

**State Water Commission Meeting**  
**Pioneer Room, 1<sup>st</sup> Floor, Judicial Wing, State Capitol**  
**600 E. Boulevard Ave.**  
**Bismarck, North Dakota**  
**October 14, 2021 – 1:00 p.m. CT**

Public is Invited to Join Microsoft Teams meeting

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Phone Conference ID: 382 120 51#

**AGENDA**

- A. Roll Call (**no attachment**)
- B. Consideration of Agenda (**no attachment**)
- C. Consideration of Minutes
  - 1. **Draft Minutes for August 12, 2021, Commission Meeting**
  - 2. **Draft Minutes for September 9, 2021, Joint Subcommittee Meeting**
- D. Financial Reports
- E. Strategic Governance and Finance Study
- F. **Southwest Pipeline Project - Hybrid Main Transmission Line Upgrades Contract 2-3I/2-5C/2-7D Award**
  - New Agenda Item - Transfer and Assignment of Water Permit 1977 (Great River Energy)
- G. Purpose Funding Summary
- H. Flood Control
  - 1. **Bismarck Public Works - Bismarck Outfall Flood Control - \$72,000** PC
  - 2. **Neche - Neche Flood Control - \$502,964** PC
  - 3. **Steele County WRD - Golden Lake Complex Improvement - \$60,000** PC
  - 4. **Bottineau County WRD - Stone Creek Lateral B - \$20,250** PC
  - 5. **Traill County WRD - Blanchard-Norman Drain 23-40 - \$85,545** PC
  - 6. **Nelson County WRD - Petersburg Drain - \$78,509** C
  - 7. **North Cass WRD - Cass County Drain 18 Improvements - \$147,149** C
  - 8. **Richland County WRD - Wild Rice Snagging and Clearing - \$85,000** C
  - 9. **Souris River Joint WRD - Mouse River Enhanced Flood Protection Federal Funding** L
- I. General Water
  - M2. Low Head Dam Inventory
    - 1. **Barnes County WRD - Valley City Little Dam Repurposing Project - \$102,000** PC
    - 2. **Minot – Water Supply Low Head Dam Remediation - \$93,750** PC

J. Water Supply

- |  |               |
|--|---------------|
| 1. Wahpeton – Well Field and Transmission Main - \$223,400                                 | PC            |
| <del>2. WAWSA – R&amp;T Water District Battleview/McGregor Rural Phase 1 - \$281,100</del> | <del>PC</del> |
| <del>3. WAWSA – R&amp;T Water District Stanley Rural Part 2 - \$4,092,000</del>            | <del>C</del>  |
| 4. Bismarck – 43 <sup>rd</sup> Avenue Phase 2 - \$2,340,000                                | C             |
| 5. Rugby – Water Treatment Plant Phase 3 - \$881,000                                       | C             |
| 6. GDCD – Red River Valley Water Supply 5B, 5C 5D, 6 - \$47,490,000                        | C             |

K. Rural Water – Rural Water Districts and Associations Map

- |   |    |
|---|----|
| 1. Agassiz Water Users District – User Expansion Phase 2 - \$266,000                      | PC |
| 2. Cass Rural Water Users District – 2022 System Distribution Improvements - \$447,500    | PC |
| 3. McLean-Sheridan Rural Water District – Service to Blue Flint Ethanol Plant - \$821,000 | PC |
| 4. Barnes Rural Water District – 2021 Storage Expansion - \$2,262,400                     | C  |

L. Legal Updates (**Presentation if time allows**)

M. Updates (**Presentations if time allows**)

1. Drought Disaster Livestock Water Supply Program
- ~~2. Low Head Dam Inventory~~
3. Devils Lake
4. Missouri River
5. Mouse River
6. Northwest Area Water Supply
7. SWPP

N. Adjourn

**BOLD ITEMS REQUIRE SWC ACTION**

- |    |                  |
|----|------------------|
| PC | Pre-Construction |
| C  | Construction     |
| L  | Legislative      |
| CI | Cost Increase    |
| O  | Other            |

## MINUTES

### North Dakota State Water Commission Bismarck, North Dakota

October 14, 2021

The ND State Water Commission (Commission) held a meeting in the Pioneer Room, State Capitol, 600 E. Boulevard Ave., Bismarck, ND, and via telephone conference on October 14, 2021. Lt. Governor Sanford called the meeting to order at 1:02 p.m. A quorum was present.

#### **STATE WATER COMMISSION MEMBERS PRESENT:**

Lt. Governor Sanford, Chairman

Doug Goehring, Commissioner, ND Department of Agriculture, Bismarck (absent 2:30-3:00 p.m.)

Michael Anderson, Hillsboro

Richard Johnson, Devils Lake

James Odermann, Belfield

Connie Ova, Cleveland

Gene Veeder, Watford City

Jay Volk, Bismarck

April Walker, West Fargo

Jason Zimmerman, Minot

#### **OTHERS PRESENT:**

Andrea Travnicek, Ph.D., Director, ND Department of Water Resources

John Paczkowski, State Engineer

ND Department of Water Resources (DWR) Staff

Jennifer Verleger, General Counsel, Attorney General's Office

Approximately 75 people interested in agenda items.

### CONSIDERATION OF AGENDA

The agenda for the October 14, 2021, SWC meeting was approved as presented.

### CONSIDERATION OF DRAFT MEETING MINUTES

The draft minutes for the following meetings were reviewed and approved as written:

- August 12, 2021, Commission meeting
- September 9, 2021, Subcommittee meeting

**It was moved by Commissioner Johnson, seconded by Commissioner Walker, and unanimously carried, that the minutes for the August 12, 2021, Commission meeting, and September 9, 2021, Subcommittee meeting be approved as written.**

### FINANCIAL REPORTS

The allocated program expenditures, financial reports, and financial spreadsheets were presented by Heide Delorme, Administrative Services Director (**APPENDIX A**). The oil extraction tax deposits into the Resources Trust Fund total \$46,021,979 through October 2021 which is \$4,574,800 over projected revenue.

## **STRATEGIC GOVERNANCE AND FINANCE STUDY (STUDY)**

Jon Kelsch, Water Development Division Director and Brent Bogar, AE2S, provided a brief update on the Strategic Governance and Finance Study (Study). Brent stated that additional comments will be incorporated into the Study and minor adjustments and corrections were made throughout the Study. Lt. Governor Sanford stated there was not the intent for the Commission to approve the Study, but rather receive the report for future discussion in order to determine the Commission's next steps.

Lt. Governor Sanford stated that Governor Burgum requested a separate Subcommittee meeting be scheduled to review the final Study recommendations and how the Study may affect future policy and ownership changes as well as cost-share methodologies. Several hours will be needed to discuss recommendations and the overall process of moving forward to implement policy and legislation changes.

After discussion, the following motion was made:

**It was moved by Commissioner Goehring and seconded by Commissioner Zimmerman the Commission receive and file the Study.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.**

## **SOUTHWEST PIPELINE PROJECT (SWPP) – HYBRID MAIN TRANSMISSION LINE UPGRADES CONTRACT 2-3I/2-5C/2-7D AWARD**

Sindhuja S.Pillai-Grinolds, SWPP Project Manager, provided background information related to SWPP's overall plan to address treated water distribution capacity needs and detailed information related to SWPP's hybrid main transmission line parallel piping contract needed for the improvements. The piping contracts bid opening was held on September 22, 2021. Sindhuja presented the final bid results, Life Cycle Cost Analyses, and recommendation for award to the Commission for consideration.

There were no questions, and the following motions were made:

**It was moved by Commissioner Goehring and seconded by Commissioner Anderson the Commission 1) authorize the Secretary to award SWPP Hybrid Main Transmission Line Upgrades Contract 2-3I/2-5C/2-7D, to BEK Consulting, LLC in the amount of \$9,066,502 including the Bid Alternate. The award of SWPP Contract 2-3I/2-5C/2-7D will be dependent upon legal review of the contract documents; and,**

**2) approve \$9.8M dollars to the SWPP from the capital assets funds appropriated for the 2021-2023 biennium.**

**Commissioners Anderson, Johnson, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. Commissioner Odermann abstained. There were no nay votes. The motion carried.**

## **TRANSFER AND ASSIGNMENT OF WATER PERMIT NO. 1977**

Chris Bader, Water Appropriation Division Director, provided a brief history of Perfected Water Permit No. 1977 which was assigned to Great River Energy in 2006 for the annual diversion of surface water from the Missouri River for industrial power generation at the Coal Creek Station.

Great River Energy is in the process of selling Coal Creek Station to Rainbow Energy Center, LLC. Once legal interest by Rainbow Energy Center, LLC is verified for the point of diversion, an assignment of the water permit will be necessary. Statutory authority for water permit assignment is given to the DWR in NDCC 61-04-15; however, Condition No. 11 of the water permit requires written Commission approval of assignment, transfer, or sale of any part of the water. Therefore, Commission approval is required to assign Perfected Water Permit No. 1077 to Rainbow Energy Center, LLC.

After discussion, the following motion was made:

**It was moved by Commissioner Goehring and seconded by Commissioner Volk the Commission provide authorization to the DWR Director to approve the assignment and transfer of Water Permit No. 1977 once legal interest is verified at the point of diversion.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.**

### **PURPOSE FUNDING SUMMARY**

Jeffrey Mattern, DWR Engineer Manager, presented the purpose funding summary of overall appropriations available for October cost-share requests. There were no questions.

### **STATE COST-SHARE REQUESTS**

#### **FLOOD CONTROL AND GENERAL WATER PROJECTS**

Julie Prescott, DWR Cost-Share Program Manager, presented the requests for the Flood Control and General Water projects.

#### **BISMARCK PUBLIC WORKS - BISMARCK OUTFALL FLOOD CONTROL - \$72,000 (SWC Project No. 2168)**

The city of Bismarck (Sponsor) requested cost-share for the Bismarck Wastewater Treatment Plant Outfall Flood Control project (Project). The Project involves preconstruction work associated with improvements to the wastewater treatment plant's effluent outfall system. The Sponsor indicated that the wastewater treatment plant may become inoperable during high water events on the Missouri River and proposes to install slide gates on the outflow system to prevent backflow from the river at two locations.

The total eligible preconstruction cost is \$120,000 with 60 percent cost-share of \$72,000. The total cost of the improvements is estimated at \$1,301,180. The Project was included in the 2021 Water Development Plan (WDP) as a high funding priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request.

Michelle Klose, Bismarck Director of Utility Operations, clarified that Federal Emergency Management Agency funds were not pursued for the Project because Bismarck considered this Project as Phase 2 of the Southport Flood Protection Project, was included in the 2021 WDP, and submitted as a public infrastructure project eligible under the Commission's cost-share policy. Michelle also stated the portion related to federal funds dealt with generators, and applications for that funding is through the ND Department of Emergency Services.

After discussion, the following motion was made:

**It was moved by Commissioner Goehring and seconded by Commissioner Zimmerman the Commission approve the request of the City of Bismarck for state cost participation in the Bismarck Outfall Flood Control project at 60 percent of eligible costs, not to exceed \$72,000. The approval is contingent on available funding.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.**

**NECHE – FLOOD CONTROL - \$502,964  
(SWC Project No. 274)**

The city of Neche (Sponsor) requested pre-construction cost-share for the Neche Levee Certification project (Project). The Project is a continuation to receive FEMA accreditation of the levee system located in Neche.

The total eligible cost is \$838,273 with 60 percent cost-share of \$502,964. The Project was included in the 2021 WDP as a moderate funding priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request if a favorable benefit-to-cost ratio was determined through the requested economic analysis (EA).

The completed EA was requested by the Commission to better indicate potential cost-share for future construction requests before proceeding with preconstruction efforts. An EA has not yet been completed and DWR staff will continue to work with the Sponsor on their EA effort.

Commissioners also expressed concerns that the Sponsor has not secured local funding and flood insurance rates for those with federal home loans.

After discussion, the original motion was withdrawn and the following motion was made:

**It was moved by Commissioner Zimmerman and seconded by Commissioner Odermann the Commission table Neche's cost-share request until a completed EA is received and further review of the Project is completed.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.**

**STEELE COUNTY WATER RESOURCE DISTRICT - GOLDEN LAKE COMPLEX  
IMPROVEMENT - \$60,000  
(SWC Project No. 475)**

The Steele County Water Resource District requested cost-share for the Golden Lake Complex Improvement Study (Study). The Study will evaluate alternatives to address flooding in the Beaver Creek watershed and water quality issues within the Golden Lake Complex.

The total eligible cost is \$100,000 with 60 percent cost-share of \$60,000. The Project was included in the 2021 WDP as a moderate priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request.

There were no questions. The following motion was made:

**It was moved by Commissioner Goehring and seconded by Commissioner Walker the Commission approve the request by the Steele County Water Resource District for state cost participation in the Golden Lake Complex Improvement Study at 60 percent of eligible costs, not to exceed \$60,000. The approval is contingent on available funding.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.**

**BOTTINEAU COUNTY WATER RESOURCE DISTRICT - STONE CREEK LATERAL B - \$20,250  
(SWC Project No. 1061)**

The Bottineau County Water Resource District requested cost-share for the Stone Creek Lateral B project (Project). The Project is preconstruction engineering associated with the proposed Lateral B to the existing Stone Creek drain.

A positive assessment vote was received (95.83 percent) for the drain and Surface Drain Permit 5577 was approved for construction. The benefit-to-cost analysis performed for the Project returned a value of 1.0.

The total eligible cost is \$45,000 with 45 percent cost-share of \$20,250. The Project was identified in the 2021 WDP as a moderate priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request.

