $1,067,750 | $0   |
| Other Funding                        | $0    | $0    |
| Total Local                          | $1,067,750 | $0   |

| Payment Per User With Cost-Share     | $2.12 | $0.00 |
| Local Share                          | $4,271,000 | $0   |
| Other Funding                        | $0    | $0    |
| Total Local                          | $4,271,000 | $0   |

| Payment Per User Without Cost-Share  | $8.47 | $0.00 |

**Explanation of Results:**

The sponsor's preferred project is “Well Completion and Raw Water Line.” The present value cost of this alternative is $4,953,000 with no alternative source to compare. The present value cost per user for the preferred alternative is $1,942. The monthly user cost of the local share with DWR 75% cost-share participation is $2.12 per month and $8.47 without DWR participation.
### CAPITAL IMPROVEMENT PLAN (CIP)

**System:** Stutsman Rural Water District  
**Population:** 6,700  
**Date:** 04/25/22  
**Users:** 2,550  
**Ave Per User Gallons:** 5,000

<table>
<thead>
<tr>
<th>ASSET</th>
<th>UNIT COST</th>
<th>QTY</th>
<th>REPLACEMENT COST</th>
<th>AVERAGE LIFE (YRS)</th>
<th>PERCENT OF REPLACEMENT</th>
<th>RESERVE</th>
<th>ANNUAL RESERVE</th>
<th>MONTHLY RESERVE</th>
<th>MONTHLY RESERVE PER CUSTOMER</th>
<th>MONTHLY RESERVE PER 1,000 GALLONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Projects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reservoir - Pump Replacement</td>
<td>$50,000</td>
<td>13</td>
<td>$650,000</td>
<td>30</td>
<td>50%</td>
<td>$125,000</td>
<td>$10,833</td>
<td>$903</td>
<td>$0.35</td>
<td>$0.07</td>
</tr>
<tr>
<td>Elevated Tower - Coating Rehabilitation</td>
<td>$100,000</td>
<td>2</td>
<td>$200,000</td>
<td>20</td>
<td>70%</td>
<td>$140,000</td>
<td>$7,000</td>
<td>$583</td>
<td>$0.23</td>
<td>$0.05</td>
</tr>
<tr>
<td>Water Treatment Plant</td>
<td>$2,100,000</td>
<td>1</td>
<td>$2,100,000</td>
<td>50</td>
<td>70%</td>
<td>$1,470,000</td>
<td>$29,400</td>
<td>$2,450</td>
<td>$0.96</td>
<td>$0.19</td>
</tr>
<tr>
<td>SRWD Existing Pipeline</td>
<td>$25,000,000</td>
<td>1</td>
<td>$25,000,000</td>
<td>60</td>
<td>50%</td>
<td>$12,500,000</td>
<td>$208,333</td>
<td>$17,361</td>
<td>$6.81</td>
<td>$1.36</td>
</tr>
<tr>
<td><strong>New Projects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Service to Streeter</td>
<td>$775,000</td>
<td>1</td>
<td>$775,000</td>
<td>60</td>
<td>50%</td>
<td>$387,500</td>
<td>$12,917</td>
<td>$1,076</td>
<td>$0.42</td>
<td>$0.08</td>
</tr>
<tr>
<td>Well 6609 Pipeline</td>
<td>$4,271,000</td>
<td>1</td>
<td>$4,271,000</td>
<td>60</td>
<td>50%</td>
<td>$2,135,000</td>
<td>$71,183</td>
<td>$5,932</td>
<td>$2.33</td>
<td>$0.47</td>
</tr>
<tr>
<td>Greenhouse Service</td>
<td>$571,000</td>
<td>1</td>
<td>$571,000</td>
<td>30</td>
<td>50%</td>
<td>$285,500</td>
<td>$9,033</td>
<td>$1,586</td>
<td>$0.62</td>
<td>$0.12</td>
</tr>
<tr>
<td>Phase 8</td>
<td>$760,000</td>
<td>1</td>
<td>$760,000</td>
<td>60</td>
<td>50%</td>
<td>$380,000</td>
<td>$12,667</td>
<td>$1,056</td>
<td>$0.41</td>
<td>$0.08</td>
</tr>
<tr>
<td><strong>Subtotal Existing CIP Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$14,435,000</td>
<td>$21,297</td>
<td>$8.35</td>
<td>$1.67</td>
</tr>
</tbody>
</table>

| **Subtotal New CIP Costs**           |           |     |                  |                    |                        |         | $3,188,500    | $294,867        | $24,572         | $9.64                       | $1.93                             |

**Total Existing and New Project CIP:**  
- **Subtotal:** $34,327,000  
- **Annual Reserve:** $17,623,500  
- **Monthly Reserve Per Customer:** $12.14  
- **Monthly Reserve Per 1,000 Gallons:** $2.43

**Report Prepared by (Title):** Geneva Kaiser  
**Date:** General Manager SRWD

**Notes:**
## Application Details

<table>
<thead>
<tr>
<th>Funding Opportunity:</th>
<th>19214-2022 Infrastructure Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding Opportunity Due Date:</td>
<td>Dec 31, 2022 3:00 PM</td>
</tr>
<tr>
<td>Program Area:</td>
<td>Funding for Infrastructure in ND - FIND</td>
</tr>
<tr>
<td>Status:</td>
<td>Under Review</td>
</tr>
<tr>
<td>Stage:</td>
<td>Final Application</td>
</tr>
<tr>
<td>Initial Submit Date:</td>
<td>Aug 29, 2022 4:44 PM</td>
</tr>
<tr>
<td>Initially Submitted By:</td>
<td>Abby Ritz</td>
</tr>
</tbody>
</table>

## Contact Information

### Primary Contact Information

| Active User*: | Yes |
| Type: | External User |
| Name: | Salutation Abby Salutation Middle Name Ritz |
| Title: |  |
| Email*: | abby.ritz@ae2s.com |
| Address*: | 1815 Schafer Street, Suite 301 |
| | AE2S |
| | Bismarck North Dakota 58501 |
| | Phone 701-221-0530 Ext. |
| | Fax #####-#### |
| Comments: |  |

### Organization Information

| Status*: | Approved |
| Name*: | Upper Souris Water Users District |
| Organization Type*: | Political Subdivision |
| Tax Id: |  |
| Organization Website: |  |
| Address*: | PO Box 397 |
Infrastructure Funding Request

**Project, Program, or Study Name**: 2022 Improvement-Expansion Project - SCADA Improvements

**Sponsor(s)**: Upper Souris Water Users District

**County**: Multiple

**City**: Kenmare

**Description of Request**: New

If Study, What Type:

If Project/Program, What Type: Rural Water Supply

**Jurisdictions/Stakeholders Involved**: Upper Souris Water Users District, City of Glenburn, City of Bowbells, City of Lansford, City of Lorraine

**Specific Needs Addressed By the Project, Program or Study**: The proposed project would include internal distribution system improvements (installing parallel pipelines, pump station improvements, and the additional of a supervisory control and data acquisition (SCADA) system) to increase flow and pressure throughout the system to improve service to existing customers as well as allow the addition of additional customers. This request specifically requests cost-share for the SCADA system improvements. System expansion will be requested at a later date.

**Description of Problem or Need and How Project Addresses that Problem or Need**.
Description of Problem:
Upper Souris Rural Water District (USRWD) has received numerous requests for water service over the last several years. However, due to limited capacity (limited flow and pressure), USRWD has had to delay serving these requests for water service.

For this project,

Choose City, County or Water District: Water District

What is the Current Estimated Population?: 2531

For this project,

What is the Benefited Population?: 2531

Has Feasibility Study Been Completed?: Yes

Has Engineering Design Been Completed?: No

Have Assessment Districts Been Formed?: N/A

Have Land or Easements Been Acquired?: No

Has Sediment Analysis For Reconstruction Of An Existing Drain Been Completed?: N/A

Extraterritorial Jurisdiction?: No

Have You Applied For Any Federal Permits?: N/A

If Yes or Ongoing, Please Explain (include type/number):

Have You Applied for any State Permits?: No

If Yes or Ongoing, Please Explain (include type/number):

Have You Applied for any Local Permits?: No

If Yes or Ongoing, Please Explain (include type/number):

Briefly explain the level of review the Project/Program/Study has undergone.

Level Review:
Concept level hydraulic analysis of the existing system to identify hydraulic restrictions, concept level cost estimates for system improvements and addition of rural users, and concept level financial analysis to determine rate impacts to existing and potential new customers.

Do You Expect Any Obstacles To Implementation (i.e. problems with land acquisition, permits, funding, local opposition, environmental concerns, etc.)?

Obstacles: No

Have you received, or do you anticipate receiving federal funding?

Federal Funding: No

Implementation Timelines

Study: 09/2021
Month/Year (00/0000)

Design: 08/2022
Month/Year (00/0000)

Bid: 10/2022
Month/Year (00/0000)
Construction Start*: 11/2022  
Month/Year (00/0000)

Construction Completion*: 06/2023  
Month/Year (00/0000)

Explain Additional Timeline Issues*:  
No timeline issues anticipated.

Certification

Submitted by*: Jody Meidinger 08/29/2022  
First Name Last Name Date

Address*: 43601 506th St NW  
Address Line 1

Kenmare North Dakota 58746-0000  
City State Zip Code

Telephone Number*: 701-385-4093

Sponsor Email*: jody@uppersouriswater.com

Consulting Engineer*: Dustin Schultz

Engineer Telephone Number*: 701-774-3080

Engineer Email*: Dustin.Schultz@AE2S.com

This section needs to be completed by the project sponsor.  
I certify that, to the best of my knowledge, the provided information is true and accurate.

Certify*: Yes

Authorized Individual*: Jody Meidinger 08/29/2022  
First Name Last Name Date

Documentation

Project Specific Map  
(Including an inset map of location within state.)  
CLICK HERE to see examples.

Project Specific Map*:  
2022 08 29 SYSTEM WIDE SCADA IMPROVEMENTS - Location Map.pdf

Are You Seeking Department of Water  
Resources Cost-Share?: Yes

CLICK HERE for SN 61801 Delineation of Costs.

Delineation of Costs SN 61801:  
sfn_61801_delineation_of_cost 12.xlsx

Type of Request: Construction

Signed Plans and Specifications For  
Bidding:  
2022 08 29 SYSTEM WIDE SCADA IMPROVEMENTS - Cover Sheet.pdf

Water Supply Projects?: Yes  
CLICK HERE for Life Cycle Cost Analysis Instructions.

Life Cycle Cost Analysis: life_cycle_cost_analysis_worksheet.xlsx  
CLICK HERE for SN 61938 Capital Improvement Plan.