After discussion, the following motion was made:

**It was moved by Commissioner Goehring and seconded by Commissioner Zimmerman the Commission approve the request by the Bottineau County Water Resource District for state cost participation in the Stone Creek Lateral B project at 45 percent of eligible costs, not to exceed \$20,250. The approval is contingent on available funding.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.**

**TRAILL COUNTY WATER RESOURCE DISTRICT - BLANCHARD-NORMAN DRAIN 23-40 - \$85,545**

**(SWC Project No. 1241)**

The Traill County Water Resource District requested cost-share for the Blanchard-Norman Drain 23-40 project (Project). The Project involves preconstruction engineering associated with 7.7 miles of drain improvements to benefit agricultural land.

A positive assessment vote (60 percent) was received for the improvements, and the benefit-to-cost analysis performed for the Project returned a value of 1.0.

The total eligible cost of preconstruction is \$190,100 with 45 percent cost-share of \$85,545. The Project is included in the 2021 WDP as a low funding priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request.

After discussion, the following motion was made:

**It was moved by Commissioner Johnson and seconded by Commissioner Goehring the Commission approve the request by the Traill County Water Resource District for state cost participation in the Blanchard – Norman Drain 23-40 project at 45 percent of eligible costs, not to exceed \$85,545. The approval is contingent on available funding.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.**

**NELSON COUNTY WATER RESOURCE DISTRICT – PETERSBURG DRAIN - \$78,509 (SWC Project No. 2163)**

The Nelson County Water Resource District requested cost-share for the Petersburg Infrastructure and Flood Mitigation project (Project). The purpose of the project is to improve drainage within the watershed.

An assessment district has been formed through a positive vote and Surface Drain Permit 5554 was approved for construction and the benefit-to-cost analysis performed for the Project returned a value of 0.21.

The total eligible cost is \$872,324 with 45 percent cost-share; however, modified cost-share in consideration of the benefit-to-cost ratio of 0.21 yields a cost-share of 9 percent of eligible costs in the amount of \$78,509. The Project was included in the 2021 WDP as a moderate funding priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request at the modified 9 percent of eligible costs.

After discussion, the following motion was made:

**It was moved by Commissioner Goehring and seconded by Commissioner Odermann the Commission approve the request by the Nelson County Water Resource District for state cost participation in the Petersburg Infrastructure and Flood Mitigation Project at 9 percent of eligible costs, not to exceed \$78,509. The approval is contingent on available funding.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.**

**NORTH CASS WATER RESOURCE DISTRICT - CASS COUNTY DRAIN 18 IMPROVEMENTS - \$147,149**

**(SWC PROJECT NO. 2159)**

The North Cass Water Resource District requested cost-share for the Cass County Drain 18 Extension project (Project). The Project consists of new drain construction to benefit agricultural land within an existing assessment district.

A positive assessment vote (81 percent) was received for the improvements and the benefit-to-cost analysis performed for the Project returned a value of 0.94. Surface Drain Permit 5872 was approved for construction.

The total eligible cost is \$350,355 with 45 percent cost-share; however, modified cost-share in consideration of the benefit-to-cost ratio of 0.94 yields a cost-share of 42 percent of eligible costs in the amount of \$147,149. The Project is included in the 2021 WDP as a moderate funding priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request at the modified 42 percent of eligible costs.

After discussion, the following motion was made:

**It was moved by Commissioner Goehring and seconded by Commissioner Zimmerman the Commission approve the request by the North Cass Water Resource District for state cost participation in the Cass County Drain 18 Extension project at 42 percent of eligible costs for an additional \$147,149, with total cost-share not to exceed \$157,499. The approval is contingent on available funding.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.**

**RICHLAND COUNTY WATER RESOURCE DISTRICT - WILD RICE SNAGGING AND CLEARING - \$85,000**

**(SWC Project No. 1842)**

The Richland County Water Resource District requested cost-share for the Wild Rice River Snagging and Clearing 2021 project (Project). The Project involves snagging and clearing of two reaches of the Wild Rice River.

The total eligible cost is \$170,000 with 50 percent cost-share of \$85,000. The Project was identified in the 2021 WDP as a low priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request.

After discussion, the following motion was made:

**It was moved by Commissioner Zimmerman and seconded by Commissioner Walker the Commission approve the request by the Richland County Water Resource District for state cost participation in the Wild Rice River Snagging and Clearing 2021 project at 50 percent of eligible costs,**

**not to exceed \$85,000. The approval is contingent on available funding.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.**

**SOURIS RIVER JOINT WATER RESOURCE DISTRICT - MOUSE RIVER ENHANCED FLOOD PROTECTION PROJECT - FEDERAL FUNDING  
(SWC Project No. 1974)**

The Souris River Joint Water Resource District (Sponsor) requested consideration to maintain cost-share at 65 percent of eligible costs for the Mouse River Enhanced Flood Protection Project (MREFPP), MI-5D Phase, due to notification the Sponsor is likely to receive a grant award through the Department of Defense's – Defense Community Infrastructure Program (DCIP) in the amount of \$9,840,892.

If approved, the grant would be applied toward construction and contingency costs associated with the northeast tieback floodwall, known as Phase MI-5D. The total cost of Phase MI-5D is \$23,618,141.

Commission cost-share policy states that for projects with federal participation, cost-share may be up to 50 percent of the eligible non-federal costs. Where there is no federal contribution, Commission policy provides for cost-share of up to 60 percent of eligible costs. However, cost-share for MREFPP construction has previously been approved by the Commission at 65 percent of eligible costs. The Sponsor requested that the Commission maintain cost-share at 65 percent of eligible costs for Phase MI-5D if the federal grant is awarded. Securing the DCIP grant while maintaining a level of cost-share at 65 percent for Phase MI-5D could result in an overall cost savings to the State of up to \$6,396,580. The recommendation was to approve the request.

There were no questions. The following motion was made:

**It was moved by Commissioner Goehring and seconded by Commissioner Zimmerman the Commission approve the request by the Souris River Joint Water Resource District to maintain cost-share at 65 percent of eligible costs in the Mouse River Enhanced Flood Protection Project, Phase MI-5D.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.**

**LOW HEAD DAM INVENTORY**

Prior to cost-share requests for low head dam improvement projects, Pat Fridgen, Planning and Education Division Director, provided background information related to the low head dam inventory, prioritization process, hazard warning signs, and cost-share implications for low head dam modifications. The memorandum and documentation presented is attached as **APPENDIX B**.

Pat clarified that the Commission has approved some low head dam modification projects that were not a higher priority in the WDP, however, are important to the communities and the cost-share partner. The agency will continue to work with the communities on opportunities for low head dam modifications.

**BARNES COUNTY WATER RESOURCE DISTRICT –  
VALLEY CITY LITTLE DAM REPURPOSING PROJECT - \$102,000  
(SWC Project No. 1264)**

The Barnes County Water Resource District (Sponsor) requested cost-share for the Valley City Little Dam Improvement project (Project). The Project is preconstruction engineering associated with Little Dam, a low head dam. The purpose of the Project is to address the hydraulic roller effects present at the dam, which has led to loss of life in the past. Little Dam is included in the DWR's Low Head Dam Inventory with a high hazard risk ranking.

A feasibility study to evaluate options for addressing safety concerns at the dam was completed in 2015 and the Sponsor has chosen to remove the existing dam and replace with arched rock riffles.

The total eligible cost for preconstruction is \$136,000 with 75 percent cost-share of \$102,000. Also note, the Industrial Commission (IC) has received an Outdoor Heritage Fund (OHF) request for assistance on this project in the amount of approximately \$227,000, but a decision is pending following the October 19, 2021, IC meeting. Legislation passed during the 2021 Assembly (HB 1088) no longer allows for OHF assistance to be used as the local cost-share. Therefore, any OHF funds would be considered ineligible, and DWR agreements would be adjusted accordingly.

The Project is included in the 2021 WDP as a moderate funding priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request.

There were no questions. The following motion was made:

**It was moved by Commissioner Goehring and seconded by Commissioner Walker the Commission approve the request by the Barnes County Water Resource District for state cost participation in the Valley City Little Dam Improvement Project at 75 percent of eligible costs, not to exceed \$102,000. The approval is contingent on any future Industrial Commission OHF grants and available funding.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.**

**MINOT – WATER SUPPLY LOW HEAD DAM REMEDIATION - \$93,750  
(SWC Project No. 2169)**

The city of Minot requested cost-share for the Minot Water Supply Low Head Dam Remediation project (Project). The Project is preconstruction engineering associated with the Minot Water Supply Dam which currently serves as an emergency water supply backup for Minot. The purpose of the Project is to address the hydraulic roller effect present at the Minot Water Supply Dam, which is included in the DWR Low Head Dam Inventory with a high hazard risk ranking.

The total eligible cost for preconstruction \$125,000 with 75 percent cost-share of \$93,750. The Project is identified in the 2021 WDP as a moderate priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request.

After discussion, the following motion was made:

**It was moved by Commissioner Goehring and seconded by Commissioner Zimmerman the Commission approve the request by Minot for state cost participation in the Minot Water Supply Low Head Dam Remediation Project at 75 percent of eligible costs, not to exceed \$93,750. The approval is contingent on available funding.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.**

## **WATER SUPPLY AND RURAL WATER PROJECTS**

Jeffrey Mattern presented the requests for the Water Supply and Rural Water projects.

### **WAHPETON – WELL FIELD AND TRANSMISSION MAIN - \$223,400 (SWC Project No. 2050WAH)**

Wahpeton requested cost-share for preconstruction costs for a new well field to replace the existing well field and extend a water transmission line.

The life cycle cost analysis considered three alternatives and the preferred alternative was to construct a new well field.

The total eligible preconstruction cost is \$372,333 with 60 percent cost-share of \$223,400. The project is in the 2021 WDP as a low priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request.

There were no questions. The following motion was made:

**It was moved by Commissioner Johnson and seconded by Commissioner Veeder the Commission approve the request by Wahpeton for state cost-share participation at 60 percent of eligible costs for the new well field and transmission line, with the total amount not to exceed \$223,400. The approval is contingent on available funding.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.**

### **BISMARCK – 43<sup>RD</sup> AVENUE PHASE 2 - \$2,340,000 (SWC Project No. 2050BIS)**

Bismarck requested cost-share for construction of the 43<sup>rd</sup> Avenue Water System Expansion Phase 2 project (Project). The purpose of the Project is to help meet population growth demands in Bismarck's north service zones and is being completed in conjunction with a ND Department of Transportation (NDDOT) road project in order to reduce construction costs.

The life cycle cost analysis considered two alternatives and the preferred alternative was to complete the installation during the NDDOT road construction.

The total eligible cost is \$3,900,000 with 60 percent cost-share of \$2,340,000. The Project is in the 2021 WDP as a moderate priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request.

There were no questions. The following motion was made:

**It was moved by Commissioner Goehring and seconded by Commissioner Volk the Commission approve the request by Bismarck for state cost-share participation at 60 percent of eligible costs, for the 43<sup>rd</sup> Avenue Water System Expansion Project, with additional cost-share not to exceed \$2,340,000. The approval is contingent on available funding.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.**

**RUGBY – WATER TREATMENT PLANT PHASE 3 - \$881,000  
(SWC Project No. 2050RUG)**

Rugby requested cost-share to purchase and install two clarifier units for the water treatment plant with Phase 3 being the final phase of the plant's upgrade and improvement projects.

The life cycle cost analysis considered two alternatives and the preferred alternative was to replace the two clarifiers.

The total eligible cost is \$1,468,333 with 60 percent cost-share of \$881,000. The project is in the 2021 WDP as a low priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request.

There were no questions. The following motion was made:

**It was moved by Commissioner Zimmerman and seconded by Commissioner Odermann the Commission approve the request by Rugby for state cost-share participation at 60 percent of eligible costs for the Phase 3 Water Plant Improvements Project for cost-share not to exceed \$881,000. The approval is contingent on available funding.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, and Governor Burgum voted aye. Commissioner Goehring was absent. There were no nay votes. The motion carried.**

**GARRISON DIVERSION CONSERVANCY DISTRICT – RED RIVER VALLEY WATER  
SUPPLY CONTRACTS 5B, 5C 5D, 6 - \$47,490,000  
(SWC Project No. 325)**

The Garrison Diversion Conservancy District requested additional cost-share for the Red River Valley Water Supply Project for costs associated with contracts for Pipelines 5B, 5C, 5D, 6; and for land acquisition and additional services costs. The request is for an additional \$47,490,000 at 75 percent cost-share, bringing the total 2021-2023 cost-share to \$48,000,000.

The project is in the 2021 WDP as a high priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request.

After discussion, the following motion was made:

**It was moved by Commissioner Johnson and seconded by Commissioner Anderson the Commission approve the request by Garrison Diversion Conservancy District for state cost-share participation at 75 percent of eligible costs for the Red River Valley Water Supply Project for an additional**

**\$47,490,000, with total 2021-2023 cost-share not to exceed \$48,000,000. The approval is contingent on available funding.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, and Governor Burgum voted aye. Commissioner Goehring was absent. There were no nay votes. The motion carried.**

### **RURAL WATER DISTRICTS AND ASSOCIATIONS MAP**

Prior to cost-share requests for rural water projects, Jeffrey Mattern provided the rural water districts and associations map, clarifying that boundary changes for any district/association need to be completed by formal petition as outlined in NDCC 61-35.

### **AGASSIZ WATER USERS DISTRICT – USER EXPANSION PHASE 2 - \$266,000 (SWC Project No. 2050AGA)**

The Agassiz Water Users District (Agassiz) requested cost-share for preconstruction costs to add new users, upsizing transmission mains, and modifying several reservoirs. Agassiz completed an interconnection with East Central Regional Water District (ECRWD) in 2018, decommissioned their aging water treatment plant, and is purchasing water from ECRWD. The southern area of the system is undersized for the transmission capacity. The project will increase capacity between the reservoirs and provide adequate pressure in the Agassiz's service area.