Capital Improvement Plan SN 61938:  
sfn_61938_capital_improvement_plan 11.xlsx

Rural Flood Control?: No

Drain Reconstructions?: No

Flood Recovery Property Acquisition?: No
Community Flood Control, Rural Flood Control, Bank Stabilization, or Snag & Clear Project With Total Cost of $200,000 or More?:  No

Feasibility/Engineering Study for the Proposed Project or Other Applicable Documents:

Engineering Total Cost of $35,000 or More?:  Yes

Engineering Selection Documentation:

Sources

| Funding Amount Requested - Include Amount Requested for All State Funding Sources |
|-----------------------------------------------|---------------------------------|--------|--------|--------|--------|
| State FY1 | State FY2 | Beyond State FY2 | Total Cost | Source | Type | Term | Interest Rate |
| $281,250.00 | $0.00 | $0.00 | $281,250.00 | | 0.00 | 0.00 |
| $281,250.00 | $0.00 | $0.00 | $281,250.00 | | |

Other Funding Sources

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Grant or Loan</th>
<th>State FY1</th>
<th>State FY2</th>
<th>Beyond State FY2</th>
<th>Total Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>SWC (Pre-Construction)</td>
<td>Grant</td>
<td>$245,000.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$245,000.00</td>
</tr>
<tr>
<td>State</td>
<td>DWSRF</td>
<td>Loan</td>
<td>$175,417.00</td>
<td>$862,509.00</td>
<td>$0.00</td>
<td>$1,037,926.00</td>
</tr>
<tr>
<td>State</td>
<td>SWC (Expansion Construction)</td>
<td>Grant</td>
<td>$0.00</td>
<td>$2,587,529.00</td>
<td>$0.00</td>
<td>$2,587,529.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$420,417.00</td>
<td>$3,450,038.00</td>
<td>$0.00</td>
<td>$3,870,455.00</td>
</tr>
</tbody>
</table>

Project Total

Current Requested Amount:  $281,250.00

Other Funding Sources:  $3,870,455.00

Total Project:  $4,151,705.00
SYSTEM WIDE SCADA UPPERS SOURIS WATER DISTRICT IMPROVEMENTS

PRELIMINARY NOT FOR CONSTRUCTION

STATE OF NORTH DAKOTA

PROJECT LOCATION MAP

PROJECT AERIAL MAP

GLENBURN BOOSTER STATION

GLENBURN WTP

KENMARE WTP

SHERWOOD RESERVOIR

UPPER SOURIS LAKE

UPPER DES LACS LAKE

LAKE DARLING

MINOT AFB

TOLLEY

KENMARE WTP

GLENBURN WTP

GLENBURN BOOSTER STATION

SHERWOOD RESERVOIR
### Delineation of Costs

**North Dakota Department of Water Resources**

**Planning and Education**

**Project**: 2022 Improvement-Expansion Project - SCADA Improvements

**Sponsor**: Upper Souris Water Users District

**Contact**: Jody Meidinger, Manager

**Phone**: 701-385-4093

**Engineer**: Cory Chorne, AE2S

**Local Cost**: $1,067,950

**Construction**: $2,840,000

**Preconstruction**: $243,750

**Previous Approval**: $245,000

**SCADA Construction**: Current Request: $281,250

**Project Type**: Cost-share

<table>
<thead>
<tr>
<th>Cost Description</th>
<th>Units</th>
<th>Unit Price</th>
<th>Total</th>
<th>Cost-Share %</th>
<th>Cost-Share $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Mobilization</td>
<td>1 LB</td>
<td>138,000.00</td>
<td>138,000</td>
<td>75%</td>
<td>103,500</td>
</tr>
<tr>
<td>2. Bonding / Insurance</td>
<td>1 LS</td>
<td>83,000.00</td>
<td>83,000</td>
<td>75%</td>
<td>62,250</td>
</tr>
<tr>
<td>3. Water Main 2 in</td>
<td>2800 LF</td>
<td>3.50</td>
<td>988,000</td>
<td>75%</td>
<td>741,000</td>
</tr>
<tr>
<td>4. Water Main 4 in</td>
<td>11500 LF</td>
<td>4.70</td>
<td>54,000</td>
<td>75%</td>
<td>40,530</td>
</tr>
<tr>
<td>5. Pipeline Appurtenances</td>
<td>1 LS</td>
<td>414,000.00</td>
<td>414,000</td>
<td>75%</td>
<td>310,500</td>
</tr>
<tr>
<td>6. Miller - Frost Fee</td>
<td>35 EA</td>
<td>7,500.00</td>
<td>262,500</td>
<td>75%</td>
<td>196,875</td>
</tr>
<tr>
<td>7. Pressure Relief Valve</td>
<td>8 EA</td>
<td>25,000.00</td>
<td>200,000</td>
<td>75%</td>
<td>150,000</td>
</tr>
<tr>
<td>8. Process Pipes, Valves, Fittings</td>
<td>1 LS</td>
<td>50,000.00</td>
<td>50,000</td>
<td>75%</td>
<td>37,500</td>
</tr>
<tr>
<td>9. Pump Equipment</td>
<td>1 LB</td>
<td>20,000.00</td>
<td>20,000</td>
<td>75%</td>
<td>15,000</td>
</tr>
<tr>
<td>10. Miller - Maser</td>
<td>4 EA</td>
<td>135,000.00</td>
<td>540,000</td>
<td>75%</td>
<td>405,000</td>
</tr>
<tr>
<td>11. Supervisory Control and Data Acquisition</td>
<td>1 LS</td>
<td>250,000.00</td>
<td>250,000</td>
<td>75%</td>
<td>187,500</td>
</tr>
<tr>
<td>12. Project Inspection</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>13.</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>15.</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>16.</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>17.</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>18.</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>19.</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>20.</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>21.</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>22.</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>23.</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>24.</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>25.</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>26.</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>27.</td>
<td>1.8%</td>
<td>59,000.00</td>
<td>59,000</td>
<td>75%</td>
<td>44,250</td>
</tr>
<tr>
<td>28.</td>
<td>5.6%</td>
<td>178,000.00</td>
<td>178,000</td>
<td>75%</td>
<td>133,500</td>
</tr>
<tr>
<td>29.</td>
<td>0.9%</td>
<td>30,000.00</td>
<td>30,000</td>
<td>75%</td>
<td>22,500</td>
</tr>
<tr>
<td>30.</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>31.</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>32.</td>
<td>1.2%</td>
<td>39,000.00</td>
<td>39,000</td>
<td>75%</td>
<td>29,250</td>
</tr>
<tr>
<td>33.</td>
<td>9.3%</td>
<td>307,000.00</td>
<td>307,000</td>
<td>75%</td>
<td>230,250</td>
</tr>
<tr>
<td>34.</td>
<td>0.8%</td>
<td>25,000.00</td>
<td>25,000</td>
<td>75%</td>
<td>18,750</td>
</tr>
<tr>
<td>35.</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>36.</td>
<td>3.8%</td>
<td>125,000.00</td>
<td>125,000</td>
<td>75%</td>
<td>93,750</td>
</tr>
<tr>
<td>37.</td>
<td>1.3%</td>
<td>53,000.00</td>
<td>53,000</td>
<td>75%</td>
<td>39,750</td>
</tr>
<tr>
<td>38.</td>
<td>0.1%</td>
<td>5,000.00</td>
<td>5,000</td>
<td>75%</td>
<td>3,750</td>
</tr>
<tr>
<td>39.</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>40.</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>41.</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>42.</td>
<td>0.2%</td>
<td>10,000.00</td>
<td>10,000</td>
<td>0%</td>
<td>-</td>
</tr>
<tr>
<td>43.</td>
<td>0.4%</td>
<td>15,000.00</td>
<td>15,000</td>
<td>0%</td>
<td>-</td>
</tr>
<tr>
<td>44.</td>
<td>0.4%</td>
<td>15,000.00</td>
<td>15,000</td>
<td>0%</td>
<td>-</td>
</tr>
<tr>
<td>45.</td>
<td>0.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Construction Engineering Total**: $498,000

**Construction Engineering Costs**: $372,000

**Other Eligible Costs**: $39,750

**Ineligible Costs**: $43,500

**Total Eligible Costs**: $4,111,700

**Cost Share Date Received**: August 29, 2022

**Federal or State Funds That Supplant Costs**: $0

**Cost Share**: 75%

---

*The cost-share estimate is purely for planning and informational purposes only and does not, in any way, guarantee a financial commitment to any degree, from the State Water Commission.*
**Life Cycle Cost Analysis Review**

**Sponsor:** Upper Souris Water Users District  
**Project Title:** System Wide Scada Improvements  
**Date:** September 6, 2022

**Explanations of Alternatives:**

Infrastructure Expansion (Preferred) - The proposed improvements would add additional transmission pipelines (4-inch) to increase flow and pressure throughout the system, improvements to Booster Station 3, and a telemetry system to improve system monitoring and control. The distribution system expansion would include the addition of up to 25 new rural users throughout the district’s service territory and 25 future users. Do Nothing: This alternative does not address the users' capacity problems or add any users.

**Inputs:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Connections Served</td>
<td>25</td>
</tr>
<tr>
<td>Future Connections Served</td>
<td>25</td>
</tr>
<tr>
<td>Current Connections Served</td>
<td>635</td>
</tr>
<tr>
<td>Net Connections (New + Current)</td>
<td>660</td>
</tr>
</tbody>
</table>

**LCCA Model Results:**

<table>
<thead>
<tr>
<th>Scenario Analysis - Present Value Life Cycle Cost Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital Costs</strong></td>
</tr>
<tr>
<td><strong>O&amp;M</strong></td>
</tr>
<tr>
<td><strong>Repair, Rehab, Replacement</strong></td>
</tr>
<tr>
<td><strong>Salvage Value</strong></td>
</tr>
<tr>
<td><strong>Total PVC</strong></td>
</tr>
</tbody>
</table>

**PV Cost Per User** $9,958

**Explanation of Results:**

The sponsor’s preferred project is the “Infrastructure Expansion” option. The present value cost of the preferred alternative is $6,572,000 and $0 for the “Do Nothing” alternative for comparison. The present value cost per user for the preferred alternative is $9,958. The monthly user cost of the local share with DWR 75% cost-share participation is $7.96 per month and $31.82 without DWR participation.

The economic model appears to have functioned properly. The results are deemed to be reliable and repeatable with the inputs provided by the project sponsor.
<table>
<thead>
<tr>
<th>Asset Description</th>
<th>Units</th>
<th>Unit Cost</th>
<th>QTY</th>
<th>Replacement %</th>
<th>Replacement Cost</th>
<th>Average Life (YRS)</th>
<th>Annual Reserve</th>
<th>Monthly Reserve</th>
<th>Monthly Reserve Per Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>System-wide SCADA Improvements</td>
<td>Lump Sum</td>
<td>$250,000.00</td>
<td>1</td>
<td>25.00%</td>
<td>$62,500</td>
<td>15</td>
<td>$4,167</td>
<td>$347</td>
<td>$0.34</td>
</tr>
<tr>
<td><strong>SUBTOTAL Existing CIP Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$62,500</td>
<td></td>
<td>$4,167</td>
<td>$347</td>
<td>$0.34</td>
</tr>
<tr>
<td><strong>TOTAL Existing and New Project CIP Costs</strong></td>
<td></td>
<td>$62,500</td>
<td>$4,167</td>
<td>$347</td>
<td>$0.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. Fill in colored items.
2. Enter existing asset project CIP costs.
3. Enter new asset project CIP costs.
4. Enter current total reserves and annual reserve.

Report Prepared by (Title): Abby Ritz (AE2S)

Date: 8/29/22
MEMORANDUM

TO: Members of the State Water Commission
FROM: Andrea Travnicek, Ph.D., Secretary
SUBJECT: 2023 Water Development Plan (WDP) Update
DATE: September 8, 2022

Project Inventory
Project sponsors were asked to provide changes or updates to the Water Development Plan inventory by August 15. Those updates have been completed.

WDP Web Pages & Dashboard
As mentioned previously, the intention for the 2023 planning effort is to provide the vast majority of information electronically through a Water Development Plan web page and dashboard. Staff have been working on content and populating sections of the dashboard. Draft information will be available for Commission review in October as scheduled.

A printed summary fact sheet that addresses the high points of the Water Development Plan will also be developed after all necessary information is available. The goal is to have this available for Commission consideration prior to Legislative session.

Goals & Highest Priority Initiatives
Previous Water Development Plans have been guided by two goals and key priority initiatives that tie directly back to the Commission’s Project Prioritization Guidance. Specifically, the key priority initiatives are those efforts that are identified as either essential or high priorities as outlined below. The following include improved draft DWR water development planning goals and key priority initiatives. Please note, until the ongoing Project Prioritization Guidance changes are approved, there could be more modifications necessary in the future.

Goal: Improve resiliency and protect North Dakota’s citizens and economy from negative water-related impacts.

Highest Priority Initiatives (Reflective of current Prioritization Guidance Draft)
- Address imminent flood or dam-related threats to human life or primary residences, or emergency response efforts.
- Support advancement of federally authorized flood protection projects.
- Support mitigation of low head dam roller effects.
- Support projects that protect primary residences or businesses from flooding in population centers or involve flood-related property acquisitions.
• Main Street Initiative related projects.

Goal: Improve resiliency and provide safe and reliable water supplies for the health and prosperity of North Dakota’s citizens and economy.

Highest Priority Initiatives (Reflective of current Prioritization Guidance Draft)
• Address imminent water supply loss to an existing multi-user system, or emergency response efforts.
• Support advancement of federally authorized water supply projects.
• Support new water supply connections between communities and rural or regional water systems that result in reduced costs through economies of scale.
• Correct violations of primary drinking water standards under the Safe Drinking Water Act.
• Address severe or anticipated water supply shortages for domestic use in a service area or city with rapid population growth.
• Main Street Initiative related projects.