The life cycle cost analysis considered three alternatives and the preferred alternative includes transmission piping, modification of reservoirs, and adding 20 rural users.

The total eligible preconstruction cost is \$354,667 with 75 percent cost-share of \$266,000. The project is in the 2021 WDP as a high priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request.

After discussion, the following motion was made:

**It was moved by Commissioner Zimmerman and seconded by Commissioner Odermann the Commission approve the request by the Agassiz Water Users District for state cost-share participation at 75 percent of eligible costs for the 2022 Expansion Phase 2 Project at an amount not to exceed \$266,000. This approval is contingent on available funding.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, and Governor Burgum voted aye. Commissioner Goehring was absent. There were no nay votes. The motion carried.**

### **CASS RURAL WATER USERS DISTRICT – 2022 SYSTEM DISTRIBUTION IMPROVEMENTS - \$447,500 (SWC Project No. 2050CAS)**

The Cass Rural Water District requested cost-share for preconstruction costs to add parallel and looping water mains, a booster station, and increased storage at reservoirs.

The life cycle cost analysis considered two alternatives and the preferred alternative was for system improvements.

The total eligible preconstruction cost is \$596,667 with 75 percent cost-share of \$447,500. The project is in the 2021 WDP as a low priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request.

After discussion, the following motion was made:

**It was moved by Commissioner Zimmerman and seconded by Commissioner Veeder the Commission approve the request by the Cass Rural Water District for state cost-share participation at 75 percent of eligible costs for the 2022 System Distribution Project at an amount not to exceed \$477,500. The approval is contingent on available funding.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Zimmerman, and Governor Burgum voted aye. Commissioner Walker abstained. Commissioner Goehring was absent. There were no nay votes. The motion carried.**

### **MCLEAN-SHERIDAN RURAL WATER DISTRICT – SERVICE TO BLUE FLINT ETHANOL PLANT - \$821,000**

#### **(SWC Project No. 2050MCL)**

McLean-Sheridan Rural Water District (McLean) requested cost-share for preconstruction costs to provide a water supply and water disposal for the Blue Flint Ethanol Plant (BFEP). This project would replace the water services currently supplied by the Coal Creek Power Plant, which is pending change of ownership from Great River Energy. Midwest AgEnergy (MAG), who owns and operates the BFEP, requested McLean evaluate the feasibility of providing supply water of 750,000 gallons per day and a disposal water pipeline of 75,000 gallons per day. Concept level hydraulic and engineering analyses with cost estimates have been completed. This project is specifically serving one industrial user with non-potable water.

The life cycle cost analysis considered two alternatives and the preferred alternative was to obtain water supply from the Washburn water treatment plant.

During the 2013-2015 biennium, Washburn was approved for 65 percent cost-share of \$2,334,250 for the replacement of its Missouri River intake and was approved for a \$1,026,025 FEMA grant. In 2019, Washburn provided a new estimated cost of \$4,656,500, and requested additional cost-share for the cost increase, but was denied due to the level of state and federal funding already approved. Washburn's share of the new intake is \$2,306,000, where 42 percent, or \$970,000, is being attributed to the BFEP water supply project.

The total project cost is \$15,301,667, eligible costs are \$14,006,667, and 75 percent cost-share is \$10,505,000. McLean's request is for 75 percent cost-share of \$821,000 on pre-construction costs of \$1,094,667. The project will benefit Washburn, an industrial water user, and supports rural economic development, which allows the funding to be equally divided between the purpose funding of water supply and rural water. The project is in the 2021 WDP as a low priority and meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request.

Lynn Oberg, McLean President, clarified that any water discharge permits would be obtained from the ND Department of Environmental Quality and water quality would be monitored. It was also clarified that the water is non-potable and clarified water only.

Commissioners expressed concern related to funding an industrial project of this amount and depleting the rural water allocation for the 2021-2023 biennium and funding may not be available for additional rural water projects. Commissioners also suggested creating an additional funding source for industrial projects rather than rural water or water supply projects.

Lt. Governor Sanford stated that planning for future funding allocation would need to occur during next legislative session, with House and Senate Appropriations, and the Governor's office. He also stated that economic development projects will continue as a priority because of several industries pursuing business in North Dakota.

Eric Volk, ND Rural Water Systems Association's (Association) Executive Director, stated that overall, this project would benefit the rural water system, helps with the sustainability of a rural system, and helps make rates a little more stable for the end user. Eric also stated the Association is working through the process with the state Legislature to have additional funds considered for the rural systems and will continue to advocate for extra rural water funding.

Andrea Travnicek, DWR Director, clarified that the DWR would need to request any additional funding for the 2021-2023 biennium from the Interim Budget Section Committee.

After further discussion, the following motion was made:

**It was moved by Commissioner Johnson and seconded by Commissioner Anderson the Commission approve the request by McLean-Sheridan Rural Water District for state cost-share participation at 75 percent of eligible costs for the Service to Blue Flint Ethanol Plant Project for an amount not to exceed \$821,000. The approval is contingent on available funding.**

**Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.**

The project will be funded with \$410,500 rural water funds and \$410,500 water supply funds.

**BARNES RURAL WATER DISTRICT – 2021 STORAGE EXPANSION - \$2,262,400 (SWC PROJECT NO. 2050BAR)**

Barnes Rural Water District (Barnes) requested cost-share request for construction for the 2021 Storage Expansion Project to add an additional 100,000 gallons of water storage to four existing reservoirs to accommodate growth.

The life cycle cost analysis considered three alternatives and the preferred alternative was adding underground storage.

The total eligible cost is \$3,165,867, with 75 percent cost-share of \$2,374,400. The project was funded at \$112,000 in the 2019-2021 biennium preconstruction and Barnes is requesting an additional \$2,262,400 for construction. The project is not in the 2021 WDP, but preconstruction was funded in 2019-2021, and the project meets requirements of the Commission's cost-share policy. The recommendation was to approve the cost-share request.

There were no questions. The following motion was made:

**It was moved by Commissioner Goehring and seconded by Commissioner Volk the Commission approve the request by Barnes Rural Water District for state cost-share participation at 75 percent of eligible costs, for the 2021 Storage Expansion Project, with additional cost-share of \$2,262,400, and**

total cost-share not to exceed \$2,374,400. The approval is contingent on available funding.

Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Lt. Governor Sanford voted aye. There were no nay votes. The motion carried.

#### LEGAL UPDATE

Jennifer Verleger, General Counsel, Attorney General's Office, provided an update on current Commission and DWR litigation.

There being no further business to come before the Commission, Lt. Governor Sanford adjourned the meeting at 3:36 p.m.



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Brent Sanford, Lt. Governor  
Acting Chairman, State Water Commission



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Andrea Travnicek, Ph.D.  
Director, North Dakota Department of Water  
Resources, and Secretary to the State Water  
Commission

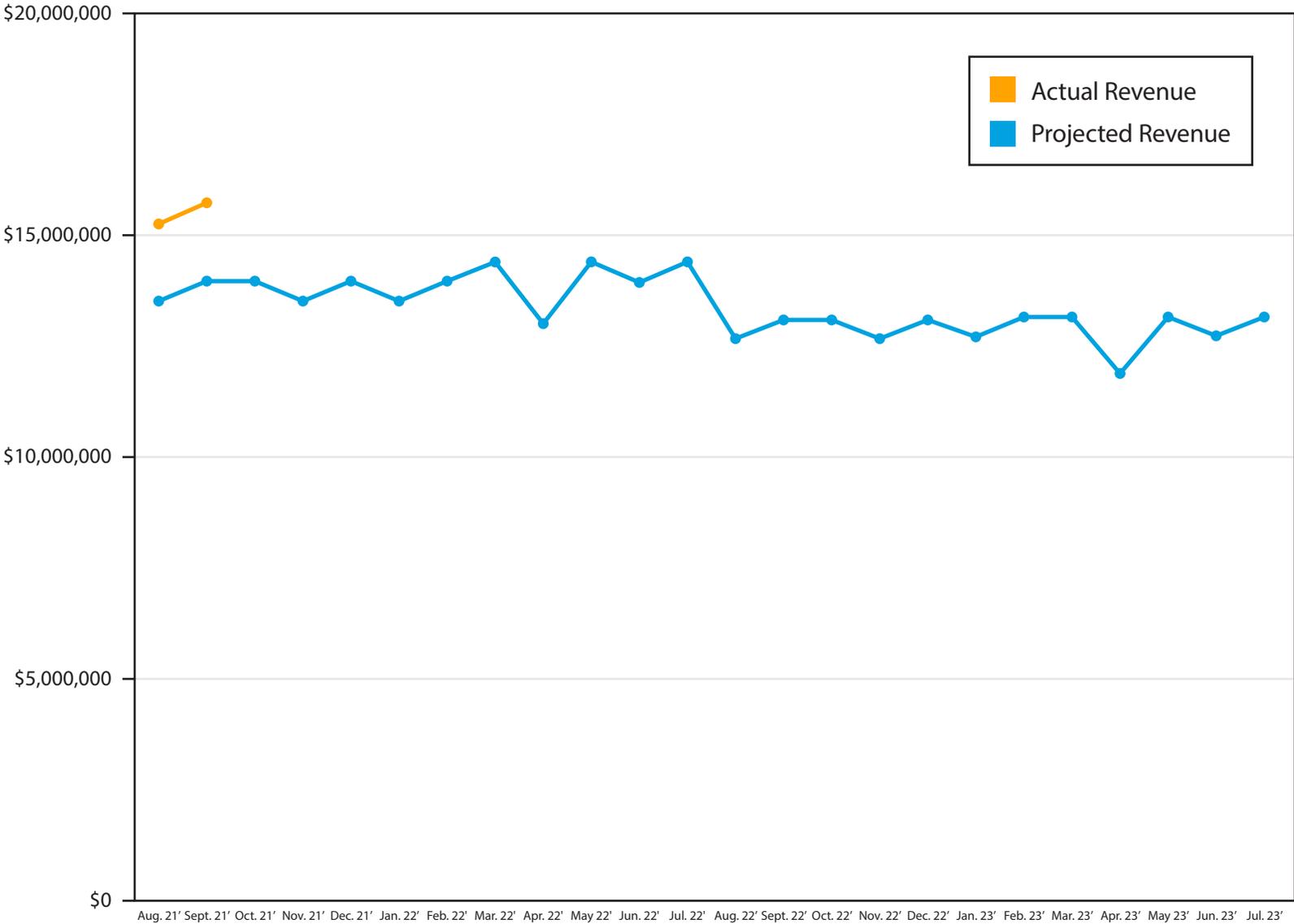
# APPENDIX A

NORTH DAKOTA DEPARTMENT OF WATER RESOURCES  
OIL EXTRACTION REVENUE  
FOR THE 2021 - 2023 BIENNIUM

MONTH / YEAR	PROJECTED <u>REVENUE</u>	<b>ACTUAL <u>REVENUE</u></b>	<u>OVER/(UNDER)</u>
AUGUST, 2021	13,515,385	<b>15,253,686</b>	1,738,301
SEPTEMBER, 2021	13,965,897	<b>15,731,071</b>	1,765,174
OCTOBER, 2021	13,965,897	<b>15,037,222</b>	1,071,325
NOVEMBER, 2021	13,515,385		
DECEMBER, 2021	13,965,897		
JANUARY, 2022	13,515,385		
FEBRUARY, 2022	13,965,897		
MARCH, 2022	14,397,263		
APRIL, 2022	13,006,515		
MAY, 2022	14,400,070		
JUNE, 2022 (INC A/B)	13,935,552		
JULY, 2022	14,400,070		
AUGUST, 2022	12,668,683		
SEPTEMBER, 2022	13,090,973		
OCTOBER, 2022	13,090,973		
NOVEMBER, 2022	12,668,683		
DECEMBER, 2022	13,090,973		
JANUARY, 2023	12,709,026		
FEBRUARY, 2023	13,156,757		
MARCH, 2023	13,156,757		
APRIL, 2023	11,883,522		
MAY, 2023	13,156,757		
JUNE, 2023	12,732,345		
JULY 2023-JUNE REVENUE	13,156,757		
<b>TOTALS</b>	<b>321,111,419</b>	<b>46,021,979</b>	<b>4,574,800</b>

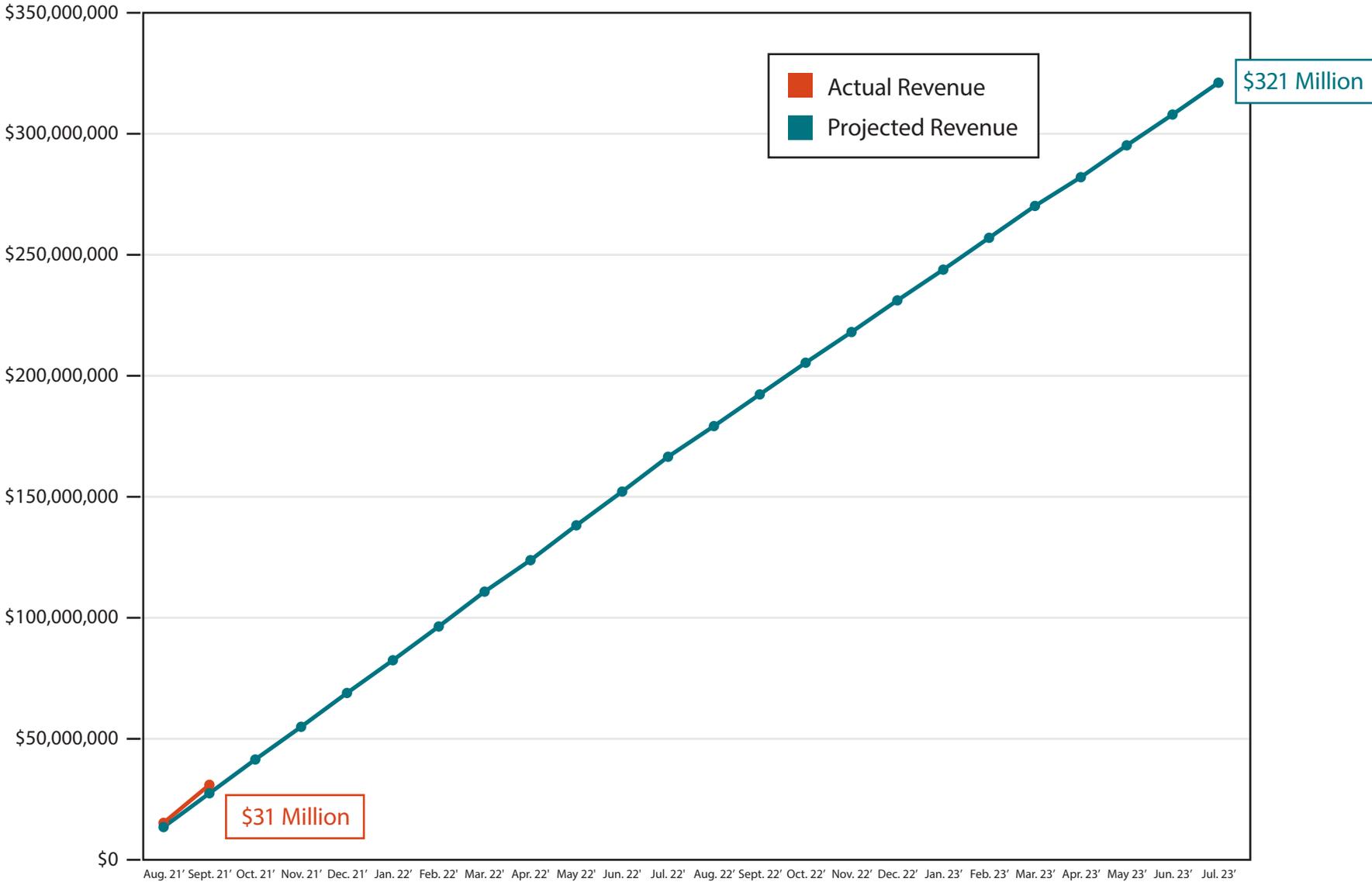
# RESOURCES TRUST FUND REVENUE

2021-2023 (Month by Month) | September 30, 2021



# RESOURCES TRUST FUND REVENUE

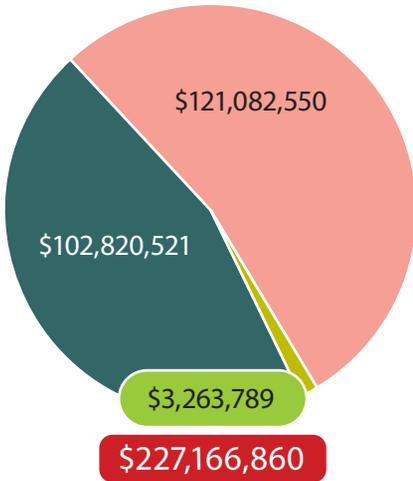
2021-2023 (Cumulative) | September 30, 2021



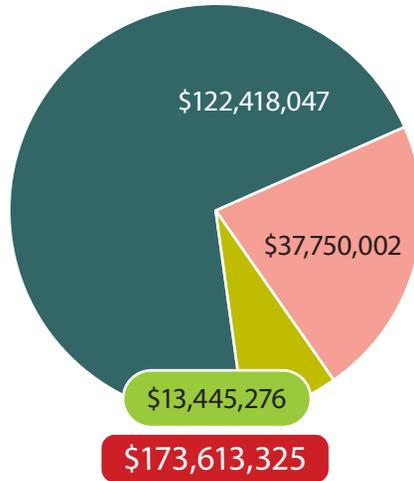
# PROJECT FUNDS

2021-2023 | August 31, 2021

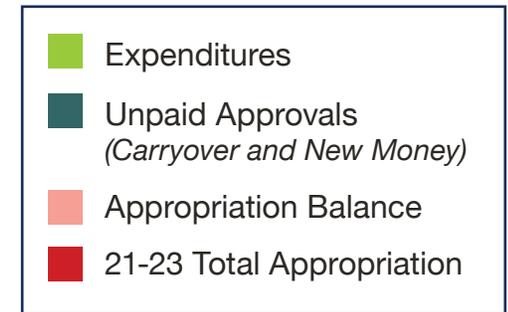
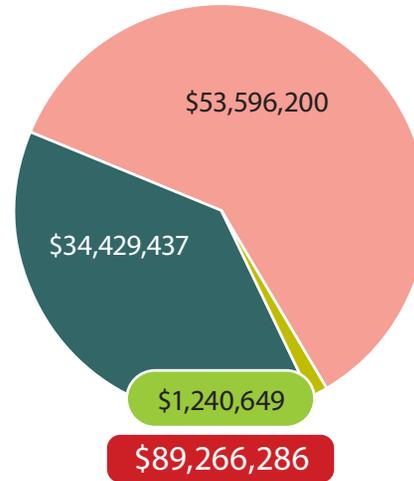
Water Supply



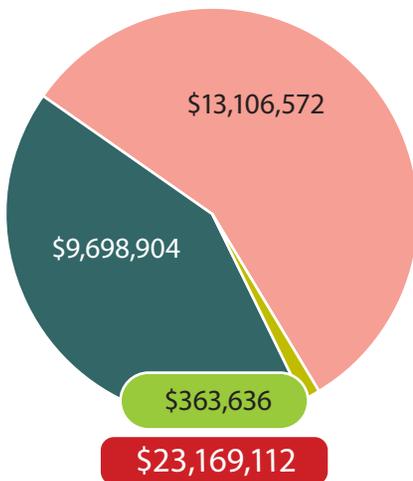
Flood Control



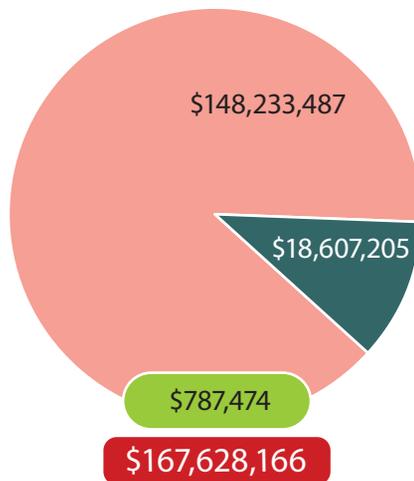
Rural Water Supply



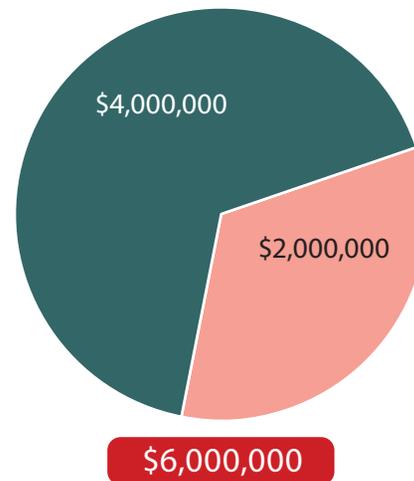
General Water



Capital Assets



Discretionary



Basin Wide Plan



# 2021 - 23 PURPOSE FUNDING

## HOUSE BILL NO. 1020

August 31 2021

APPROVED

APPROPRIATED



\*Capital Assets bucket includes \$50M line of credit.

**DEPARTMENT OF WATER RESOURCES  
PROJECT SUMMARY  
2021-2023 BIENNIUM**

*August 31, 2021*

	2019-2021 CARRYOVER	2021-2023 APPROPRIATION	2021-2023 TOTAL	SWC/Director APPROVED	APPROPRIATION BALANCE
<b>MUNICIPAL &amp; REGIONAL WATER SUPPLY:</b>					
MUNICIPAL WATER SUPPLY	49,069,655	3,948,850	53,018,505	53,018,505	(0)
RED RIVER VALLEY	31,133,057	510,000	31,643,057	31,643,057	(0)
OTHER REGIONAL WATER SUPPLY	21,422,747	(0)	21,422,747	21,422,747	(0)
UNOBLIGATED MUNICIPAL/REG WATER SUPPLY	541,400	120,541,150	121,082,550		121,082,550
Total	102,166,860	125,000,000	227,166,859	106,084,310	\$ 121,082,550
% OBLIGATED		3.70%			
<b>RURAL WATER SUPPLY:</b>					
RURAL WATER SUPPLY	29,666,086	6,003,800	35,669,886	35,669,886	(0)
UNOBLIGATED RURAL WATER SUPPLY	0	53,596,200	53,596,200		53,596,200
Total	29,666,086	59,600,000	89,266,086	35,669,886	53,596,200
% OBLIGATED		11.20%			
<b>FLOOD CONTROL:</b>					
FARGO	50,966,383	(0)	50,966,383	50,966,383	(0)
MOUSE RIVER	38,406,498	10,000,000	48,406,498	48,406,498	(0)
MOUSE RIVER HB1431	0	74,500,000	74,500,000	74,500,000	0
VALLEY CITY	11,355,126	(0)	11,355,126	11,355,126	(0)
LISBON	174,579	(0)	174,579	174,579	(0)
OTHER FLOOD CONTROL	5,105,467	74,250	5,179,717	5,179,717	(0)
PROPERTY ACQUISITIONS	7,316,754	30,000	7,346,754	7,346,754	(0)
WATER CONVEYANCE	11,618,945	815,320	12,434,265	12,434,265	0
UNOBLIGATED FLOOD CONTROL	669,572	37,080,432	37,750,003		37,750,003
MOUSE RIVER HB 1431 BOND PROCEEDS	0	(74,500,000)	(74,500,000)	(74,500,000)	
Total	125,613,325	48,000,000	173,613,325	135,863,323	37,750,003
% OBLIGATED		29.45%			
<b>GENERAL WATER:</b>					
GENERAL WATER	8,927,329	1,135,211	10,062,541	10,062,541	0
UNOBLIGATED GENERAL WATER	14,510	13,092,062	13,106,572		13,106,572
Total	8,941,838	14,227,274	23,169,113	10,062,541	13,106,572
% OBLIGATED		8.67%			
<b>SUBTOTAL</b>	266,388,109	246,827,274	513,215,383	287,680,060	225,535,325
<b>CAPITAL ASSETS:</b>					
SWPP CAPITAL ASSETS	8,528,779	0	8,528,779	8,528,779	0
NAWS CAPITAL ASSETS	10,865,900	0	10,865,900	10,865,900	0
UNOBLIGATED CAPITAL ASSETS	0	148,233,487	148,233,487		148,233,487
Total	19,394,679	148,233,487	167,628,166	19,394,679	148,233,487
% OBLIGATED		0.00%			
<b>DISCRETIONARY FUNDING:</b>					
DISCRETIONARY FUNDING PROJECTS	0	4,000,000	4,000,000	4,000,000	0
UNOBLIGATED DISCRETIONARY FUNDS	0	2,000,000	2,000,000		
Total	0	6,000,000	6,000,000	4,000,000	2,000,000
% OBLIGATED		0.00%			
<b>BASINWIDE PLAN IMPLEMENTATION:</b>					
BASINWIDE PLAN IMPLEMENTATION	0	1,100,000	1,100,000	1,100,000	0
UNOBLIGATED DISCRETIONARY FUNDS	0	0	0		0
Total	0	1,100,000	1,100,000	1,100,000	0
% OBLIGATED		0.00%			
<b>TOTAL</b>	285,782,788	402,160,761	687,943,549	312,174,739	375,768,812

**DEPARTMENT OF WATER RESOURCES  
PROJECT SUMMARY  
2021-2023 BIENNIUM**

*Aug-21*

	SWC/Director APPROVED	EXPENDITURES	UNPAID APPROVALS
<b>MUNICIPAL &amp; REGIONAL WATER SUPPLY:</b>			
MUNICIPAL WATER SUPPLY	53,018,505	853,758	52,164,747
RED RIVER VALLEY	31,643,057	1,320,673	30,322,384
OTHER REGIONAL WATER SUPPLY	21,422,747	1,089,358	20,333,389
TOTAL	106,084,310	3,263,789	102,820,521
<b>RURAL WATER SUPPLY:</b>			
RURAL WATER SUPPLY	35,669,886	1,240,649	34,429,237
<b>FLOOD CONTROL:</b>			
FARGO	50,966,383	5,862,312	45,104,072
MOUSE RIVER	31,506,498	4,318,169	27,188,329
VALLEY CITY	11,355,126	0	11,355,126
LISBON	174,579	0	174,579
OTHER FLOOD CONTROL	5,179,717	0	5,179,717
PROPERTY ACQUISITIONS	24,246,754	2,355,729	21,891,025
WATER CONVEYANCE	12,434,265	909,065	11,525,199
TOTAL	135,863,323	13,445,276	122,418,047
<b>GENERAL WATER:</b>			
GENERAL WATER	10,062,541	363,636	9,698,905
<b>SUBTOTAL</b>	287,680,060	18,313,349	269,366,711
<b>CAPITAL ASSETS:</b>			
SWPP CAPITAL ASSETS	8,528,779	54,028	8,474,751
NAWS CAPITAL ASSETS	10,865,900	733,446	10,132,454
TOTAL	19,394,679	787,474	18,607,205
<b>DISCRETIONARY FUNDING:</b>			
DISCRETIONARY FUNDING PROJECTS	4,000,000	0	4,000,000
<b>BASINWIDE PLAN IMPLEMENTATION:</b>			
BASINWIDE PLAN IMPLEMENTATION	1,100,000	0	1,100,000
<b>TOTALS</b>	312,174,739	19,100,824	293,073,916