If you have any comments or questions regarding the draft goals or highest priority initiatives, please send those to Pat Fridgen at pfridgen@nd.gov, or call (701)-328-4964 to discuss.

AT:pf/322
### 2023 Water Development Plan Timeline & Milestones

<table>
<thead>
<tr>
<th>Tasks</th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Request Project Information From Sponsors Via Letter, Email, Social Media Posts, Website, The Current Newsletter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reminder Post-card Mailing, Email, Social Media, Website, The Current Newsletter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Sponsor Information Development &amp; Submittals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-Submittal Deadline Correspondence With Project Sponsors - As Necessary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Commission Project Information Form Reviews</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commissioner-Hosted Basin Meetings (8 Total) - Project Inventory Made Available For Public Review/Updates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Inventory Updates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Development Plan/Dashboard Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Draft To SWC For Review</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Draft To SWC For Review</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWC Approval of 2023 WDP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Process Milestones**
PROJECT FUNDING POLICY, PROCEDURE, AND GENERAL REQUIREMENTS

POLICY PURPOSE & STATEMENT

The Water Commission (WPC) has adopted this policy to support local sponsors in development of sustainable water related projects in North Dakota. This policy reflects the Water Commission’s cost-share priorities and provides basic requirements for all projects considered for prioritization during the agency’s budgeting process. Projects and studies that receive funding from the agency’s appropriated funds are consistent with the public interest. The Water Commission values and relies on local sponsors and their participation to assure on-the-ground support for projects and prudent expenditure of funding for project or program development.

It is the policy of the Water Commission that only the items described in this document will be eligible for cost-share or loans upon approval by the Water Commission, unless specifically authorized by Water Commission action. No funds will be used in violation of Article X, § 18 of the North Dakota Constitution (Anti-Gift Clause).
APPLICATION PREOCCESS, REQUIREMENTS, AND REVIEW PROCEDURES

APPLYING FOR COST-SHARE ASSISTANCE
An application for cost-share is required in all cases and must be submitted by the local sponsor through North Dakota’s WebGrants portal. Sponsors seeking funding for water development projects through the Department of Water Resource’s (Department) Cost-Share Program should choose the “Funding for Infrastructure in North Dakota” (FIND) option/opportunity. To apply for funding through FIND, applicants must first establish a North Dakota login and account. Specific information related to WebGrants and the application process are available at www.dwr.nd.gov under “Project Development” and then “Cost-Share Program.” The application form is maintained and updated by the Secretary.

APPLYING FOR LOAN ASSISTANCE
In addition to cost-share and grants, the Water Commission may lend a portion of the local share based on demonstrated financial need. Project sponsors who are seeking loans for water infrastructure through the Bank of North Dakota Administered (BND) Water Infrastructure Revolving Loan Fund (WIRLF) or Legacy Infrastructure Loan Fund (LILF), must first receive Water Commission approval. For WIRLF or LILF requests, sponsors must provide a letter of verification from BND indicating the sponsor’s debt service capacity, and an explanation of the overall economic impact of the project as part of their request to the Water Commission. Projects not eligible for state revolving funds under chapters 61-28.1 and 61-28.2 must be given priority for loans from the WIRLF.

Applications for WIRLF or LILF loans are also initiated through the WebGrants portal. After receiving Water Commission approval to apply to BND for WIRLF or LILF loans, sponsors must follow BND loan application requirements.

PRE-APPLICATIONS FOR ASSESSMENT PROJECTS
A pre-application process is allowed for cost-share of assessment projects. This process only requires the local sponsor to submit a brief narrative of the project, and a delineation of costs (using SFN 61801). The Secretary will then review the material presented, make a determination of project eligibility, and estimate the cost-share funding the project may anticipate receiving.

A project eligibility letter will then be sent to the local sponsor noting the percent of cost-share assistance that may be expected on eligible items as well as listing those items that are not considered to be eligible costs. In addition, the project eligibility letter will state that the Secretary will recommend approval when all cost-share requirements are addressed. The local sponsor may use the project eligibility letter to develop a project budget for use in the assessment voting process. Upon completion of the assessment vote and all other requirements an application for cost-share can be submitted.
Applications for cost-share are accepted at any time. Incomplete applications or applications received less than 45 days before a Water Commission meeting will not be considered at that meeting and will be held for consideration at a future meeting. Meeting dates are available on the DWR homepage.

The Commission will consider cost-share requests and issue agreements under a two-tier process for applicable projects. Cost-share for pre-construction-related (Tier I) expenses will be considered first; followed by construction-related (Tier III) expenses after completion of pre-construction activities, including plans and specifications for bidding project construction.

In order for an application to be considered complete for Water Commission consideration, it must include the following supplemental materials:

**Tier I (Pre-Construction) Applications**

- Category of cost-share activity.
- Location of the proposed project or study area shown on a map.
- Description, purpose, goal, objective, and narrative of the proposed activities.
- Delineation of costs (SFN 61801), with contingencies of no more than 10 percent of the total project construction costs.
- Anticipated timeline of project from preliminary study through final closeout.
- Potential federal, other state, or other North Dakota state entity participation.
- Completed life cycle cost analysis worksheet for water supply projects. The completed worksheet must include a no action alternative, and up to three additional plausible alternatives - including repair, replacement, and regionalization options. If repair, replacement, and regionalization alternatives are excluded from the life cycle cost analysis, justification must be provided by the project sponsor.

**Tier II (Construction) Applications**

- Updated Tier I pre-construction application materials (see above).
- Engineering plans and specifications for purposes of bidding the project.
- Status of required permitting, including submission of approved drain, sovereign land, or construction permits if required by state statute.
- Status and type of local funding source.
- When applicable for flood control projects, a Conditional Letter of Map Revision (CLOMR) from the United State’s Federal Emergency Management Agency (FEMA).
- Potential territorial service area conflicts or service area agreements, if applicable.

**APPLICATION REQUIREMENTS AND MATERIALS**

In order for an application to be considered complete for Water Commission consideration, it must include the following supplemental materials.

- Completed life cycle cost analysis worksheet for water supply projects. The completed worksheet must include a no action alternative, and up to three additional plausible alternatives - including repair, replacement, and regionalization options. If repair, replacement, and regionalization alternatives are excluded from the life cycle cost analysis, justification must be provided by the project sponsor.
- Status of required permitting, including submission of approved drain, sovereign land, or construction permits if required by state statute.
- Status and type of local funding source.
- When applicable for flood control projects, a Conditional Letter of Map Revision (CLOMR) from the United State’s Federal Emergency Management Agency (FEMA).
- Potential territorial service area conflicts or service area agreements, if applicable.
• A completed Capital improvement Plan (CIP) for water supply projects, including demonstration of a sustainable Capital Improvement Fund (CIF), that at a minimum sets aside 2% percent of the cost of the asset(s) for which the Commission is cost-sharing over the expected life of the asset(s). (Required at the time applications include a request for construction cost-share.)

• Completed economic analysis worksheet for water conveyance and flood-related projects expected to cost two hundred thousand dollars or more.

• Results of a positive assessment vote (rural flood control projects only).

• A completed sediment analysis (drain reconstructions only).

• A property acquisition plan (flood property acquisition program only).

• Additional information as deemed appropriate by the Secretary or Commission.

Water Development Plan Submittals

Applications for cost-share are separate and distinct from the Department and Commission’s biennial project information collection effort that is part of the budgeting process and published as the State Water Development Plan (WDP). All local sponsors are encouraged to submit project financial needs for the WDP. Projects not submitted as part of the WDP process may be held until action can be taken on those that were included during budgeting, unless determined to be an emergency that directly impacts human health and safety or that are a direct result of a natural disaster.

APPLICATION REVIEWS

Upon receiving an application for cost-share, the Secretary will review the application and accompanying information. If the Secretary is satisfied that the proposal meets all requirements, the Secretary will give a 10-day notice to the local sponsor when their application for cost-share is placed on the tentative agenda of the Water Commission. The local sponsor will be asked to attend that meeting when their application is being considered.

The Secretary will provide a recommendation to the Water Commission for its action. The Secretary’s review of the application will include the following items and any other considerations that the Secretary deems necessary and appropriate.

• All required Tier I or Tier II application materials.
• Applicable engineering plans.
• Field inspection results, if deemed necessary by the Secretary.
• The percent and limit of proposed cost-share determined by category of cost-share activity and eligible expenses.
• Assurance of sustainable operation, maintenance, and replacement of project facilities by the local sponsor (including a Capital Improvement Plan and evidence of a Capital Improvement Fund for water supply projects).
• Status of permitting and service area agreements.
SECRETARY APPROVALS

The Secretary is authorized to approve cost-share up to $75,000 and also approve cost overruns up to $75,000 without Water Commission action. The Secretary will respond to such requests within 60 days of receipt of the request. A final decision may be deferred if warranted by funding or regulatory consideration.

AGREEMENT AND DISTRIBUTION OF FUNDS

No funds will be disbursed until the Water Commission and local sponsor have entered into an agreement for cost-share participation. No agreement for construction funding will be entered into until all required Department permits have been acquired.

For construction projects, the agreement will address indemnification and vicarious liability language. The local sponsor must require that the local sponsor and the state be made an additional insured on the contractor’s commercial general liability policy including any excess policies, to the extent applicable. The levels and types of insurance required in any contract must be reviewed and agreed to by the Secretary. The local sponsor may not agree to any provision that indemnifies or limits the liability of a contractor.

For any property acquisition, the agreement will specify that if the property is later sold, the local sponsor is required to reimburse the Commission the percent of sale price equal to the percent of original cost-share.

The Secretary may make partial payment of cost-sharing funds as deemed appropriate. Upon notice by the local sponsor that all work or construction has been completed, the Secretary may conduct a final field inspection. And the local sponsor must identify with signage that the completed project was paid for through a cooperative effort with the Department. If the Secretary is satisfied that the work has been completed in accordance with the agreement, the final payment will be disbursed to the local sponsor, less any partial payment previously made.

PROJECT PROGRESS REPORTS

The project sponsor must provide a progress report to the Commission at least once every four years if the term of the project exceeds four years. If a progress report is not received in a timely fashion, or if after a review of the progress report the Commission determines the project has not made sufficient progress, the Commission may terminate the agreement for project funding. The project sponsor may submit a new application to the Commission for funding for a project for which the Commission previously terminated funding.

DRAFT FOR REVIEW – SEPTEMBER 15, 2022
LITIGATION
If a project submitted for cost-share is the subject of litigation, the application may be deferred until the litigation is resolved. If a project approved for cost-share becomes the subject of litigation before all funds have been disbursed, the Secretary may withhold funds until the litigation is resolved. In either of the aforementioned cases, it is the local sponsor’s responsibility to notify the Department and Commission of litigation related to their project(s).

ECONOMIC ANALYSIS
Project sponsors seeking cost-share for construction of flood control or water conveyance projects with a total cost of two hundred thousand dollars or more must complete the Water Commission’s economic analysis worksheet. The results of the economic analysis must be provided with the sponsor’s application for cost-share assistance for agency review. When the results of the economic analysis are determined by the Department to be accurate, the results will then be presented to the Water Commission for their consideration as part of the cost-share request.

Projects that yield a benefit to cost (BC) ratio of one to one, or greater, are eligible for up to the maximum allowable cost-share per project type and policy. Projects that yield a BC ratio of less than one to one will have the BC ratio used as a percentage of the allowable cost-share (i.e. eligible costs, multiplied by the applicable cost-share percentage, multiplied by the BC ratio) – unless otherwise authorized by the Commission.

Projects that will result in FEMA accredited flood protection for communities may be exempt from the requirement of using the BC ratio as a percentage of the allowable cost-share.

[Alternative Option: In communities where flood protection currently exists, but it is not FEMA accredited – the Economic Analysis will be conducted with a baseline condition of no existing protection, if the completed project goal is FEMA accredited flood protection.]