**DEPARTMENT OF WATER RESOURCES  
PROJECT SUMMARY  
2021-2023 Biennium  
Resources Trust Fund**

**WATER SUPPLY**

						<i>Aug-21</i>			
Approved SWC By No	Dept	Approved Biennium	Sponsor	Project	Approved Date	Total Approved	Total Payments	Balance	
<b>Municipal Water Supply:</b>									
SWC	2050-13	5000	2017-19	Mandan	New Raw Water Intake	6/19/19	580,025	400,726	179,299
SWC	2050-13	5000	2019-21	Mandan	New Raw Water Intake	6/19/19	17,290,000	0	17,290,000
SWC	2050-15	5000	2017-19	Washburn	New Raw Water Intake	4/12/18	1,872,949	0	1,872,949
SWC	2050-32	5000	2017-19	Williston	Water Systems Improvement Project	12/6/19	3,629,490	0	3,629,490
SWC	2050-37	5000	2017-19	Dickinson	Dickinson State Avenue South Water Main	12/6/19	900,043	0	900,043
SWC	2050-54	5000	2017-19	West Fargo	North Loop Connection	8/23/17	117,461	0	117,461
SWC	2050-75-19	5000	2019-21	Bismarck	Lockport Water Pump Station	10/8/20	408,339	0	408,339
SWC	2050-84-19	5000	2019-21	Cavalier	Water Tower Replacement	2/11/21	1,175,325	0	1,175,325
SWC	2050-85-19	5000	2019-21	Mapleton	300,000 Gallon Storage Tank	10/10/19	173,441	0	173,441
SWC	2050-86-19	5000	2019-21	Minot	SW Water Tower	10/10/19	976,010	0	976,010
SWC	2050-87-19	5000	2019-21	Streeter	Well Installation and Tower Rehabilitation	10/10/19	96,812	0	96,812
SWC	2050-88-19	5000	2019-21	Davenport	Water Improvement District No. 2019-1	10/10/19	421,582	0	421,582
SWC	2050-89-19	5000	2019-21	West Fargo	9th Street NW Water Main	10/10/19	594,000	0	594,000
SWC	2050-90-19	5000	2019-21	Grand Forks	Water Treatment Plant	10/10/19	450,037	0	450,037
SWC	2050-94-19	5000	2019-21	Watford City	Water Distribution 2019	12/6/19	541,400	0	541,400
SWC	2050-95-19	5000	2019-21	Garrison	Water Supply Treatment and Transmission Line	2/13/20	3,076,759	14,720	3,062,040
SWC	2050-96-19	5000	2019-21	Larimore	2020 Water System Replacement	12/11/20	3,329,005	256,073	3,072,932
SWC	2050-98-19	5000	2019-21	Sykeston	Water Tower Replacement	5/4/21	414,966	0	414,966
SWC	2050-99-19	5000	2019-21	Valley City	Water Main Improvement 100/101	2/13/20	47,939	0	47,939
SWC	2050-100-19	5000	2019-21	Wyndmere	2020 Water Main Improvements	2/13/20	663,203	170,968	492,235
SWC	2050-101-19	5000	2019-21	Fargo	Downtown Water Tower	2/13/20	2,751,478	0	2,751,478
SWC	2050-102-19	5000	2019-21	Lincoln	Water Tank Replacement	2/13/20	1,268,000	0	1,268,000
SWC	2050-103-19	5000	2019-21	Kindred	Water Main Looping 2020	2/13/20	35,546	0	35,546
SWC	2050-104-19	5000	2019-21	Hazen	Water Storage Improvements	2/13/20	1,283,038	0	1,283,038
SWC	2050-105-19	5000	2019-21	Williston	42nd Street and 16th Avenue Water Main	2/13/20	230,157	0	230,157
SWC	2050-106-19	5000	2019-21	Parshall	Water Tower Storage	4/9/20	262,686	0	262,686
SWC	2050-107-19	5000	2019-21	Dickinson	North Annexation Water Supply	4/9/20	842,408	0	842,408
SWC	2050-115-19	5000	2019-21	Killdeer	2020 Water Main and Pump Station Project	10/8/20	1,011,008	1,272	1,009,736
SWC	2050-116-19	5000	2019-21	Portland	Water Systems Improvement Feasibility Study	11/16/20	0	0	0
SWC	2050-117-19	5000	2019-21	Lakota	Water Transmission Line Replacement Project	12/11/20	184,954	0	184,954
SWC	2050-121-19	5000	2019-21	Killdeer	HWBL Water Expansion	2/11/21	72,300	0	72,300
SWC	2050-122-19	5000	2019-21	Bowbells	Watermain Improvements 2020	2/11/21	22,800	0	22,800
SWC	2050-123-19	5000	2019-21	Horace	District 2020-06 Water System Improvements	6/8/21	3,053,000	0	3,053,000
SWC	2050-124-19	5000	2019-21	Horace	District 2020-07 Connection to Cass RWD	2/11/21	75,750	0	75,750
SWC	2050-125-19	5000	2019-21	Williston	Williston Square Watermain	2/11/21	280,100	0	280,100
SWC	2050-127-19	5000	2019-21	Valley City	Watermain Improvement District 100 Project	4/8/21	166,645	0	166,645
SWC	2050-128-19	5000	2019-21	Bismarck	43rd Avenue Expansion Phase I	6/8/21	584,000	0	584,000
SWC	2050-129-19	5000	2019-21	Napoleon	Water Tower Replacement	6/8/21	177,000	0	177,000
<b>TOTAL MUNICIPAL WATER SUPPLY CARRYOVER</b>							<b>49,059,655</b>	<b>843,758</b>	<b>48,215,897</b>
SWC	2050-104-21	5000	2021-23	Hazen	Water Systems Improvement Project	8/12/21	367,000	0	367,000
SWC	2050-106-21	5000	2021-23	Parshall	Water Tower	8/12/21	703,200	0	703,200
SWC	2050-124-21	5000	2021-23	Horace	Watermain Improvement District 2020-7 to Cass	8/12/21	1,232,250	0	1,232,250
SWC	2050-129-21	5000	2021-23	Napoleon	Water Tower Replacement	8/12/21	1,617,000	0	1,617,000
SWC	2050-134-21	5000	2021-23	Stanley	Country Estates Watermain Extension	8/12/21	29,400	0	29,400
<b>TOTAL MUNICIPAL WATER SUPPLY 2021-2023</b>							<b>3,948,850</b>	<b>0</b>	<b>3,948,850</b>
<b>TOTAL MUNICIPAL WATER SUPPLY</b>							<b>53,008,505</b>	<b>843,758</b>	<b>52,164,747</b>
<b>Regional Water Supply:</b>									
SWC	1973-07	5000	2019-21	WAWSA	WAWSA Phase VI	6/8/21	21,422,747	1,089,358	20,333,389
SWC	325-17-19	5000	2017-19	RRVWSP	RRVWSP Garrison Diversion	10/8/20	1,452,074	428,105	1,023,969
SWC	325-19-21	5000	2019-21	RRVWSP	RRVWSP Garrison Diversion	6/8/21	29,680,983	892,568	28,788,415
<b>TOTAL REGIONAL WATER SUPPLY CARRYOVER</b>							<b>52,555,804</b>	<b>2,410,031</b>	<b>50,145,774</b>
SWC	325-21-23	5000	2021-23	RRVWSP	RRVWSP Garrison Diversion	8/12/21	510,000	0	510,000
<b>TOTAL REGIONAL WATER SUPPLY 2021-2023</b>							<b>510,000</b>	<b>0</b>	<b>510,000</b>
<b>TOTAL REGIONAL WATER SUPPLY</b>							<b>53,065,804</b>	<b>2,410,031</b>	<b>50,655,774</b>
<b>TOTAL</b>							<b>106,074,310</b>	<b>3,253,789</b>	<b>102,820,521</b>
<b>Capital Assets:</b>									
SWC	1736-05	8000		SWPP	Southwest Pipeline Project	10/10/19	8,528,779	54,028	8,474,751
SWC	2374	9000		NAWS	Northwest Area Water Supply	2/8/18	10,865,900	733,446	10,132,454
<b>TOTAL CAPITAL ASSETS</b>							<b>19,394,679</b>	<b>787,474</b>	<b>18,607,205</b>

PROGRESS REPORT REQUIRED

SWC Board Approved to Continue

	<u>BUDGET</u>	<u>APPROVED</u>	<u>BALANCE</u>
WATER SUPPLY OTHER CARRYOVER - RRVWSP		31,133,057	
WATER SUPPLY 2021-2023 - RRVWSP		<u>510,000</u>	
LEGISLATIVE INTENT	0	31,643,057	(31,643,057)
<b>RRVWSP WATER SUPPLY</b>	<b>510,000</b>	<b>510,000</b>	<b>0</b>
<b>OTHER WATER SUPPLY</b>	<b>124,490,000</b>	<b>3,948,850</b>	<b>120,541,150</b>
<b>OTHER WATER SUPPLY - COMPLETED</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>BUDGET WATER SUPPLY 2019-2021</b>	<b>125,000,000</b>	<b>4,458,850</b>	<b>120,541,150</b>

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COMPLETED WATER SUPPLY

Approved SWC By	No	Dept	Approved Biennium	Sponsor	Project	Approved Date	Total Approved	Total Payments	Aug-21 Balance
<b>Municipal Water Supply:</b>									
SWC	2050-55	5000	2017-19	West Fargo	West Loop Connection	8/23/17	10,000	10,000	-
SWC	2050-94-19	5000	2019-21	Watford City	Water Distribution 2019	12/6/19	0	0	541,400.00
<b>TOTAL MUNICIPAL WATER SUPPLY CARRYOVER</b>							<b>10,000</b>	<b>10,000</b>	<b>541,400</b>
0	0	0	0	0	0	1/0/00	0	0	-
<b>TOTAL MUNICIPAL WATER SUPPLY 2021-2023</b>							<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL MUNICIPAL WATER SUPPLY</b>							<b>10,000</b>	<b>10,000</b>	<b>541,400</b>
<b>Regional Water Supply:</b>									
0	0	0	0	0	0	1/0/00	0	0	-
<b>TOTAL REGIONAL WATER SUPPLY CARRYOVER</b>							<b>0</b>	<b>0</b>	<b>0</b>
0	0	0	0	0	0	1/0/00	0	0	-
<b>TOTAL REGIONAL WATER SUPPLY 2021-2023</b>							<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL REGIONAL WATER SUPPLY</b>							<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL</b>							<b>10,000</b>	<b>10,000</b>	<b>541,400</b>
<b>Capital Assets:</b>									
0	0	0	0	0	0	1/0/00	0	0	-
<b>TOTAL CAPITAL ASSETS</b>							<b>0</b>	<b>0</b>	<b>0</b>

SWC Board Approved to Continue



**DEPARTMENT OF WATER RESOURCES  
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**RURAL WATER**

*Aug-21*

Approved SWC By	No	Dept	Approved Biennium	Sponsor	Project	Approved Date	Total Approved	Total Payments	Balance
<b>Rural Water Supply:</b>									
SWC	2050-34	5000	2017-19	North Prairie Rural Water District	Storage and Water Main	10/6/15	108,252	0	108,252
SWC	2050-43	5000	2017-19	All Seasons Water District	System 4 Connection to System 1	12/11/15	4,900,000	0	4,900,000
SWC	2050-57	5000	2017-19	North Central Regional Water District	Mountrail Expansion Phase II	8/23/17	2,981,628	0	2,981,628
SWC	2050-58	5000	2017-19	North Central Regional Water District	Mountrail Co. Watery Phase III	8/23/17	3,386,181	0	3,386,181
SWC	2050-65	5000	2017-19	Tri-County Rural Water District	System Expansion Project	8/9/18	28,929	0	28,929
SWC	2373-39	5000	2017-19	North Central Rural Water Consortium	Carpio Berthold Phase 2	4/7/15	258,691	0	258,691
SWC	2050-77-19	5000	2019-21	Dakota Rural Water District	2019 Expansion	4/9/20	2,053,156	109,855	1,943,300
SWC	2050-78-19	5000	2019-21	McLean-Sheridan Rural Water District	2019 Expansion	4/9/20	669,008	0	669,008
SWC	2050-91-19	5000	2019-21	Agassiz Water Users District	2019 Expansion	4/9/20	206,532	10,919	195,613
SWC	2050-92-19	5000	2019-21	East Central Regional Water District	2019 Expansion Phase IV	10/8/20	2,665,243	976,561	1,688,682
SWC	2050-113-19	5000	2019-21	North Prairie Regional Water District	Minot to Yelva Highway 52 Improvement	10/8/20	3,074,030	0	3,074,030
SWC	2050-114-19	5000	2019-21	Walsh Rural Water District	Drayton Water Supply Project	2/11/21	7,323,029	47,181	7,275,849
SWC	2050-119-19	5000	2019-21	Southeast Water Users District	West System Supply Study	2/11/21	134,408	25,133	109,275
SWC	2050-120-19	5000	2019-21	East Central Regional Water District	Grandin Water Supply	6/8/21	1,640,000	44,000	1,596,000
SWC	2050-126-19	5000	2019-21	East Central Regional Water District	Hatton Water Supply	4/8/21	75,000	27,000	48,000
SWC	2050-130-19	5000	2019-21	Barnes Rural Water District	2021 Storage Expansion	6/8/21	112,000	0	112,000
SWC	2050-131-19	5000	2019-21	Northeast Regional Water District	Expansion - Adams/Walsh RWD	6/8/21	50,000	0	50,000
<b>TOTAL RURAL WATER SUPPLY CARRYOVER</b>							<b>29,666,086</b>	<b>1,240,649</b>	<b>28,425,437</b>
SWC	2050-77-21	5000	2021-23	Dakota Rural Water District	2019 Expansion	8/12/21	1,877,000	0	1,877,000
SWC	2050-126-21	5000	2021-23	East Central Regional Water District	Hatton Water Supply	8/12/21	1,220,000	0	1,220,000
SWC	2050-131-19	5000	2021-23	Northeast Regional Water District	Expansion - Adams/Walsh RWD	6/8/21	160,000	0	160,000
SWC	2050-132-21	5000	2021-23	McLean-Sheridan Rural Water District	McClusky Water Tower Replacement	6/8/21	274,000	0	274,000
SWC	2050-133-21	5000	2021-23	Rolette County	Turtle Mountain Public Utilities Comm: Membrane Treatment	6/8/21	1,036,800	0	1,036,800
SWC	2050-135-21	5000	2021-23	East Central Regional Water District	WTP and Transmission Expansion	8/12/21	521,000	0	521,000
SWC	2050-136-21	5000	2021-23	McLean-Sheridan Rural Water District	System Improvements Phase 2	8/12/21	670,000	0	670,000
SWC	2050-137-21	5000	2021-23	Upper Souris Water District	2021 Improvements and Expansion	8/12/21	245,000	0	245,000
<b>TOTAL RURAL WATER SUPPLY 2021-2023</b>							<b>6,003,800</b>	<b>0</b>	<b>6,003,800</b>
<b>TOTAL RURAL WATER SUPPLY</b>							<b>35,669,886</b>	<b>1,240,649</b>	<b>34,429,237</b>

PROGRESS REPORT REQUIRED

SWC Board Approved to Continue

	BUDGET	APPROVED	BALANCE
LEGISLATIVE INTENT	0	0	0
OTHER RURAL WATER	59,600,000	6,003,800	53,596,200
OTHER RURAL WATER - COMPLETED	0	0	0
<b>BUDGET RURAL WATER 2021-2023</b>	<b>59,600,000</b>	<b>6,003,800</b>	<b>53,596,200</b>

DEPARTMENT OF WATER RESOURCES  
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**COMPLETED RURAL WATER**

Approved SWC By	No	Dept	Approved Biennium	Sponsor	Project	Approved Date	Total Approved	Total Payments	Aug-21 Balance
0	0	0	0	0	<i>Rural Water Supply:</i>				
				0		1/0/00	0	0	-
					<b>TOTAL RURAL WATER SUPPLY CARRYOVER</b>		<b>0</b>	<b>0</b>	<b>0</b>
0	0	0	0	0		1/0/00	0	0	-
					<b>TOTAL RURAL WATER SUPPLY 2021-2023</b>		<b>0</b>	<b>0</b>	<b>0</b>
					<b>TOTAL RURAL WATER SUPPLY</b>		<b>0</b>	<b>0</b>	<b>0</b>

SWC Board Approved to Continue



**DEPARTMENT OF WATER RESOURCES  
PROJECT SUMMARY  
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**FLOOD CONTROL**

Aug-21

Approved SWC By No	Dept	Approved Biennium	Sponsor	Project	Approved Date	Total Approved	Total Payments	Balance	
<b>Flood Control:</b>									
SB 2020	1928-17	5000	2017-19	Fargo Metro Flood Diversion	Fargo Metro Flood Diversion Authority 2017-2019	2/14/19	6,966,383	5,862,312	1,104,072
SB 2020	1928-19	5000	2019-21	Fargo Metro Flood Diversion	Fargo Metro Flood Diversion Authority 2019-2021	10/8/20	44,000,000	0	44,000,000
SWC	1771-01	5000	2017-19	Grafton	Grafton Flood Control Project	10/12/16	1,600,000	0	1,600,000
SWC	1974	Rural	2017-19	Souris River Joint WRD	Mouse River Rural Projects	6/19/19	1,045,902	107,398	938,504
SWC	1974	Rural	2019-21	Souris River Joint WRD	Mouse River Rural Projects	6/19/19	21,913,543	2,459,300	19,454,244
SWC	1974	M-15	2017-19	Souris River Joint WRD	Mouse River Municipal Projects carryover 2015-17	3/29/17	415,310	415,310	0
SWC	1974	M-17	2017-19	Souris River Joint WRD	Mouse River Municipal Projects carryover 2017-19	4/12/18	8,992,670	323,014	8,669,656
SWC	1974	M-19	2019-21	Souris River Joint WRD	Mouse River Municipal New Projects 2019-21	6/19/19	5,907,657	960,856	4,946,801
SWC	2107-02	5000	2017-19	City of Minot	SWIF 2018 Outfall Pipe Project	10/11/18	131,415	52,291	79,124
SWC	1504-03	5000	2017-19	Valley City	Permanent Flood Protection PH II	12/9/16	234,498	0	234,498
SWC	1504-08	5000	2017-19	Valley City	Permanent Flood Protection Erosion Sites	4/9/19	44,560	0	44,560
SWC	1504-09	5000	2019-21	Valley City	Permanent Flood Protection PH IV and V	4/9/20	10,926,068	0	10,926,068
SWC	1504-10	5000	2019-21	Valley City	Permanent Flood Protection Storage Building	6/8/21	150,000	0	150,000
SB 2371	1344-02	5000	2017-19	Lisbon	Sheyenne River Valley Flood Control Project	8/8/16	103,971	0	103,971
SWC	1991-10	5000	2017-19	Lisbon	Permanent Flood Protection - Levee F Project	4/12/18	70,608	0	70,608
SWC	2111	5000	2019-21	Maple River WRD	Davenport Flood Risk Reduction	4/9/20	2,012,115	0	2,012,115
SWC	2118	5000	2017-19	Cass County Joint WRD	Sheldon Subdivision Levee	10/11/18	370,200	0	370,200
SWC	416-02	5000	2019-21	City of Devils Lake	Devils Lake Flood Risk Management Levee	4/8/21	266,250	0	266,250
SE	2124	5000	2017-19	City of Belfield	Heart River & Tributaries Flood Control Study	11/6/18	27,000	0	27,000
SWC	2129	5000	2019-21	Burleigh County WRD	Sibley Island Flood Control Project	8/8/19	48,473	0	48,473
SWC	2131	5000	2017-19	Lower Heart River WRD	Lower Heart Flood Risk Reduction	10/8/20	781,430	0	781,430
<b>TOTAL FLOOD CONTROL CARRYOVER</b>							<b>106,008,054</b>	<b>10,180,481</b>	<b>95,827,573</b>
SWC	1974	M-21	2021-23	Souris River Joint WRD	Mouse River Municipal New Projects 2021-23	8/12/21	57,600,000	0	57,600,000
SWC	1974	R-21	2021-23	Souris River Joint WRD	Mouse River Rural Projects 2021-23	8/12/21	10,000,000	0	10,000,000
Director	2167	5000	2021-23	Steele County WRD	Steele County Drain 11 Outlet Improvements	8/18/21	74,250	0	74,250
<b>TOTAL FLOOD CONTROL 2021-2023</b>							<b>67,674,250</b>	<b>0</b>	<b>67,674,250</b>
<b>TOTAL FLOOD CONTROL</b>							<b>173,682,304</b>	<b>10,180,481</b>	<b>163,501,823</b>
<b>Floodway Property Acquisitions:</b>									
SWC	1974-MA19	5000	2019-21	Minot Acquisitions	Minot Phase - Floodway Acquisitions	6/19/19	7,035,716	2,355,729	4,679,987
SWC	1974-RA19	5000	2019-21	Rural Floodway Acquisitions	Minot Rural - Floodway Acquisitions	6/19/19	0	0	0
SB 2371	1504-05	5000	2017-19	Valley City	Valley City - Floodway Acquisitions	12/8/17	260,280	0	260,280
SWC	1991-05	5000	2017-19	Lisbon	Lisbon - Floodway Acquisition	5/8/19	20,759	0	20,759
<b>TOTAL FLOOD FLOODWAY PROPERTY ACQUISITIONS CARRYOVER</b>							<b>7,316,754</b>	<b>2,355,729</b>	<b>4,961,025</b>
SWC	1974	MA-21	2021-23	Souris River Joint WRD	Minot Phase - Floodway Acquisitions 2021-23	8/12/21	13,150,000	0	13,150,000
SWC	1974	RA-21	2021-23	Souris River Joint WRD	Minot Rural - Floodway Acquisitions 2021-23	8/12/21	3,750,000	0	3,750,000
Director	1504-05	5000	2021-23	Valley City	Valley City - Floodway Acquisitions	8/18/21	30,000	0	30,000
<b>TOTAL FLOOD FLOODWAY PROPERTY ACQUISITIONS 2021-2023</b>							<b>16,930,000</b>	<b>0</b>	<b>16,930,000</b>
<b>FLOODWAY PROPERTY ACQUISITIONS</b>							<b>24,246,754</b>	<b>2,355,729</b>	<b>21,891,025</b>
<b>TOTAL FLOOD CONTROL</b>							<b>197,929,058</b>	<b>12,536,210</b>	<b>185,392,848</b>
<b>Discretionary Funding Projects:</b>									
SWC	1851	5000	2021-23	ND State Water Commission	Drought Disaster Livestock Water Supply Assistance	7/30/21	4,000,000	0	4,000,000
<b>Basinwide Plan Implementation:</b>									
SWC	PS/WRD/UIP	5000	2021-23	Upper Sheyenne River Joint WRB	Upper Sheyenne River Watershed Pilot Project	8/12/21	1,100,000	0	1,100,000
<b>TOTAL</b>							<b>203,029,058</b>	<b>12,536,210</b>	<b>190,492,848</b>

PROGRESS REPORT REQUIRED

SWC Board Approved to Continue

	BUDGET	APPROVED	BALANCE
FLOOD CONTROL	121,684,680	84,604,250	37,080,430
FLOOD CONTROL - COMPLETED	0	0	0
CONVEYANCE	815,320	815,320	0
<b>BUDGET FLOOD CONTROL 2021-2023</b>	<b>122,500,000</b>	<b>85,419,570</b>	<b>37,080,430</b>

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**COMPLETED FLOOD CONTROL**

Approved By	SWC No	Dept	Approved Biennium	Sponsor	Project	Approved Date	Total Approved	Total Payments	<i>Aug-21</i> Balance	
SWC	1771-01	5000	2017-19	<b>Flood Control:</b> Grafton	Grafton Flood Control Project	10/12/16	661,521	0	661,521	
					<b>TOTAL FLOOD CONTROL CARRYOVER</b>		<b>661,521</b>	<b>0</b>	<b>661,521</b>	
	0	0	0	0	0	0	1/0/00	0	0	
					<b>TOTAL FLOOD CONTROL 2021-2023</b>		<b>0</b>	<b>0</b>	<b>0</b>	
					<b>TOTAL FLOOD CONTROL</b>		<b>661,521</b>	<b>0</b>	<b>661,521</b>	
	0	0	0	0	<b>Floodway Property Acquisitions:</b> 0	0	1/0/00	0	0	
					<b>TOTAL FLOOD FLOODWAY PROPERTY ACQUISITIONS CARRYOVER</b>		<b>0</b>	<b>0</b>	<b>0</b>	
	0	0	0	0	0	0	1/0/00	0	0	
					<b>TOTAL FLOOD FLOODWAY PROPERTY ACQUISITIONS 2019-2021</b>		<b>0</b>	<b>0</b>	<b>0</b>	
					<b>FLOODWAY PROPERTY ACQUISITIONS</b>		<b>0</b>	<b>0</b>	<b>0</b>	
					<b>TOTAL FLOOD CONTROL</b>		<b>661,521</b>	<b>0</b>	<b>661,521</b>	
	0	0	0	0	<b>Discretionary Funding Projects:</b> 0 0	0	0	0	0	
					<b>Basinwide Plan Implementation</b>			<b>0</b>	<b>0</b>	
<b>TOTAL</b>								<b>661,521</b>	<b>0</b>	<b>661,521</b>