LIFE CYCLE COST ANALYSIS
Project sponsors seeking cost-share for water supply projects must complete the Water Commission’s life cycle cost analysis worksheet. The completed worksheet must include a no action alternative, and up to three additional plausible alternatives - including repair, replacement, and regionalization options. If repair, replacement, and regionalization alternatives are excluded from the life cycle cost analysis, justification must be provided by the project sponsor.

The results of the life cycle cost analysis must be provided with the sponsor’s application for cost-share assistance for agency review. When the results of the life cycle cost analysis are determined by the agency to be accurate, the results will then be presented to the Water Commission for their consideration as part of the cost-share request.
PROJECT FRACTURING

The fracturing or separating of projects into smaller components to avoid policy requirements is prohibited. If the Commission determines a project has been fractured for this purpose, the entire project, or elements of the project, may be considered ineligible for cost-share assistance.

INELIGIBLE ITEMS

Ineligible items from cost-share include:

1. Administrative costs, including salaries for local sponsor members and employees as well as consultant services that are not project specific and other incidental costs incurred by the sponsor.

2. Property and easement acquisition costs paid to the landowner unless specifically identified as eligible within the Flood Recovery Property Acquisition Program, the Flood Protection Program, or water retention projects.

3. Work and costs incurred prior to a cost-share approval date, except for emergencies as determined by the Secretary.

4. Project related operation and regular maintenance costs.

5. Sediment removal as part of reconstruction of an existing drain.

6. Funding contributions provided by federal, other state, or other North Dakota state entities that supplant costs.

7. Elements of finished water storage projects that are sized in excess of the capacity necessary for peak daily consumption. This excludes storage associated with water treatment plants. Peak daily consumption means the peak reported water usage identified during the previous ten year period.

8. Wastewater treatment processes and wastewater effluent transmission lines not for beneficial use.

9. Stormwater management studies and projects within the corporate limits of cities. To differentiate between a flood control project and stormwater management, the Commission may reduce the cost-share provided by the percentage of the contributing watershed that is located within the community’s corporate limits as calculated on an acreage basis.

10. Work incurred outside the scope of the approved study or project.

11. Invoices that are dated one year or more before the date they are received by the Department for reimbursement. Invoices submitted by agricultural producers who have been approved for cost-share through the Drought Disaster Livestock Water Assistance Program are exempt.

12. Local requirements imposed beyond State and Federal requirements for the project may be ineligible.

DEFINITIONS

CAPITAL IMPROVEMENT FUND is money set aside from a portion of user fees for the year.

COST-SHARE APPLICATION AND APP...
COST-SHARE ELIGIBLE PROJECTS AND PROGRAMS

COST-SHARE CATEGORIES
The Water Commission supports the following categories of projects and programs for cost-share.

ASSET INVENTORY ASSESSMENT AND CAPITAL IMPROVEMENT PLANNING (AIACIP) PROGRAM
The Water Commission encourages planning efforts that support the long-term financial sustainability of water supply infrastructure projects and works. The primary purpose of the AIACIP is to help local project sponsors with the development and establishment of capital improvement funds necessary for proactive financial management of their water supply systems.

In support of the AIACIP, the Commission can provide 50 percent cost-share, with a maximum of $100,000 in matching funds per sponsor for developing an inventory of water supply infrastructure, to assess the condition of assets, to prioritize the most critical water supply infrastructure needs, and to develop a capital improvement plan and fund to support the sponsor’s water supply projects and infrastructure.

Sponsors seeking cost-share assistance through the AIACIP must follow Water Commission criteria established for this program as outlined in APPENDIX 3.

PRE-CONSTRUCTION
The State Water Commission supports local sponsor development of eligible projects, including pre-construction activities. Pre-construction expenses are cost-shared at 50 percent (Option 1) or the same percent as the construction costs when approved by the Water Commission (Option 2). Copies of the deliverables must be provided to the Secretary upon completion. The Secretary will determine the payment schedule and interim progress report requirements.

COST INCREASES
When a sponsor has been approved for cost-share assistance and additional cost-share is requested as a result of increased construction-related costs, only those eligible construction-related costs, and construction engineering costs that are directly related to, and are resulting from, the cost increase are eligible for additional cost-share. Pre-construction engineering costs are a non-eligible expense as part of cost increase cost-share requests.

MAIN STREET INITIATIVE
The Commission supports water development infrastructure that aligns with the Main Street Initiative, which is one of North Dakota’s five Strategic Initiatives. The four foundational pillars of the Main Street Initiative are Skilled Workforce; Smart, Efficient Infrastructure; Healthy, Vibrant Communities; and Economic Diversification. In support of the Main Street Initiative, the Commission can provide additional cost-share assistance of 10 percent beyond existing cost-share percentages, with a maximum of $250,000 in additional funding, if an eligible water infrastructure project:

1. Is located within a community that has received a “Main Street Champion” designation from North Dakota’s Department of Commerce (NDDC).
2. Has been identified as an integral part of a completed comprehensive planning effort or action plan that was developed through the NDDC “Partners in Planning” grant program; and
3. Meets all other Commission eligibility requirements for cost-share.

DRAFT FOR REVIEW – SEPTEMBER 15, 2022 8
WATER SUPPLY
The Water Commission supports water supply efforts associated with regional, rural, and municipal water supply systems. The transmission of reclaimed water for beneficial use is also an eligible cost. Debt per capita, water rates and financial need may be considered by the Commission when determining an appropriate cost-share percentage or priority.

Regional, Rural, And Municipal Water Supply Projects.
The Commission reserves flexibility to adjust percentages on a case-by-case basis, but generally may provide:

- Up to 75 percent cost-share for:
  - Regional and rural water system expansions and improvements
  - New connections between communities and regional or rural systems that reduce costs through economies of scale
  - Improvements required to meet primary drinking water standards

- Up to 60 percent cost-share for:
  - Municipal water supply expansions and improvements
  - Connection of new rural water customers located within extraterritorial areas of a municipality

A lesser amount of cost-share for replacement projects as determined by the Commission.

Water depots for industrial use receiving water from facilities constructed using Water Commission funding or loans have the following additional requirements:

- Domestic water supply has priority over industrial water supply in times of shortage. This must be explicit in the water service contracts with industrial users.
- If industrial water service will be contracted, public notice of availability of water service contracts is required when the depot becomes operational.
- Public access to water on a non-contracted basis must be provided at all depots.

Federal Municipal, Rural, And Industrial Water Supply Program
The Municipal, Rural, and Industrial Water Supply Program, which uses federal funds, is administered according to North Dakota Administrative Code Article 89-12.

Drought Disaster Livestock Water Assistance Program
This program provides assistance with projects that support livestock impacted during drought declarations and is administered according to North Dakota Administrative Code Article 89-11. The Commission may provide up to 50 percent cost-share for Drought Disaster Livestock Water Assistance Program projects, but no more than $15,000 per project, and three projects per applicant.

FLOOD CONTROL
The Water Commission may provide cost-share for eligible items of flood control projects protecting communities from flooding and may include the repair of dams that provide a flood control benefit.

DRAFT FOR REVIEW – SEPTEMBER 15, 2022
When applicable, project sponsors must first acquire a Conditional Letter of Map Revision (CLOMR) from FEMA prior to applying for construction-related cost-share assistance.

**Flood Protection Program**

This program supports local sponsor efforts to mitigate impacts and prevent future property damage due to flood events. The Water Commission may provide cost-share up to 60 percent of eligible costs for flood protection projects and related property acquisitions. Flood recovery acquisition efforts in severely impacted communities may be considered for alternative cost-share percentages based on the severity of the event and at the Commission’s discretion.

All contracted costs directly associated with property acquisitions for project development or recovery under this program will be considered eligible for cost-share. This includes the acquisition of flood damaged properties or properties necessary for project development. Contracted costs may include: appraisals, legal fees (title and abstract search or update, etc.), property survey, closing costs, hazardous materials abatement needs (asbestos, lead paint, etc.), and site restoration.

Prior to applying for assistance related to acquisitions, the local sponsor must adopt and provide to the Secretary an acquisition plan that includes a description and map of properties to be acquired; the estimated cost of property acquisition, including contract costs and removal of structures; and the benefit of acquiring the properties.

The local sponsor must include a perpetual restrictive covenant on any properties purchased under this program. These covenants must be recorded either in the deed or in a restrictive covenant that would apply to multiple deeds. Costs for property acquired, by easement or fee title, to preserve the existing conveyance of a breakwater corridor recognized as essential to FEMA system accreditation may be eligible under this program.

The local sponsor must fund the local share for acquisitions. Federal funds are considered "local" for this program if they are entirely under the authority and control of the local sponsor. For any property acquisition, the agreement will specify that if the property is later sold, the local sponsor is required to reimburse the Commission the percent of sale price equal to the percent of original cost-share.

The cost-share application must include the return interval or design flow for which the project will provide protection. The Commission will calculate the amount of its financial assistance, based on the needs for protection against:

1. One-hundred year flood event as determined by a federal agency;
2. The national economic development alternative; or
3. The local sponsor’s preferred alternative if the Commission first determines the historical flood prevention costs and flood damages and the risk of future flood prevention costs and flood damages, warrant protection to the level of the local sponsor’s preferred alternative.

**FEMA Levee System Accreditation Program**

The Water Commission may provide cost-share up to 60 percent for eligible services for FEMA 44 CFR 65.10 flood control or reduction levee system certification analysis. The analysis is required for FEMA to accredit the levee system for flood insurance mapping purposes. Typical eligible costs include site visits and field surveys to include travel expenses, hydraulic evaluations, closure evaluations, geotechnical evaluations, embankment protection, soils investigations, interior drainage evaluations, internal drainage hydrology and hydraulic reports, system modifications, break-out flows, and all other engineering services needed for construction of temporary or long-term protection against.

Deleted: [70]

Deleted: [69]

Deleted: [68]

Deleted: [67]

Deleted: [66]

Deleted: [65]

Deleted: [64]
required by FEMA. The analysis will result in a comprehensive report to be submitted to FEMA and the Secretary.

Administrative costs to gather existing information or to recreate required documents, maintenance and operations plans and updates, and emergency warning systems implementation are not eligible.

**Water Retention Projects**

The goal of water retention projects is to reduce flood damages by storing floodwater upstream of areas prone to flood damage. The Water Commission may provide cost-share up to 60 percent of eligible costs for water retention projects including purchase price of the property. Water retention structures constructed with Water Commission cost-share must meet state dam safety requirements, including the potential of cascade failure. A hydrologic analysis including an operation plan and a quantification of the flood reduction benefits for 25, 50, and 100-year events must be submitted with the cost-share application.

**Individual Rural And Farmstead Ring Dike Program**

This program is intended to protect individual rural homes and farmsteads through ring dike programs established by water resource districts. All ring dikes within the program are subject to the Commission’s Individual Rural and Farmstead Ring Dike Criteria provided in Appendix B. Protection of a city, community or development area does not fall under this program but may be eligible for the flood control program. The State Water Commission may provide up to 60 percent cost-share of eligible items for ring dike up to a limit of $55,000 per ring dike.

Landowners enrolled in the Natural Resource Conservation Service’s (NRCS) Environmental Quality Incentive Program (EQIP) who intend to construct rural or farmstead ring dikes that meet the Department’s elevation design criteria are eligible for a cost-share reimbursement of 20 percent of the NRCS construction payment, limited to a combined NRCS and State Water Commission contribution of 80 percent of project costs.

**WATER CONVEYANCE**

The Water Commission may provide cost-share for eligible items of water conveyance projects. Water conveyance projects include rural flood control, bank stabilization, and snagging and clearing.

**Rural Flood Control**

These projects are intended to improve the drainage and management of runoff from agricultural sources. The State Water Commission may provide cost-share up to 45 percent of the eligible items for the construction of ditches, channels, or diversion ditches. Construction costs for public road crossings that are integral to the project are eligible for cost-share as defined in N.D.C.C. § 61-21-31 and 61-21-32. If an assessment-based rural flood control project involves multiple districts, each district involved must join in the cost-share application.

Cost-share applications for rural assessment drains will only be processed after the assessment vote has passed, and a drain permit has been obtained. If the local sponsor wishes to submit a cost-share application prior to completion of the aforementioned steps, a pre-application process will be followed.