SWC Board Approved to Continue



**DEPARTMENT OF WATER RESOURCES  
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**WATER CONVEYANCE**

Aug-21

Approved SWC By	No	Dept	Approved Biennium	Sponsor	Project	Approved Date	Total Approved	Total Payments	Balance
<b>Drain &amp; Channel Improvement Projects:</b>									
SWC	1059	5000	2017-19	Bottineau Co WRD	Baumann Legal Drain	12/7/18	156,132	0	156,132
SWC	1064	5000	2019-21	Rush River WRD	Cass County Drain 2 Channel Improvement	6/8/21	605,379	0	605,379
SWC	1090	5000	2019-21	Southeast Cass WRD	Cass County Drain 40 Channel Improvements 2021	6/8/21	320,019	0	320,019
SWC	1217	5000	2019-21	Tri-County WRD	Drain No 6	10/10/19	174,013	0	174,013
SWC	1222	5000	2015-17	Sargent Co WRD	Drain No 11 Channel Improvements	10/12/16	1,350,501	0	1,350,501
SE	1299	5000	2019-21	Ransom County	Maple River Bridge Bank Stabilization	6/11/21	50,267	0	50,267
SWC	1520	5000	2017-19	Walsh Co. WRD	Walsh County Drain 30-2	10/11/18	82,318	0	82,318
SE	1638	5000	2019-21	Rush River WRD	Auka Ring Dike	5/20/21	55,000	0	55,000
SWC	1951	5000	2015-17	Maple River WRD	Lynchburg Channel Improvements	7/6/16	505,707	0	505,707
SWC	1975	5000	2019-21	Walsh Co. WRD	Walsh County Drain 31 Improvements	6/8/21	287,349	0	287,349
SWC	1990	5000	2011-13	Mercer Co. WRD	Lake Shore Estates High Flow Diversion Project	3/7/12	43,821	0	43,821
SWC	1999	5000	2019-21	Pembina Co. WRD	Tongue River Cutoff Channel Improvements	2/13/20	6,812	0	6,812
SE	2016	5000	2015-17	Pembina Co. WRD	Establishment of Pembina County Drain No. 80	4/10/17	3,981	0	3,981
SWC	2084	5000	2019-21	Richland County WRD	Richland County Drain 31 Reconstruction	6/8/21	174,771	0	174,771
SWC	2087	5000	2015-17	Walsh Co. WRD	Drain #87/McLeod Drain	3/29/17	374,907	0	374,907
SWC	2094	5000	2019-21	McLean County WRD	Fort Mandan/4H Camp Access Road	4/9/20	67,996	0	67,996
SWC	2104	5000	2019-21	Bottineau Co. WRD	Overgaard Extension	2/13/20	57,899	0	57,899
SWC	2112	5000	2019-21	Pembina Co. WRD	Pembina Co Drain #81	2/13/20	284,982	0	284,982
SWC	2135	5000	2019-21	Grand Forks-Traill County Joint WRD	Grand Forks County Legal Drain No.59	12/11/20	2,783,837	909,065	1,874,772
SWC	2136	5000	2019-21	Pembina County WRD	Drain No. 39	4/9/20	27,683	0	27,683
SWC	2138	5000	2019-21	Pembina County WRD	Drain No. 82	12/6/19	985,718	0	985,718
SWC	2140	5000	2019-21	Grand Forks-Traill County Joint WRD	Thompson Drainage	4/9/20	613,751	0	613,751
SE	2143	5000	2019-21	Traill Co. WRD	Hillsboro Drain No. 26 Channel Improvements	3/27/20	7,612	0	7,612
Director	2144	5000	2019-21	Ransom County	Virgil Schultz Bridge Bank Slope Stabilization	5/5/20	36,531	0	36,531
SWC	2157	5000	2019-21	Maple River WRD	Upper Swan Creek Channel Improvements	6/8/21	698,468	0	698,468
SWC/SE	1413-01	5000	2019-21	Traill Co. WRD	Camrud Drainage Improvement District No. 79	4/9/20	740,307	0	740,307
SWC	2152	5000	2019-21	Enderlin Park Board	Maple River Bank Stabilization Project	12/11/20	132,500	0	132,500
SE	2153	5000	2019-21	Traill Co. WRD	Hong Drainage Improvement District No. 81	11/16/20	2,279	0	2,279
SWC	2155	5000	2019-21	Richland County, Center Township	Wild Rice River Bank Stabilization	10/8/20	44,423	0	44,423
SWC	2156	5000	2019-21	Bottineau County WRD	McHenry Laterals A and B	10/8/20	362,492	0	362,492
SE	2159	5000	2019-21	North Cass WRD	Cass County Drain 18 Extension	12/2/20	10,350	0	10,350
SE	2162	5000	2019-21	Steele Couty WRD	Drain 1 Lateral A - Preliminary Design Phase	4/13/21	9,000	0	9,000
SWC	PS/WRD/M	5000	2019-21	Mercer County WRD	Knife River Bank Stabilization	10/8/20	87,831	0	87,831
<b>TOTAL RURAL FLOOD CONTROL CARRYOVER</b>							<b>11,144,636</b>	<b>909,065</b>	<b>10,235,570</b>
SWC	1221	5000	2021-23	Sargent County WRD	County Drain No. 9/11	8/12/21	35,618	0	35,618
SWC	1650	5000	2021-23	Sargent Co WRD	County Drain No.7	8/12/21	185,927	0	185,927
SWC	1999	5000	2021-23	Pembina Co. WRD	Tongue River Cut-off Channel Improvements	8/12/21	145,980	0	145,980
SWC	2140	5000	2021-23	Grand Forks-Traill County Joint WRD	Thompson Drainage Improvement District 72	8/12/21	168,148	0	168,148
Director	2144	5000	2021-23	Ransom County	Virgil Schultz Bridge Bank Slope Stabilization	8/18/21	18,754	0	18,754
SWC	2162	5000	2021-23	Steele Couty WRD	Drain 1 Lateral A - Construction Phase	8/12/21	120,355	0	120,355
<b>TOTAL RURAL FLOOD CONTROL 2021-2023</b>							<b>674,782</b>	<b>0</b>	<b>674,782</b>
<b>TOTAL RURAL FLOOD CONTROL</b>							<b>11,819,418</b>	<b>909,065</b>	<b>10,910,352</b>
<b>Snagging &amp; Clearing Projects:</b>									
SWC	568	5000	2019-21	Southeast Cass WRD	Sheyenne River Snag & Clear	8/8/19	84,852	0	84,852
SE	1277	5000	2019-21	Emmons County WRD	2020-2021 Beaver Creek Snag & Clear	12/10/20	74,000	0	74,000
SE	1667	5000	2019-21	Traill County WRD	Goose River Snagging & Clearing	10/27/20	44,683	0	44,683
SWC	1694	5000	2019-21	Pembina County WRD	Tongue River Snag and Clear, City of Cavalier	10/8/20	98,400	0	98,400
SWC	1868	5000	2019-21	Southeast Cass WRD	2020-2021 Wild Rice River Snag & Clear	12/11/20	9,956	0	9,956
SE	1934	5000	2019-21	Traill County WRD	Elm River Snagging & Clearing	10/27/20	45,739	0	45,739
SE	1945	5000	2019-21	Rush River WRD	Rush River Snagging & Clearing	2/10/21	70,000	0	70,000
SE	2095	5000	2019-21	Barnes Co WRD	2019 Sheyenne River Snag & Clear Reach 1 - Project 2	9/16/19	7,435	0	7,435
SWC	2095	5000	2019-21	Southeast Cass WRD	2020-2021 Sheyenne River Snag & Clear	12/11/20	39,244	0	39,244
<b>TOTAL SNAGGING &amp; CLEARING CARRYOVER</b>							<b>474,309</b>	<b>0</b>	<b>474,309</b>
Director	662	5000	2021-23	Walsh County WRD	Park River Snag & Clear 2021	8/13/21	40,538	0	40,538
Director	1271	5000	2021-23	Southeast Cass WRD	Rose Coulee Snagging and Clearing	8/18/21	50,000	0	50,000
	2170	5000	2019-21	Richland County WRD	Sheyenne River Snag & Clear	8/30/21	50,000	0	50,000
<b>TOTAL SNAGGING &amp; CLEARING 2021-2023</b>							<b>140,538</b>	<b>0</b>	<b>140,538</b>
<b>TOTAL SNAGGING &amp; CLEARING</b>							<b>614,847</b>	<b>0</b>	<b>614,847</b>
<b>TOTAL WATER CONVEYANCE</b>							<b>12,434,265</b>	<b>909,065</b>	<b>11,525,199</b>
TOTAL							12,434,265	909,065	11,525,199

PROGRESS REPORT REQUIRED

SWC Board Approved to Continue

	BUDGET	APPROVED	BALANCE
WATER CONVEYANCE	815,320	815,320	0
COMPLETED WATER CONVEYANCE	0	0	0
BUDGET WATER CONVEYANCE 2021-2023	815,320	815,320	0

DEPARTMENT OF WATER RESOURCES  
 PROJECT SUMMARY  
 2021-2023 Biennium  
 Resources Trust Fund

COMPLETED WATER CONVEYANCE

Approved SWC By	No	Dept	Approved Biennium	Sponsor	Project	Approved Date	Total Approved	Total Payments	<i>Aug-21</i> Balance	
SE		2149	5000	2019-21	Maple River WRD	Tower Township Improvement District No. 79	12/2/20	8,051	0	8,051
<b>TOTAL WATER CONVEYANCE CARRYOVER</b>								<b>8,051</b>	<b>0</b>	<b>8,051</b>
	0	0	0	0	0	0	0	0	0	0
<b>TOTAL WATER CONVEYANCE 2021-2023</b>								<b>0</b>	<b>0</b>	<b>0</b>
TOTAL								8,051	0	8,051
SWC Board Approved to Continue										

**DEPARTMENT OF WATER RESOURCES  
PROJECT SUMMARY  
2021-2023 Biennium  
Resources Trust Fund**

**GENERAL PROJECTS**

										Aug-21
Approved SWC By No	Dept	Approved Biennium	Sponsor	Project	Approved Date	Total Approved	Total Payments	Balance		
<b>Hydrologic Investigations:</b>										
SWC 2041	3000	2017-19	USGS	Stream Gage Joint Funding Agreement	6/8/21	463,860	0	463,860		
<b>TOTAL CARRYOVER</b>						<b>463,860</b>	<b>0</b>	<b>463,860</b>		
<b>Subtotal Hydrologic Investigations</b>						<b>463,860</b>	<b>0</b>	<b>463,860</b>		
<b>General Water Management:</b>										
SWC 269	5000	2017-19	Walsh Co. WRD	Fordville Dam Rehabilitation	6/19/19	45,098	0	45,098		
SWC 391	5000	2019-21	Sargent Co WRD	Silver Lake Dam Improvements	4/9/20	46,047	0	46,047		
SWC 394	5000	2019-21	Golden Valley Co WRD	Odland Dam Rehabilitation Project	4/9/20	571,582	0	571,582		
SWC 394	5000	2019-21	Golden Valley Co WRD	Odland Dam Rehabilitation Project	12/11/20	306,000	0	306,000		
SE 477	5000	2019-21	City of Valley City	Mill Dam Rehabilitation	11/16/20	74,625	0	74,625		
SE 531	5000	2017-19	Benson Co WRD	Bouret Dam Rehabilitation	12/20/18	8,124	0	8,124		
SWC 531	5000	2017-19	Benson Co WRD	Bouret Dam Rehabilitation	4/9/19	79,058	0	79,058		
SE 531	5000	2019-21	Benson Co WRD	Bouret Dam Rehabilitation	12/2/20	75,000	0	75,000		
SE 632	5000	2019-21	Bottineau County Highway Dept	Antler Dam Repair	1/16/20	31,207	0	31,207		
SWC 688	5000	2017-19	Grand Forks Co WRD	Larimore Dam Rehabilitation	6/19/19	43,211	0	43,211		
SWC 980	5000	2015-17	Cass Co. Joint WRD	Upper Maple River Watershed Detention Study	6/11/21	35,910	22,589	13,321		
SWC 980	5000	2015-17	Cass Co. Joint WRD	Rush River Watershed Detention Study	1/7/16	38,602	0	38,602		
SE 1264	5000	2013-15	Bames Co WRD	Little Dam Repurposing Feasibility Study	6/17/15	5,797	0	5,797		
SE/SWC 1267	5000	2019-21	Bottineau County WRD	Westhope Dam Rehabilitation	6/9/20	71,293	0	71,293		
SE 1289	5000	2015-17	McKenzie Co. Weed Board	Control of Noxious Weeds on Sovereign Land	3/23/21	40,111	0	40,111		
SWC 1303	5000	2015-17	Sargent Co WRD	Shortfoot Creek Watershed Planning Program	3/9/16	45,560	7,709	37,851		
SE 1378	5000	2019-21	Bames Co WRD	Clausen Springs Dam EAP	2/7/20	3,304	0	3,304		
SWC 1389	5000	2013-15	Bank of ND	BND AgPace Program	2/11/21	220,291	0	220,291		
SE 1431	5000	2019-21	USGS/LaMoire County	Rapid Deployment Gages under FEMA Hazard Mit	10/17/19	500	0	500		
SE 1453	5000	2017-19	Hettinger County WRD	Karey Dam Rehabilitation Design & Planning	12/14/18	48,284	0	48,284		
SE 1453	5000	2017-19	Hettinger County WRD	Karey Dam Rehabilitation Project	4/9/19	181,661	0	181,661		
SWC 1785	5000	2019-21	Maple River WRD	Maple River Dam Site T-180 Improvements	2/13/20	35,759	0	35,759		
SWC 1851-01	5000	2015-17	ND State Water Commission	Drought Disaster Livestock Water Supply Assistance	6/8/21	3,853,243	305,481	3,547,762		
SWC 1968	5000	2017-19	Garrison Diversion	MM 0 and MM 0.4 Imigation Project	12/7/18	1,620,054	0	1,620,054		
SE 2055	5000	2015-17	Red River Joint Water Resource District	Lower Red Basin Regional Detention Study	11/3/20	77,905	19,433	58,472		
SWC 2059	5000	2015-17	Park River Joint WRD	North Branch Park River NRCS Watershed Study	10/6/15	4,904	0	4,904		
SWC 2060	5000	2017-19	Walsh Co. WRD	Matejcek Dam Rehabilitation	10/11/18	85,993	0	85,993		
SE 2072	5000	2015-17	Bames Co WRD	Ten Mile Lake Flood Risk Reduction Project	6/8/16	4,901	0	4,901		
SE 2073	5000	2019-21	Walsh Co. WRD	BTAG Oslo, MN Area Hydraulic Analysis	4/15/21	3,139	0	3,139		
SE 2089	5000	2015-17	Maple River WRD	Tower Township Improvement District No. 77 Study	12/19/16	11,769	0	11,769		
SE 2090	5000	2015-17	International Water Institute	River Watch Program	8/2/19	17,330	0	17,330		
SWC 2103	5000	2017-19	Walsh Co. WRD	Bylin Dam Rehabilitation	6/19/19	50,341	0	50,341		
SE 2109	5000	2017-19	Logan County WRD	McKenna Lake Feasibility Study	6/21/17	2,247	0	2,247		
SE 2109	5000	2017-19	Logan County WRD	McKenna Lake Hydrologic Study	9/12/18	4,271	0	4,271		
SWC 2109-02	5000	2019-21	Logan County WRD	McKenna Lake Hydrologic Study Phase 2	10/8/20	89,786	0	89,786		
SWC 2115	5000	2017-19	Applied Weather Associates, LLC	(PMP) Probable Maximum Precipitation Estimates	10/11/18	11,822	130	11,692		
SWC 2121	5000	2017-19	Pembina Co. WRD	Senator Young Dam Rehabilitation	6/19/19	53,205	0	53,205		
SWC 2123	5000	2017-19	Geotech, Inc.	Airborne Electromagnetic (AEM) 2018	8/9/18	23,104	0	23,104		
SWC 2141	5000	2019-21	Pembina Co. WRD	Weiler Dam Gate and Catwalk Retrofit	4/9/20	28,661	0	28,661		
SE 2154	5000	2019-21	Elm River Joint WRD	Elm River Watershed Study	11/3/20	1,035	0	1,035		
SWC 2161	5000	2019-21	AE2S	Strategic Governance and Finance Study	10/8/20	115,975	0	115,975		
SE 2164	5000	2019-21	City of Dickinson	East Broadway Dam Rehabilitation	4/1/21	34,732	0	34,732		
SE 1396-01	5000	2013-15	State Water Commission	Missouri River Recovery Program	11/17/15	46,510	0	46,510		
SWC ARB-WMI-19-1	7600	2019-21	Weather Modification, Inc.	Atmospheric Resource Operations and Research Gr	6/19/19	307,223	0	307,223		
<b>TOTAL GENERAL WATER CARRYOVER</b>						<b>8,919,034</b>	<b>355,341</b>	<b>8,563,692</b>		
SE 249	5000	2021-23	City of Mott	Mott City Dam Feasibility Study	7/23/21	57,344	0	57,344		
Director 653	5000	2021-23	McLean County WRD	Katz Dam Spillway Safety Improvement Feasibility Study	8/26/21	7,088	0	7,088		
SE 671	5000	2021-23	Wells Co. WRD	Harvey Dam Hydrologic and Hydraulics Analysis	7/23/21	12,800	0	12,800		
SE 1403	5000	2021-23	NDSU	ND Water Resource Institute grant student stipends	6/11/21	25,000	0	25,000		
SWC 1859	5000	2021-23	ND Dept of Environmental Quality	NPS Pollution	8/12/21	200,000	0	200,000		
SWC 2154	5000	2021-23	Elm River Joint WRD	Elm River Watershed Study	8/12/21	36,000	0	36,000		
SE 2165	5000	2021-23	USGS	Red River Low Flow Study	6/21/21	25,000	0	25,000		
SWC ARB-WMI-21-1	7600	2021-23	Weather Modification, Inc.	Atmospheric Resource Operations and Research Gr	8/12/21	429,980	0	429,980		
SE PS/WRD/MRJ	5000	2021-23	Missouri River Joint WRB	MRRIC Terry Fleck	8/19/21	42,000	0	42,000		
SWC AOC/ASS	5000	2019-21	Assiniboine River Basin Initiative	ARBI's Outreach Efforts 21-23	6/8/21	100,000	0	100,000		
SWC AOC/RRB	5000	2019-21	Red River Basin Commission	Red River Basin Commission Contractor 21-23	6/8/21	200,000	0	200,000		
<b>TOTAL GENERAL WATER 2021-2023</b>						<b>1,135,212</b>	<b>0</b>	<b>1,135,212</b>		
<b>TOTAL GENERAL WATER</b>						<b>10,054,246</b>	<b>355,341</b>	<b>9,698,904</b>		
<b>TOTAL</b>						<b>10,054,246</b>	<b>355,341</b>	<b>9,698,904</b>		