A sediment analysis must be provided with any application for cost-share assistance for reconstruction of an existing drain. The analysis must be completed by a qualified professional engineer and must clearly indicate the percentage volume of sediment removal involved in the project. The cost of that removal must be deducted from the total for which cost-share assistance is being requested.

**Bank Stabilization**

**DRAFT FOR REVIEW – SEPTEMBER 15, 2022**
The State Water Commission may provide cost-share up to 50 percent of eligible items for bank stabilization projects on public lands or those lands under easement by federal, state, or political subdivisions. Bank stabilization projects are intended to stabilize the banks of lakes or watercourses, as defined in N.D.C.C § 61-01-06, with the purpose of protecting public facilities. Drop structures and outlets are not considered for funding as bank stabilization projects, but may be eligible under other cost-share program categories. Bank stabilization projects typically consist of a rock or vegetative design and are intended to prevent damage to public facilities including utilities, roads, or buildings adjacent to a lake or watercourse.

**Snagging And Clearing**

Snagging and clearing projects consist of the removal and disposal of fallen trees and associated debris encountered within or along the channel of a natural watercourse. Snagging and clearing projects are intended to prevent damage to structures such as bridges, and maintain the hydraulic capacity of the channel during flow events. The Water Commission may provide cost-share for up to 50 percent of the eligible items for snagging and clearing as well as any sediment that has accumulated in the immediate vicinity of snags and any trees in imminent danger of falling in the channel or watercourses as defined in N.D.C.C § 61-01-06. Items that are not eligible include snagging and clearing of man-made channels; the dredging of watercourses for sediment removal; the clearing and grubbing of cattails and other plant vegetation; or the removal of any other unwanted materials.

**RECREATION**

The Water Commission may provide cost-share up to 40 percent for projects intended to provide water-based recreation. Typical projects provide or complement water-based recreation associated with dams.

**IRRIGATION**

The Water Commission may provide cost-share for up to 50 percent of the eligible items for irrigation projects. The items eligible for cost-share are those associated with the off-farm portion of new central supply works, including water storage facilities, intake structures, wells, pumps, power units, primary water conveyance facilities, and electrical transmission and control facilities. The Commission will only enter into cost-share agreements with political subdivisions, including irrigation districts, and not with individual producers.

**DAMS AND EMERGENCY ACTION PLANS**

The Water Commission supports projects that address dam safety, deficiencies, repairs, and removals, as well as emergency action plans. In addition to the following cost-share percentages, the State Water Commission may lend a portion of the local share based on demonstrated financial need. For dams and emergency action plans, the Water Commission may:

1. Provide cost-share for up to 60 percent of the eligible items for dam deficiency or repair projects and dam breach or removal projects.
2. Provide cost-share up to 75 percent to mitigate public dangers associated with low head dam roller effects. Cost-share funding will be considered under this category for dam removals, or the placement of rock rip rap, but not both. Modifications, repairs, or removals that go beyond what is required to mitigate roller effects may be cost-shared at lesser amounts depending on the purpose for which the supplemental modifications or repairs are being made (i.e. recreation, water supply, flood control, irrigation, etc).
3. Provide cost-share up to 80 percent to develop or update emergency action plans of each dam classified as high or medium/significant hazard.

---

DRAFT FOR REVIEW – SEPTEMBER 15, 2022
APPENDIX A

DEFINITIONS

CAPITAL IMPROVEMENT FUND is money set aside from a portion of user fees for replacement of capital projects. Documentation for a Capital Improvement Fund shall include information regarding the Capital Improvement Fund's goal in meeting the Capital Improvement Plan, a rate structure to meet the goal, implementation of the rate structure, details about any restrictions on the fund, and mechanisms for releasing assets from the fund for projects.

CAPITAL IMPROVEMENT PLAN is a planning and management tool that contains a timeline and estimated costs for planned replacement of individual capital projects for a system over a specified period of time. A Capital Improvement Plan should include an inventory of all existing assets, a condition assessment of all assets, estimated replacement costs, and an estimated timeframe for replacements.

CAPITAL PROJECTS include reservoirs, pump stations, water treatment plants, and pipelines.

CONSTRUCTION COSTS are those efforts and services to be completed as work under construction contract documents. Items could include earthwork, concrete, mobilization and demobilization, dewatering, materials, seeding, rip-rap, crop damages, re-routing electrical transmission lines, moving storm and sanitary sewer system and other underground utilities and conveyance systems affected by construction, mitigation required by law related to the construction contract, water supply works, irrigation supply works, and other items and services provided by the contractor. Construction costs are only eligible for cost-share if incurred after State Water Commission approval and if the local sponsor has complied with North Dakota Century Code (N.D.C.C.) in soliciting and awarding bids and contracts, and complied with all applicable federal, state, and local laws.

COST-SHARE means funds appropriated by the legislative assembly or otherwise transferred by the Commission to a local entity under Commission policy as reimbursement for a percentage of the total approved cost of a project approved by the Commission.

DEPARTMENT means the Department of Water Resources.

ECONOMIC ANALYSIS means an estimate of the economic benefits and direct costs that result from the development of a project.

ECONOMIC IMPACT describes the direct and indirect changes in a defined region's economy due to a specific business, organization, policy, program, project, activity or other economic event.

ENGINEERING SERVICES include pre-construction and construction engineering. Pre-construction engineering is the engineering necessary to develop plans and specifications for permitting and construction of a project including preliminary and final design, material testing, flood insurance studies, hydraulic models, and geotechnical investigations. Construction engineering is the engineering necessary to build the project designed in the pre-construction phase including construction contract management, and construction observation. Administrative and support services not specific to the approved project are not engineering services. Engineering services are eligible costs if incurred after State Water Commission approval.

EXPANSIONS are construction related projects that increase the project area or users served. Expansions do not include maintenance, replacement, or reconstruction activities.
EXTRAORDINARY MAINTENANCE COSTS include the repair or replacement of portions of facilities or components that extends the overall life of the system or components that are above and beyond regular or normal maintenance. Extraordinary maintenance activities extend the asset’s useful life beyond its originally predicted useful life.

GRANT means a one-time sum of money appropriated by the legislative assembly and transferred by the Commission to a local entity for a particular purpose. A grant is not dependent on the local entity providing a particular percentage of the cost of the project.

IMPROVEMENTS are construction related projects that upgrade a facility to provide increased efficiency, capacity, or redundancy. Improvements do not include any activities that are maintenance or replacement.

LIFE CYCLE COST ANALYSIS means the summation of all costs associated with the anticipated useful life of a project, including project development, land, construction, operation, maintenance, and disposal or decommissioning.

LITIGATION for this policy is defined as legal action that would materially affect the ability of the local sponsor to construct the project; that would delay construction such that the authorized funds could not be spent; or is between political subdivisions related to the project.

LOAN means an amount of money lent to a sponsor of a project approved by the Commission to assist with funding approved project components. A loan may be stand-alone financial assistance.

LOCAL SPONSOR is the entity submitting a cost-share application and must be a political subdivision, state entity, or commission legislatively granted North Dakota recognition that applies the necessary local share of funding to match State Water Commission cost-share. They provide direction for studies and projects, public point of contact for communication on public benefits and local concerns, and acquire necessary permits and rights-of-way.

PRE-CONSTRUCTION activities include study and report phase efforts, and preliminary and final design. Study and report phase efforts are meant to identify water related problems, evaluate options to solve or alleviate the problems based on technical and financial feasibility, and provide a recommendation and cost estimate of the best option to pursue. Engineering design is considered complete when final plans, drawings, and specifications for permitting and construction of a project, including associated cultural resource and archeological studies, are delivered to the local sponsor. Study and report phases, as well as design can also include mapping and surveying to gather data for a specific task such as flood insurance studies and floodplain mapping, LiDAR acquisition, and flood imagery attainment.

RECLAIMED WATER is municipal wastewater that has been treated to meet specific water quality criteria with the intent of being used for a range of purposes. The term recycled water is synonymous with reclaimed water.

REGULAR MAINTENANCE COSTS include normal repairs and general upkeep of facilities to allow facilities to continue proper operation and function. These maintenance items occur on a regular or annual basis. Regular maintenance activities simply help ensure the asset will remain serviceable throughout its originally predicted useful life.

REPLACEMENT means repairing or rehabilitating infrastructure or equipment by installing components similar to what currently exists with the intention of preserving existing service levels.

STORMWATER is rainwater or melted snow that runs off streets, lawns, and other sites.
SUSTAINABLE OPERATION, MAINTENANCE, AND REPLACEMENT PLAN is a description of the anticipated operation, maintenance, and replacement costs with a statement that the operation, maintenance, and replacement of the project will be sustainable by the local sponsor.

WASTEWATER is used water discharged from homes, businesses, industry, and agricultural facilities.

WASTEWATER EFFLUENT is treated wastewater flowing out of a wastewater treatment plant.

WATER CONVEYANCE PROJECT means any surface or subsurface drainage works, bank stabilization, or snagging and clearing of water bodies.

WORK includes and is the result of performing or providing all labor, services, and documentation necessary for construction, furnishing, installing, and incorporating all materials and equipment into such construction, and may include related services such as testing, start-up, and commissioning, all as required by the construction contract documents.

---

1 Engineers Joint Contract Documents Committee, 2014 – National Society of Professional Engineers, American Council of Engineering Companies, and American Society of Civil Engineers

DRAFT FOR REVIEW – SEPTEMBER 15, 2022
APPENDIX B

INDIVIDUAL RURAL AND FARMSTEAD RING DIKE CRITERIA

MINIMUM DESIGN CRITERIA

- **Height:** The dike must be built to an elevation 2 ft above either the 100-year flood or the documented high water mark of a flood event of greater magnitude, whichever is greater.

- **Top Width:**
  - If dike height is 5 ft or less: 4 ft top width
  - If dike height is between 5 ft and 14 ft: 6 ft top width
  - If dike height is greater than 14 ft: 8 ft top width

- **Side Slopes:** 3 horizontal to 1 vertical

- **Strip topsoil and vegetation:** 1 ft

- **Adequate embankment compaction:** Fill in 6-8 inch layers, compact with passes of equipment

- **Spread topsoil and seed on ring dike**

LANDOWNER RESPONSIBILITY

Landowners are responsible to address internal drainage on ring dikes. If culverts and flap gates are installed, these costs are eligible for cost-share. The landowner has the option of completing the work or hiring a contractor to complete the work. **IF CONTRACTOR DOES THE WORK, payment is for actual costs with documented receipts. IF LANDOWNER DOES THE WORK, payment is based on the following unit prices:**

- **Stripping, spreading topsoil, and embankment fill:** Secretary will determine rate schedule based on current local rates.

- **Seeding:** Cost of seed times 200 \( \text{percent} \)

- **Culverts:** Cost of culverts times 150 \( \text{percent} \)

- **Flap gates:** Cost of flap gates times 150 \( \text{percent} \)

OTHER FACTS AND CRITERIA

- The topsoil and embankment quantities will be estimated based on dike dimensions. Construction costs in excess of the 3:1 side slope standard will be the responsibility of the landowner. Invoices will be used for the cost of seed, culverts, and flap gates.

- **Height can be determined by existing FIRM data or known elevations available at county floodplain management offices. Engineers or surveyors may also assist in establishing height elevations.**

- **The projects will not require extensive engineering design or extensive cross sections.**

  - A dike permit is required if the interior volume of the dike consists of 50 acre-feet, or more.
APPENDIX C
STANDARD OPERATING PROCEDURES

It has been determined by the Commission that there are Cost-Share Program operational procedures that are more appropriately clarified through Standard Operation Procedures (SOP). The following SOP have been approved by the Commission to assist Department staff with various administrative decisions related to the Cost-Share Program.

COST INCREASES
The following are various types of projects for which sponsors request cost increase assistance.

1. Projects approved for cost-share during the current biennium, and are requesting additional cost-share funding for cost increases.

SOP
- Requests in excess of $75,000 will be presented to the Commission for consideration.
- Requests of $75,000 or less will be considered by the Director Secretary.

2. Projects approved for cost-share during past biennia, and are requesting current biennium cost-share funding or available carryover funds for cost increases.

SOP
- Requests in excess of $75,000 may be deferred for the first six months of the biennium before being presented to the Commission for consideration.
- Requests of $75,000 or less may be deferred for the first six months of the biennium before being considered by the Director Secretary.

3. Projects that were denied or deferred for cost increase funding during the previous biennium.

SOP
- Requests in excess of $75,000 may be deferred for the first six months of the biennium before being presented to the Commission for consideration.
- Requests of $75,000 or less may be deferred for the first six months of the biennium before being considered by the Director Secretary.

PROJECTS NOT SUBMITTED TO THE WATER DEVELOPMENT PLAN
Project sponsors will sometimes request cost-share funding for projects that are eligible under the agency’s cost-share policy, but were not submitted or included in the current Water Development Plan (WDP). The following are various types of projects that are not included in the current WDP, but are submitted for cost-share consideration.

1. Projects that were, or were not identified in the previous biennium WDP, and are not included in the current WDP.
SOP

- These projects will be deferred for the first six months of the biennium for Commission consideration. (Exceptions are those projects considered to be an emergency – directly impacting human health and safety.)

Moved up [6]: Invoices that are dated one year or date they are received by the Department for reimbursement.

SOP!

Those invoices are considered ineligible for reimbursement. Invoices submitted by livestock producers who have been approved for cost-share through the Drought Disaster Livestock Water Assistance Program are exempt from this SOP.

LOW HEAD DAM REPAIRS – ROLLER EFFECT MITIGATION

Under the revised “Dam Safety and Emergency Action Plans” section of the Water Commission’s cost-share policy, the Commission will provide 75% cost-share to mitigate public dangers associated with low head dam roller effects. The following are various types of low head dam improvement projects that are submitted for cost-share consideration.

- Dam breaches, removals, or rock rip rap.

SOP!

The Water Commission may cost-share up to 75% to mitigate public dangers associated with low head dam roller effects. Cost-share funding will be considered under this category for dam removals, or the placement of rock rip rap, but not both.

- Modifications, repairs, or removals that go beyond what is minimally required to mitigate roller effects may be cost-shared at lesser amounts – depending on the purpose for which the supplemental modifications or repairs are being made (i.e. recreation, water supply, flood control, irrigation, etc).

LIFE CYCLE COST ANALYSIS FOR PRECONSTRUCTION & CONSTRUCTION REQUESTS

Under the “Life Cycle Cost Analysis” section of the Water Commission’s cost-share policy, project sponsors...
Page 8: [31] Deleted

Page 8: [32] Formatted
Font: Not Italic

Page 8: [33] Deleted

Page 8: [34] Formatted
Indent: Left: 0", Space Before: 0 pt, After: 0 pt

Page 8: [35] Formatted
Not Highlight

Page 8: [36] Formatted
Highlight

Page 8: [37] Deleted

Page 8: [38] Formatted
Indent: Left: 0", Hanging: 0.3", Space Before: 0 pt

Page 8: [39] Formatted
Space Before: 0 pt, No bullets or numbering

Page 8: [40] Formatted
Highlight

Page 8: [41] Deleted

Page 8: [42] Formatted
Space Before: 0 pt

Page 8: [43] Formatted
Space Before: 0 pt, No bullets or numbering

Page 8: [44] Formatted
Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 1" + Indent at: 1.25"

Page 8: [45] Formatted
List, Space Before: 0 pt, Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 1" + Indent at: 1.25"
Outline numbered + Level: 1 + Numbering Style: Bullet + Aligned at: 1" + Indent at: 1.25"

Indent: Left: 0", Hanging: 0.3", Space Before: 0 pt

Space Before: 0 pt, No bullets or numbering

Indent: Left: 0", Hanging: 0.3", Space Before: 0 pt

Space Before: 0 pt, No bullets or numbering

Strikethrough

Strikethrough

Strikethrough

Strikethrough

Indent: Left: 0", Hanging: 0.3", Space Before: 0 pt

Space Before: 0 pt, No bullets or numbering
# SWC Project Prioritization Guidance

Projects submitted during the project planning inventory process that meet SWC cost-share eligibility requirements will be considered for prioritization. In the interest of strategically investing in the state's highest water development priorities, the Water Commission will give funding preference to projects designated as higher priorities for the first 12 months of each budget cycle.

### Low Priority Projects
- Studies, reports, analyses, surveys, models, evaluations, mapping projects, or engineering designs.
- Improvement or extraordinary maintenance of a water supply system.
- Improvement or extraordinary maintenance of rural flood control projects.
- Recreation projects.
- Individual rural and farmstead ring dike constructions.
- Snagging and clearing in sparsely populated areas.

### Moderate Priority Projects
- Dam safety repairs and emergency action plans.
- Expansion of an existing water supply system (including to industrial users).
- Levee system accreditations, water retention, or flood protection property acquisitions.
- Irrigation system construction.
- New rural flood control projects.
- Bank stabilization.
- Snagging and clearing in population centers.

### High Priority Projects
- Federally authorized water supply or flood control projects with a federal funding appropriation.
- Federally authorized water supply or flood control projects that do not have a federal appropriation.
- New water supply connections between communities and rural or regional water systems that result in reduced costs through economies of scale.
- Mitigation of low head dam roller effects.
- Corrects a lack of water supply for a group of water users or connects a city to a regional/rural system.
- Corrects a violation of a primary water quality condition in a water supply system.
- Addresses severe or anticipated water supply shortages for domestic use in a service area or city with rapid population growth.
- Protects primary residences or businesses from flooding in population centers or involves flood recovery property acquisitions.

### Essential Projects (No Priority Ranking)
- Agency operational expenses.
- An imminent water supply loss to an existing multi-user system, an immediate flood or dam related threat to human life or primary residences, or emergency response efforts.
- Existing agency debt obligations.
- SWC project mitigation.

### Footnotes
1. All local sponsors are encouraged to submit project financial needs during the budgeting process. Projects not submitted as part of the project information collection effort may be held until action can be taken on those that were included during budgeting, unless determined to be an emergency that directly impacts human health and safety or that are a direct result of a natural disaster.

### Disclaimer
This process is meant to provide guidance for prioritizing water projects during the budgeting process that may be eligible for cost-share assistance through the Department of Water Resources. Interpretation and deviations from the process are within the discretion of the state as authorized by the State Water Commission or Legislature.
Water Commissioner-Hosted Basin Meeting Notes

Mouse River Basin, Minot, 7-6-2022

Commissioner Jason Zimmerman
  • Provided an introduction and discussed the accomplishments of the Commission this biennium.

Pat Fridgen, Department of Water Resources (DWR) Staff
  • Provided the DWR agency update, Water Development Plan update, and policy considerations for comment.

Ryan Ackerman, Ackerman-Estvold – (Handout)
  • Provided a progress update on the Mouse River Enhanced Flood Protection Project (MREFPP).
  • MREFPP representatives met with Governor Burgum to discuss the project and future needs and with Senator Hoeven to discuss federal support and role.
  • MREFPP sponsors have submitted a $76.1M appropriation request for 2023-2025 into the Water Development Plan.

Dennis Reep, HDR Inc., Representing Ward County Water Resource District (WCWRD) – (Handout)
  • The WCWRD detention project is complete.
  • They support the MREFPP.
  • Looking forward, WCWRD will begin to address remediation of low head dams and additional retention upstream of Minot.

Dani Quissell, ND Water Users – (Handout)
  • Fire Flow language is too limiting.
  • Infrastructure replacement still needs state assistance when failure is premature.
  • Presented economic analysis (EA) averaging as a reason to discontinue EAs on projects under $1 million.
  • Support plus up funding mechanisms.
  • Decrease in preconstruction and rural percentages will mean rate increases.
  • Want large projects out of the existing appropriation buckets and to see alternative legislative funding for larger projects.
  • Want a policy meeting with their board and all the commissioners to address their comments.

Clif Issendorf, Bottineau County WRD (BCWRD)
  • A dozen projects coming forward in the future and need to look forward and be proactive on drainage.
Wanda McFadden, Assiniboine River Basin Initiative (ARBI)
- Thanks for assistance. Appreciates the online accessibility to all meetings. Wants more face to face again.
- The ARBI water quality review has been completed.
- An Aquatic Nuisance Species (ANS) analysis is underway.

Frank Laroc, Mayor of Rugby
- Attended to meet DWR staff and others.

Ricky Rambra – Representing people who cannot get rural water.
- Appreciate mission to get people water.
- How do the cost-share policy changes help get water to people who do not currently get water?
- Concerned with percentage changes for people that are distant from current distribution.
- Thinks we should focus on prioritizing and getting water to those who do not have it before all the other requests.
- Farmers are not part of a Main Street Initiative (MSI), so there should be strong consideration for not changing from 75-65%. Her daughter is 14 to 15 miles from their water source.

Eric Volk, North Dakota Rural Water Association (NDRWA) – (Handout)
- MR&I should continue to be at 75%.
- The 65% cost-share for other systems was not in the Strategic Governance and Finance Study and wants to know why it was extended to rural and municipal systems.
- Out-year projections for projects are not meant for the type of use to which it was applied.
- The net savings from the policy changes are not significant.
- NDRWA would rather see policy helping more systems and there is a fine line on the affordability side and participation in rural water.
- Look back at the DWR white paper on impacts.
- Preconstruction efforts are necessary activities. Engineers will still charge larger fees but locals will pay more if the percentage is changed from 75% to 50%.
- Used an example where loan payments increase as cost-share drops.
- Commissioner Zimmerman – Asked him to share the data to help inform the policy decision process.

Jody Meidinger, Manager, Upper Souris Rural Water – (Showed a discolored water sample for demonstration.)
- Need Northwest Area Water Supply (NAWS) completed.
- Well water in their region can be yellow with high Sodium and Sulphur.
• Installation of 600 miles of lines was a couple million when they first started. To add new customers they need the additional 10%. It costs $40,000 to $50,000 per mile. The amount of expansion and area covered by rural water is related to cost-share percentages.

Theresa Sunsbock, Manager, North Prairie Rural Water – (Handout)
• North Prairie serves 16 of 22 cities in their region.
  o 15 subdivisions around Minot
• Anamoose has arsenic issues.
• Most growth has been in the last 15 years.
• 75% is down to 62% when you take out the ineligible items.
• Lots of people still hauling water west (methane, arsenic, other issues with water).
  o Reliable good water helps keep people in the rural areas.
• Base rate = $65 + 9.58 per 1,000 gallons.
  o They use the postage stamp rule - they all pay the same rate.
  o Provide water to agricultural users.
  o 75% grant is why the system expanded. Anything less and projects will not get built.

Dan Schaffer, Manager, All Seasons Rural Water
• The seasonal difference in demand from basic consumptive use is highlighted by 23 million gallons pumped in June vs 11 million gallons in January. The reason is agricultural spraying and use.
• “Easy ones are done” was said back in 2011.
• Currently they are looking at underserved areas northeast of Bottineau in Turtle Mountains.

Representative John Nelson, Legislator, All Seasons Rural Water (ASRW) board, Rugby resident
• Collaborative work with the Legislature is appreciated. Appreciated working with Jim Schmidt and his water leadership. How do we (Legislature) provide the most efficient manner of funding to all areas of service?
• District 14 now is the largest legislative district in the state.
• NAWS, Western Area Water Supply Authority (WAWSA), etc. and economies of scale are helping get water to remote areas.
• ASRW uses 35% of Rugby water treatment. Populations have declined but ag-related use has increased.
  o Saves trucking costs from the treatment plant depot to the field.
  o Need to continue to build out in those remote areas.
  o Rugby would appreciate the extra 5%.
• Why do we need to be equal? There are people who have waited 25 years while other projects like the Red River Valley Water Supply (RRVWSP) speed in front of these people.
• RRVWSP is a bigger hit to sustainability of the Resources Trust Fund (RTF) than rural systems.
• The Legacy Fund has $8.3 billion and may be an alternate source for infrastructure.

Dan Jonasson, Minot Public Works Director
• Thanks for all the past funding.
• Low head dam remediation is a concern.
• Minot has a number of cast iron pipe replacement projects.
• Submitted $11M in requests for 2023-2025 for various water supply and dam improvement projects.
• NAWS is very important for Minot and the region.
  o Want to see NAWS funded in total. Minot is funding 35% of NAWS and would like to shift that to the MREFPP. The average since 2011 has been $54M per year so it could take until 2045 to finish. Please accelerate.

Allan Walter, Chair, Garrison Diversion Conservancy District
• Mentioned Garrison partner projects, including negotiations with Washburn related to the $125 million river intake and their potential use of it.
• Missouri river diversion to Ogalala aquifer is a potential risk. The western U.S. needs water in the Colorado River. Important for ND to establish all of their water rights on the Missouri and do it soon.

Tami Madsen, Executive Director, WAWSA
• Thanks for the support.
• There’s a project coming up for users that signed up in the 1970s and 80s between WAWSA and Southwest Pipeline Project (SWPP).
• Resources vary for affordability across her member entities. Not everyone automatically asks for the highest cost-share percentage possible. An example was provided for McKinzie County at 50% as they have access to oil revenue.
Lower Missouri River Basin, Bismarck, 7-7-2022

Commissioner Jay Volk
- Provided opening remarks.

Pat Fridgen, DWR Staff
- Provided the DWR agency update, Water Development Plan update, and policy considerations for comment.

Dennis Reep, HDR Inc., and Ryan Jockers, Lower Heart WRD - (Handouts)
- Mandan is not confident the flood control levee will be accomplished without cost-share. They have applied for Federal Emergency Management Agency (FEMA), Building Resilient Infrastructure and Communities (BRIC) grant funding.
- Do not support the policy modification related to having all DWR permits in place before being able to apply for construction-related cost-share.
- The addition to the flood control structure is a FEMA driven project. (See presentation.)
  - Commissioner Volk asked about specific permits and timing. Reep responded there could be potential delays but no specific permit was identified.

Dani Quissell, ND Water Users – (Handout) See previous comments on policy considerations.
- Commissioner Volk – Give us ideas on how to calculate storage capacity. Wants real world examples of cost-share percentage change impacts on projects.

Eric Volk, North Dakota Rural Water Association (NDRWA) – (Handout) See previous comments on policy considerations.

Larry Cassian, South Central Water Users
- No current projects.
- Need additional storage.
- City of Ashley wants to get water at 75%.
- When small communities get 5% more it changes the trade-off relative to 75% for regionalization.
- Their system has invested significant funding into their system without asking the SWC for cost-share participation.
- Three years ago they received a 33% grant. That was their last ask.

Michelle Klose, Bismarck City Public Works
- Bismarck has a high Insurance Services Office ranking.
- When it comes to economic development opportunities, Bismarck does not seem to attract many of those industries even though they are on the Missouri River. Want to work with DWR and Commerce to figure out how to attract industries.
- Three projects in the 2023 plan.
- Supports Capital Improvement Planning and master planning.
James Landenberger, Burleigh County WRD – (Handout)
• McDowell Dam supplemental water source for recreation is moving forward. Working with Bismarck Parks and Recreation. Use is increasing for recreational interests and additional flow will reduce Nitrogen and Phosphorus loading.

Mike Gunsch, Missouri River Advisory Council
• Advise and Educate Project grant to Missouri River Joint Board to communicate the value of the Missouri River to ND and what ND has not received from original and subsequent agreements. The August 10 workshop for Missouri River stakeholders will include a Strengths, Weaknesses, Opportunities, and Threats (SWOT) exercise for participants.

AJ Tuck, Moore Engineering
• Lincoln is looking at storage improvement solutions. Will be asking for a tower under regionalization as a change of scope to a ground storage project previously approved by the Commission.
• The Riverdale raw water supply line project to them is regional but it was approved as municipal. Offered a tour of the project.

Michelle Klose, Bismarck City Public Works
• How will DWR/SWC be addressing policy percent changes in the Water Development Plan if changes aren’t complete before the end of the year?
  • Pat Fridgen – DWR will try to adapt as soon as policy is available. If not complete before the end of the year, existing percentages will be used, and then adjustments will be made to the online electronic Plan dashboard when the percentages are finalized for implementation in 2023-2025. That’s another benefit to the electronic version of the Water Development Plan.
Upper Red River Basin, Fargo, 7-11-2022

Dr. Andrea Travnicek, DWR Director
• Read Commissioner April Walker’s statement and provided opening remarks.

Pat Fridgen, DWR Staff
• Provided the DWR agency update, Water Development Plan update, and policy considerations for comment.

Dani Quissell, ND Water Users – (Handout) See previous comments on policy considerations.

Eric Volk, North Dakota Rural Water Association (NDRWA) – (Handout) See previous comments on policy considerations.

Jeremy Schuler, Northeast Regional Water
• Formed when Langdon and North Valley merged. Served by City of Devils Lake as a source.
• Historically underbuilt infrastructure.
• At 75%, loan service is $51/month. At 65%, loan service would be $74/month. That would raise the minimum water cost to over $100/month.
• Regionalization has saved towns from needing to update infrastructure. Use is increasing across the board.
• Working on three small towns to supply as individual vs bulk users.

Steve Hanson, Southeast Water Users District (SEWUD)
• 2006 Richland Ransom/Sargent and Dickey combined into SEWUD which serves 23 communities, 3,700 rural hook-ups, 21 reservoirs, and involves 2 water treatment plants (WTP).
• For their 2023-2025 projects:
  o The WTP in their west district has water quality issues (filters, iron, reverse osmosis skid, dissolved solids, etc). They are studying their well field, discharge potential, and allocations.
• It’s crucial that cost-share stay at 75%. Projects may not be feasible if it drops to 65%.

Neil Breidenbach, East Central Regional Water
• Hatton and Northwood were hooked up.
• Experiencing about 160 water breaks per year.
• Hooked up Agassiz Rural Water and Trail two years ago.
• A lot of their capacity is for agricultural use. Older lines cannot handle modern agricultural demands.

John Eaton, Agassiz Rural Water
• They have a 5-inch main which drops to 3-inches on the outskirts of Grand Forks so they cannot supply capacity for domestic and agricultural use.
• Fufeng will impact them.
• Manville firehall usage drops pressure in the city when they fill trucks.
• Spring flooding puts four miles of pipe under water each year.

Jennifer Murray, Southwest Water Authority (SWWA) and Southwest Pipeline Project (SWPP) – (Handout)
• Each system is a product of the time and resources when they were initiated.
• Replacement and Extraordinary Maintenance (REM) fund overview – one size fits all may be easier to implement but projects and needs are unique. Future projects will be more expensive and difficult to complete.

Mike Gunsch, Missouri River Advisory Council
• Advise and Educate Project grant to Missouri River Joint Board to communicate the value of the Missouri River to ND and what ND has not received from original and subsequent agreements. SWOT analysis meeting invitation for August 10.
James River Basin, Jamestown, 7-15-2022

Pat Fridgen, DWR Staff
- Commissioner Connie Ova was not able to attend so a welcome statement was provided on the Commissioner’s behalf.

Pat Fridgen, DWR Staff
- Provided the DWR agency update, Water Development Plan update, and policy considerations for comment.

Duane DeKrey, Executive Director, Garrison Diversion Conservancy District
- Thanks to DWR and SWC.
- Voiced 75% preference for regional and rural systems.
- Would like MR&I to stay at 75%. If MR&I shifts to Garrison Diversion projects from NAWS, they may not be able to use it at 65%.
- Does not like the RTF stabilization fund.
  - Questioned the inflationary cost for future projects. Suggested there are mixed signals from the Legislature – no carryover yet setting aside funding in a stabilization fund.

Geneva Kaiser, Stutsman Rural Water District – (See emailed comments.)
Commissioner Gene Veeder
- Provided opening remarks. Introduced staff and spoke about approachability of staff and agency.

Pat Fridgen, DWR Staff
- Provided the DWR agency update, Water Development Plan update, and policy considerations for comment.

Tami Madsen, Executive Director, WAWSA – (Handout)
- New requests have higher costs per user because pipeline distances are farther.
- Bakken premium is challenging – Bacon-Davis, boring, pipe crossings, and asking for consideration when evaluating and request 75% be maintained.
- Some requests do come in at a lower amount (McKenzie).
- Intake and control over U.S. Army Corps of Engineers (USACE) reservoir levels may affect intakes even below the ordinary high water marks.
- Would like to see an industrial purpose funding bucket.
- Support removal of engineer selection provision.

Dani Quissell, ND Water Users – (Handout) See previous comments on policy considerations.

Eric Volk, North Dakota Rural Water Association (NDRWA) – (Handout) See previous comments on policy considerations.

Jason Lees, ND Stockman’s Association
- Drought program – request increasing the cap.
- That program currently works out to 25% even on “inexpensive projects.” He would prefer an $8,000-$9,000 cap, but $10,000 is a nice round number.
- Regarding the 75% to 65% and 60% to 65% proposed policy - why is one category reduced and others increased?

Commissioner Gene Veeder
- The Water Commission wants improved consistency.
- Also, just three years ago, the RTF was in jeopardy.
Little Missouri, Upper Heart, and Upper Cannonball Basins, Dickinson, 7-20-2022

Commissioner James Odermann
- Provided opening remarks.

Terri Theil, Dickinson Convention and Visitors Bureau
- Discussed issues with water quality growing up and living in several small communities.
- Former vet tech mentioned the benefits to calf weight is much better with rural water.
- Resale value for houses matters with rural water.

Commissioner James Odermann
- Introduced staff and provided additional opening remarks.

Pat Fridgen, DWR Staff
- Provided the DWR agency update, Water Development Plan update, and policy considerations for comment.

Jennifer Murray, SWWA and SWPP – (PowerPoint Presentation)
- Working on upgrades to transmission lines, tanks, and intake.
- Regarding hydraulic improvements to add more customers, no bids were received in March. Preliminary design for the treatment plant expansion is underway.
- In underserved area surveys they are showing plenty of additional needs. These customers are farther apart.
  - Feasibility criteria has gone from 2 miles to 3,500 feet of pipe.
- A REM evaluation and asset inventory assessment is underway. Planning to spend $9M this budget year from the REM fund.
- SWWA scheduled capital repayments are $12M this biennium.

Dani Quissell, ND Water Users – (Handout) See previous comments on policy considerations.

Eric Volk, North Dakota Rural Water Association (NDRWA) – (Handout) See previous comments on policy considerations.

Tami Madsen, Executive Director, WAWSA – (Handout)
- $63,007 current cost per user when averaged in with all system users.
- Requested the Commission leave policy language as 75%.
- Suggested a sliding scale.
- Would like to see an industrial purpose funding bucket.

Dr. Chip Poland, Dickinson State University – (Handout)
• His family lives in a new house north of South Heart, has a well, and SWPP water. The well is good enough for cattle but not as good as SWPP water and is not good for gardens. The SWPP has a physical impact and enhances quality of life.

Randy Hatzenbuhler, Theodore Roosevelt Foundation
• Moved from good water in Mandan to bad water in Medora.
• The Foundation surveyed groups who were not coming to Medora, and responses were bad water and poor hotel quality. SWPP has added to future development possibilities for Medora. The Foundation board views their strategic plan as limited by water availability.

Greg Kessel, Belfield farmer
• He grew up on ground water. Some people have hauled water their entire lives. Rural water makes a huge difference. Provided stories from other rural areas stating they still haul water and recognizes that ND has made a huge investment that is unprecedented and is an economic driver. Would like to see more flexibility from SWPP during drought. North Dakotans are very fortunate compared to people in the Pacific northwest and should keep it going.

Dr. Chris Augustine, North Dakota State University, Extension Center
• Livestock research herd would not be possible without SWPP.

George Nodland, SWWA Board
• Grew up in Dunn Center on poor quality water. Three or four years ago the farmstead got rural water. North Dakota is rural. Some are still struggling and have a hard time coming up with the cost for their individual share.

Commissioner James Odermann
• Thanks for your attendance, thoughts, and opinions. It’s important for everyone to work together.
Lower Red River Basin, Grand Forks, 7-27-2022

Commissioner Michael Anderson
- Provided an introduction and discussed the accomplishments of the Commission this biennium.

Pat Fridgen
- Provided the DWR agency update, Water Development Plan update, and policy considerations for comment.

Eric Volk, North Dakota Rural Water Association (NDRWA) – (Handout) See previous comments on policy considerations.
- There are 268 cities served by rural water, and 68,000 people in rural areas served.
- The Water Development Plan $1 billion ask highlights the funding gap.

Jeremy Schuller, NE Rural Water – (See emailed comments.)

Stu Gullicks, Dakota Rural Water
- Adding 150 users, currently serve 6 cities, will add Hannaford – leaving only Cooperstown as not regionally supplied.
- Lowering cost-share rates would impact their ability to serve clients.

John Eaton, Agassiz Rural Water – Same as previous comments.

Neil Breidenbach, East Central Rural Water – (Piece of pipe used as visual aid.)
- System started in 1971. They have concerns due to 72 breaks so far this year. Bells are breaking off because manufacturing at shoulder is a weak point.
- Cost-share percent helps put in larger lines for future needs.
- Feed 16 towns because they had larger lines.
- Cost-share reduction will restrict their ability to incorporate towns without adding new transmission lines.
- Usage in 1971 was 36 million gallons per day (MGD) and is now 800 MGD.

Jared Hagert, ND Representative and farmer
- Would like to maintain as much of a cost-share as we can but still need to be strategic in that process.

Commissioner Michael Anderson
- Thanked rural water systems for comments. Emphasized the Commission is still in a comment period. Rural water is about rates and debt service.
- Eric Volk – 30 years at 2%, the increase would be $15 million in increased debt service.
• Neil Breidenbach - Adding plant capacity estimate was $6 million, but is now $12 million and they’re having trouble getting bids.

Border Township Association Group (BTAG), Gary Balinski, Greg Jous, Curt Haugen – (Showed a video.)
- The Oslo bridge forces flood water to spread out. Road damage is about $800,000-$900,000 per year.
- BTAG has been working with ND Department of Transportation (DOT), FEMA, DWR etc. Need 100,000 cubic feet per second (cfs) throughput. Current is 40,000 cfs.
- Approximately 17% of North Dakota wheat and 3% of U.S. wheat uses the rail line at this point.

Beau Bateman, Township Chair in Grand Forks Area and Farmer
- Increased agricultural production requires water for applications of fungicides, etc. Larger storage is needed with rural systems to address larger spray equipment needs. Producers are drawing down rural water stations at a faster rate.
- The population growth rate is 2% in his area.
- Rural people do not water their lawns. Rural has a higher poverty rate than municipalities. Shifting costs to poverty-impacted population is not sustainable.

Charlie Vein, Grand Forks City Council, RRVWSP Board (Presentation Copy)
- Expressed the need for the RRVWSP. Need to increase the pace of RRVWSP.
- A finalized Grand Forks water supply study was based on no RRVWSP. Based on 1930s drought vs future growth. Every year Grand Forks will have shortages. First in right but last in use and water will be gone. They expect 9% volume shortage, but some years over 60% short, and some months 100% short.
- The solution is the RRVWSP but it lacks a state and local funding plan/commitment and has an estimated cost of $1.4 billion. RRVWSP must have at least 75% cost-share from the state to work.
- The estimated economic impact is $3.3 billion per year if a 1930s drought hit the state.

Johnny Jorgensen and Lowell Domier, Mayville
- Addressed failure of the Mayville dam near the golf course. Irrigation water is pumped from the dam, but levels are falling. Depth and distance are above the capacity of current pumps. The dam provides a water supply to the golf course and the high school. They are looking into who is responsible for the dam and what their options are for funding repairs.

Mayor Stuart Symington, Neche
- Since 1997, Neche has had floods nearly every year. They are glad to see the exemption from the cost-share multiplier in policy. Residents have to drive through water to get in and out of town during flood events. Neche is an industrious town with employees who need to get into town.
• NDDOT is improving Hwy 18 and addressing culverts.

Larry Tanke, Walsh County Water Board
• Regarding BTAG – Water boards have certain criteria to follow when groups come to them, and they must bond proposed projects. Used to engage resources to inform the project. When we get the water to the river, then what do we do with it? It’s necessary to look at the whole bigger flood issue of the whole watershed and Canada. Do not look at one spot as there will be others that will be affected too. Look at the contributing watershed and the outflow. Multi-state projects should be federal. Fargo, Grand Forks, others impact downstream users. And Canada must cooperate if there is to be any solution concerning the border levee.
• Mentioned a Nelson County project with a pump that moves water into Walsh County. Nelson County controls the pump and that is not right. They are not following the conditional criteria. They should look at the entire watershed.
• Flood durations are longer than they used to be. Efficiency of drainage to the Red is faster and creates issues.
  o Commissioner Michael Anderson - Supporting comments on comprehensive approaches.

Keith Weston, Red River Retention Authority (RRRA) – (Handout)
• Their charge is to reduce mainstem and tributary peak flows. They are following U.S. Natural Resources Conservation Service (NRCS) planning PL566 approaches. RRRA is asking DWR to fund retention projects at the full cost-share rate and that there be no additional Water Commission application-related reviews if sponsors have federal approval. Commends BTAG and Larry Tanke’s comments.

Todd Feland, Grand Forks City Manager
• Thank you for being in Grand Forks and having these meetings. Makes him feel like it is a partnership.
• There have been a couple major projects funded by SWC/DWR, including the city’s flood protection project and their new water treatment plant. Grand Forks is very thankful. Other communities have benefitted from the Grand Forks projects.
• The Fufeng raw water project is moving forward.
• Grand Forks appreciated DWR staff engagement and assistance on the English Coulee issue.
• The RRVWSP is important to them.

Nancy Johnson, Executive Director, ND Soybean Growers Association
• They will submit formal comments.
• They support 75% cost-share for rural economic development which is dependent on water. The Spiritwood project soybean meal plant is moving forward. They want to expand feeder operations for hogs and other livestock - these operations can use waste products from the mills being built.
Dani Quissell, ND Water Users – (Handout) See previous comments on policy considerations.

• Commissioner Michael Anderson asked for their economic analysis data.

Commissioner Michael Anderson – Thanks and closing comments.
Devils Lake Basin, Devil’s Lake, 7-27-2022

Commissioner Richard Johnson
- Provided an introduction and welcome.

Pat Fridgen, DWR Staff
- Provided the DWR agency update, Water Development Plan update, and policy considerations for comment.

Commissioner Richard Johnson
- Policy already has “up to” in the language.
- Incomplete applications take extra time and applications should be ready for Commissioner review. Work with staff to get documents complete before applications are turned in.

Ben Varnson, Basin Resident
- Emergency Action Plan cost-share should not drop from 80%
- What are we doing to make EA less restrictive?

Duane Pool and Pat Fridgen, DWR Staff
- Responded that approximately three-quarters of all projects have a benefit-to-cost (B/C) ratio above 1.0.
- Continue to keep the EA tool up-to-date and conforming to professional standards.
- Ongoing snag and clear research by the International Water Institute will help update that section of the EA tool.
- Economic impact is different than EA, which is an economic efficiency analysis tool.

Commissioner Richard Johnson
- Both EA and Life Cycle Cost Analysis (LCCA) are valuable tools in evaluating projects.

Matt Odermann, All Seasons Rural Water and County Commissioner
- Still see hauling water, so we still need expansion projects.
- Does not want to see rural cost-share decreased.
- Asked about cost-share participation with tribal nations.

Pat Fridgen, DWR Staff
- DWR can only participate with state political subs, and tribes are sovereign nations.
- Eligible political subs can sponsor projects in tribal jurisdictions.

Eric Volk, North Dakota Rural Water Association (NDRWA) - (Handout) See previous comments on policy considerations.
- Asked about the timing of the policy process.
Commissioner Richard Johnson
- December is the goal.
- Policy will be impactful for 5 years.
- Need to have more discussion.
- Smaller systems cannot afford the same cost-share as large municipalities and systems.
- Should there be a one size fits all and how do you apply a differential policy?

John Nelson, ND Representative District 14
- We have been very successful in the past decade moving water projects along.
- Wants to retain buckets.
- Vetting process by rural water systems has been ongoing for several biennia.
- More concerned about the losers than the winners if buckets are removed.
- Representative Jim Schmidt moved water to the forefront and established the Stabilization Fund. Moving towards having cash in hand vs betting on extraction tax payments. Does not want to lose sight of this advancement.
- There has been better collaboration with the SWC over the last 4-6 years. The process is working very well right now.
- It would be detrimental to lower cost-share percentages in his district.

Commissioner Richard Johnson
- Representative Jim Schmidt was key to where we are today.

Jeremy Schuler, Northwest Regional Water
- Will email notes. See notes.

Nels Halgren, Greater Ramsey Water District
- With their North System Capacity Improvement project they experience vulnerability because agricultural spraying, livestock and lawns brought demand to an extreme. They are buying water from neighboring sources. Could not keep towers full. Need to produce, move, and store more water.
- A study implies they can increase capacity from 900 gallons per minute (gpm) to 1,200 gpm with filter changes. This through-put maxes all three of their wells.
- Their plant was designed in 1993.
- The Crary area is having growth, the bean plant wants to expand, and recreational areas are growing.
- They started with 700 customers and are now at 2,500.
- Previous infrastructure was sized to make their system expandable at a lower cost than other systems, plus they have sewer system income. Even with the better system they have difficulty affording expansions.
- Small towns are realizing their systems need to be individual users of regional systems.
- An example - 55 users project is at a $45 base rate. Under the new policy the base would be $65.
Mike Tweed, Eddy County Water Board
- When Greater Ramsey pumps he has trouble with his irrigation. Devils Lake, Greater Ramsey, and farmers are all below their allocation, but it may be over allocated for simultaneous use.

Dan Schaffer, All Seasons Rural Water
- In his tenure, three times they thought they solved agricultural demand (1997, 2010-13, and today). It keeps growing even after they make improvements. Rural water is what supports ag-related business which is the most important industry in ND.
- All Seasons has agreed not to take water from NAWS until Bottineau has gotten water first.
- All Seasons will get water after the Biota Water Treatment Plant is operational.

Mike Blessum, Tri County Water
- Petersburg is surrounded and serves Lakota through Greater Ramsey distribution system.
- System design was 2 gpm but now is 0.5 gpm.
- Made improvements with SWC cost-share.
- Their peak in January is about 350,000 gallons per day and goes up to 1 million gallons per day in the summer. The system is maxed out.
- They would like to see cost-share remain at 75%.

Commissioner Richard Johnson
- There is an obligation to continue to support agriculture.

Garland Hoisted, Basin Resident
- The basin has an excess of agricultural land under water.
- The USACE control structure (Tolna Control Structure) has an impact to upstream.

Pat Fridgen – The USACE constructed the Tolna Coulee Control Structure and then it was turned over to the state for operation. The structure is not meant to hold back water, but rather, to control the rate at which erosion would occur if Devils Lake reaches its spill elevation.

Dani Quissell, ND Water Users – (Handout) See previous comments on policy considerations.
- Preconstruction will have a disproportionate impact on smaller projects.
- Prefer to operate from future stream of RTF income and not the cash in hand basis the Legislature moved toward this last biennium.

Commissioner Richard Johnson
- Wants to see an extended comment period and more time to address and discuss policy issues.
Karen Hausman, Basin Resident
- The West End Outlet is broken frequently. The state should be ashamed. The outlet has economic impacts and there is room to innovate.
- The lake is just shy of 4 feet higher. No room for more water next year.

Jeff Frith, Devils Lake Basin Manager
- Rural water aging infrastructure will need replacement even while still trying to extend to new customers. Rural communities have aging infrastructure.
- Supplying agriculture with water and continuing to provide enhancement to drainage and snag and clear projects is important.
- There are people still under water who have not had the ability to farm for years. Last year they were concerned with low lake levels and in one year it is the opposite problem.
- At current pumping rates it will take 5 years to remove the water that flowed in this year without evaporation.
- Suggest having a day-long meeting with reps from all areas.

Ben Varnson, Basin Resident
- Having the Devil’s Lake outlet committee in Devils Lake was good for the public to see them engaged.

Garland Hoisted, Basin Resident
- With all of this land still under water, you have a lot of gall to say you have done a great job.

Commissioner Richard Johnson
- Provided closing comments and expressed gratitude to attendees.