PROGRESS REPORT REQUIRED

SWC Board Approved to Continue

	BUDGET	APPROVED	BALANCE
GENERAL WATER	14,227,275	1,135,212	13,092,063
COMPLETED GENERAL WATER	0	0	0
<b>BUDGET GENERAL WATER 2019-2021</b>	<b>14,227,275</b>	<b>1,135,212</b>	<b>13,092,063</b>

DEPARTMENT OF WATER RESOURCES  
 PROJECT SUMMARY  
 2021-2023 Biennium  
 Resources Trust Fund

COMPLETED GENERAL PROJECTS

Approved SWC By	No	Dept	Approved Biennium	Sponsor	Project	Approved Date	Total Approved	Total Payments	<i>Aug-21</i> Balance	
	0	0	0	0	<b>Hydrologic Investigations:</b>					
					0	1/0/00	0	0	0	
							<b>0</b>	<b>0</b>	<b>0</b>	
SE	1378	5000	2019-21	Barnes Co WRD	Clausen Springs Dam Improvements	2/7/20	17,258	2,748	14,510	
SWC	160	5000	2017-19	McLean Co WRD	Painted Woods Lake Flood Damage Reduction & Habitat	8/9/18	5,547	5,547	0	
							<b>TOTAL GENERAL WATER CARRYOVER</b>	<b>22,805</b>	<b>8,295</b>	<b>14,510</b>
	0	0	0	0	0	1/0/00	0	0	0	
							<b>TOTAL GENERAL WATER 2021-2023</b>	<b>0</b>	<b>0</b>	<b>0</b>
							<b>TOTAL GENERAL WATER</b>	<b>22,805</b>	<b>8,295</b>	<b>14,510</b>
TOTAL								<u>22,805</u>	<u>8,295</u>	<u>14,510</u>

## **Glossary of Terms**

**Allocated**-To apportion for a specific purpose. To set apart or earmark.

**Appropriation**-Specifies the amount of funds to be used for a particular purpose during a period of time, normally one biennium.

**Original**-Legislative authorization to expend.

**Current**-Requesting authorization to allocate funds.

**Balance**-Original authorization less current authorization.

**Appropriation Authority**-Legislative authority in an Appropriation Act for an agency to expend funds.

**Appropriation Bill**-A bill which appropriations are given legal effect.

**Approved**-Funds approved and allocated by the State Water Commission.

**Beginning Balance**-Resource Trust Fund cash balance that carries over from the previous biennium. This information is provided by Legislative Council and includes carryover and funds not approved or allocate by the State Water Commission.

**Carryover Funds**-Approved funds unpaid during the current biennium which are transferred to the appropriation for the following biennium.

**Carryover Projects**-Projects approved but not finished by the end of the current biennium. The time is limited to 2 years after the end of the current biennium, 6/30/21, unless approved by the State Water Commission to continue past that date.

**Cash**-Resource Trust Fund money received and not allocated to a specific appropriation purpose.

**Cost Increase**-Funding needed above original cost estimate.

**De-Obligation**-Funds released from project allocation made from the current biennium appropriation.

**Expenditure**-Payment or funds spent.

**Obligation**-Funds allocated from current biennium appropriation to pay based on a contract.

**Unexpended**-Not yet spent or paid.

**Pending Construction Request**-Potential construction requests for prior approved and current projects.

**Turnback**-Carryover funds released from prior biennium from a project allocation.

**Unobligated Carryover**-Previous biennium funding, not associated with a project released to the Resource Trust Fund.

**Unpaid Approval**-A commitment to an expense at a future date.

**Water Infrastructure Revolving Loan Fund (WIRLF) Eligibility**-Approval by the State Water Commission of the eligibility of projects to apply for a Water Infrastructure Revolving Loan in compliance with cost share and statutory authority. Final loan approval is by the Bank of North Dakota.

MEMORANDUM

**TO:** Governor Doug Burgum  
Members of the State Water Commission  
**FROM:** Andrea Travnicek, Ph.D., Secretary   
**SUBJECT:** Low Head Dam Inventory Update  
**DATE:** September 29, 2021

Low Head Dam Inventory Background

In April 2018, the Department of Water Resources began offering free cautionary signs for low head dams in North Dakota. During a subsequent Water Commission update in April 2019, staff were directed to develop an inventory of low head dams in the state. At that time, DWR was aware of 52 low head dams.

In May 2019, DWR staff began a survey effort to collect information about low head dams. In addition to the survey, Investigations staff conducted field searches in areas of potential sites. Between those two efforts, an additional 41 low head dams were identified – bringing the total at that time to 93. The updated inventory was then presented at the August 2019 Water Commission meeting.

The Commission then directed staff to develop a process to prioritize the dams with a focus on human safety - specifically their hazard level, accessibility, and proximity to population centers. That process was completed and was presented to the Commission in October 2019. Also of note, the full low head dam inventory was incorporated into a public-facing map layer on the DWR's MapService website.

More recently, DWR staff took advantage of agency drone capabilities during this past summer's low water levels in some of the state's rivers and streams. Under those low flow conditions, our drone operators were able to capture imagery of several known low head dams, but also identified two additional previously unknown low head dams. From the start of the inventory effort in 2019 that included 52 dams, that number has now increased to 104 known low head dams (see attached).

### Prioritization Process

Low head dams in the inventory are prioritized through a staff-developed process by quantifying the probability of human encounters with the dams. The probability of an encounter was defined by two major elements: 1) Population in proximity to the dam (Population Risk), and 2) Accessibility and exposure to boat ramps and state parks (Exposure Risk). Known fatalities on record with the DWR Dam Safety Section were all represented by the highest category of risk. As mentioned, the current prioritized inventory of low head dams is attached for reference.

### Hazard Warning Signs

DWR has continued the effort to offer free cautionary signs to low head dam owners. To date, 98 signs have been distributed to 25 different dam owners in North Dakota. This includes all of the highest risk dams, as indicated in the attached prioritized list. An image of the cautionary safety sign is also attached for your reference, along with examples of modified and unmodified dams.

### Cost-Share Implications

Previously modified low head dam construction cost averages were applied to each risk group to estimate financial costs to mitigate the state's currently known low head dams (see table below). These costs are based on simple downstream rock riffle solutions to mitigate the hydraulic roller hazard, and do not include other design characteristics that project sponsors may wish to include.

As outlined in the following table, the estimated potential cost-share from DWR to mitigate roller impacts of the inventoried dams that do not have DWR cost-share in place is \$38.5 million. Of the ten dams that have "Modifications Pending" (see inventory), six are working on studies and four are under construction. The potential estimated cost-share to mitigate roller effects at those dams is about \$7million.

Potential Cost to Mitigate (Riprap)				
Risk Rank	Count	Estimated Riprap Cost	Cumulative Cost	75% Cost-Share
5	12	\$7,608,000	\$7,608,000	\$5,706,000
4	23	\$14,582,000	\$22,190,000	\$16,642,500
3	17	\$10,778,000	\$32,968,000	\$24,726,000
2	14	\$8,876,000	\$41,844,000	\$31,383,000
1	15	\$9,510,000	\$51,534,000	\$38,515,500
Total	81	\$51,354,000		

AT:pf:jh/

# DWR Low Head Dam Inventory

LEGEND	
High	5
	4
Medium	3
	2
Low	1

## Low-Head Dam Hazard Prioritization

Dam Name	Primary Owner*	Stream	Risk Rank	Hazard Signs Issued
Grafton Railroad Dam	City of Grafton	Park River	5	2
139-064-01		James River	5	2
Portland Dam	City of Portland	South Branch Goose River	5	2
LaMoure City Dam	LaMoure County WRD	James River	5	2
Burlington City Park Dam	City of Burlington	Des Lacs River	5	2
Minto Dam	City of Minto	Forest River	5	2
Fort Ransom Dam	Ransom County WRD	Sheyenne River	5	2
Crystal Dam	Pembina County WRD	Cart Creek	5	2
Yegan Dam	Apple Creek Country Club	Apple Creek	5	2
Arvilla Park Dam	Grand Forks WRD	Turtle River	5	2
Wild Rice Dam (Cass County)	SE Cass WRD	Wild Rice River	5	2
Drayton Dam	City of Drayton	Red River	5	2
Brown Dam	Barnes County WRD	Sheyenne River	4	2
Forness Dam	Richland County WRD	Wild Rice River	4	
Long Creek Dam	City of Crosby	Long Creek	4	
Tatley Dam	Burleigh County WRD	Apple Creek	4	
Little Roosevelt Dam	Ward County WRD	Mouse River	4	2
Mann Dam	City of Dickinson	Heart River	4	2
Ward County Low Head Dam 1	City of Minot	Mouse River	4	2
Terracita Vallejo Dam	City of Minot	Mouse River	4	2
Oak Park Dam	Ward County WRD	Mouse River	4	2
Ramstad Dam	Ward County WRD	Mouse River	4	2
Big Roosevelt Dam	Ward County WRD	Mouse River	4	2
Soldiers Home Dam	ND Veterans Home	Sheyenne River	4	2
Jamestown Ice House Dam	City of Jamestown	James River	4	
Lisbon Dam	City of Lisbon	Sheyenne River	4	2
Vigness Dam	City of Grafton	Park River	4	2
153-080-22		Mouse River	4	
Walhalla Dam	Pembina County WRD	Pembina River	4	
132-077-12	USGS	Beaver Creek	4	
Burlington Dam 3	City of Minot	Mouse River	4	2
Crystal Water Supply Dam	City of Crystal	Cart Creek	4	
144-089-23		Spring Creek	4	
ND No Name Dam 227	Maple River WRD	Maple River	4	
Hanson Dam	Richland County WRD	Wild Rice River	4	
152-050-32		English Coulee	3	
Souris Court Dam	Ward County WRD	Mouse River	3	2

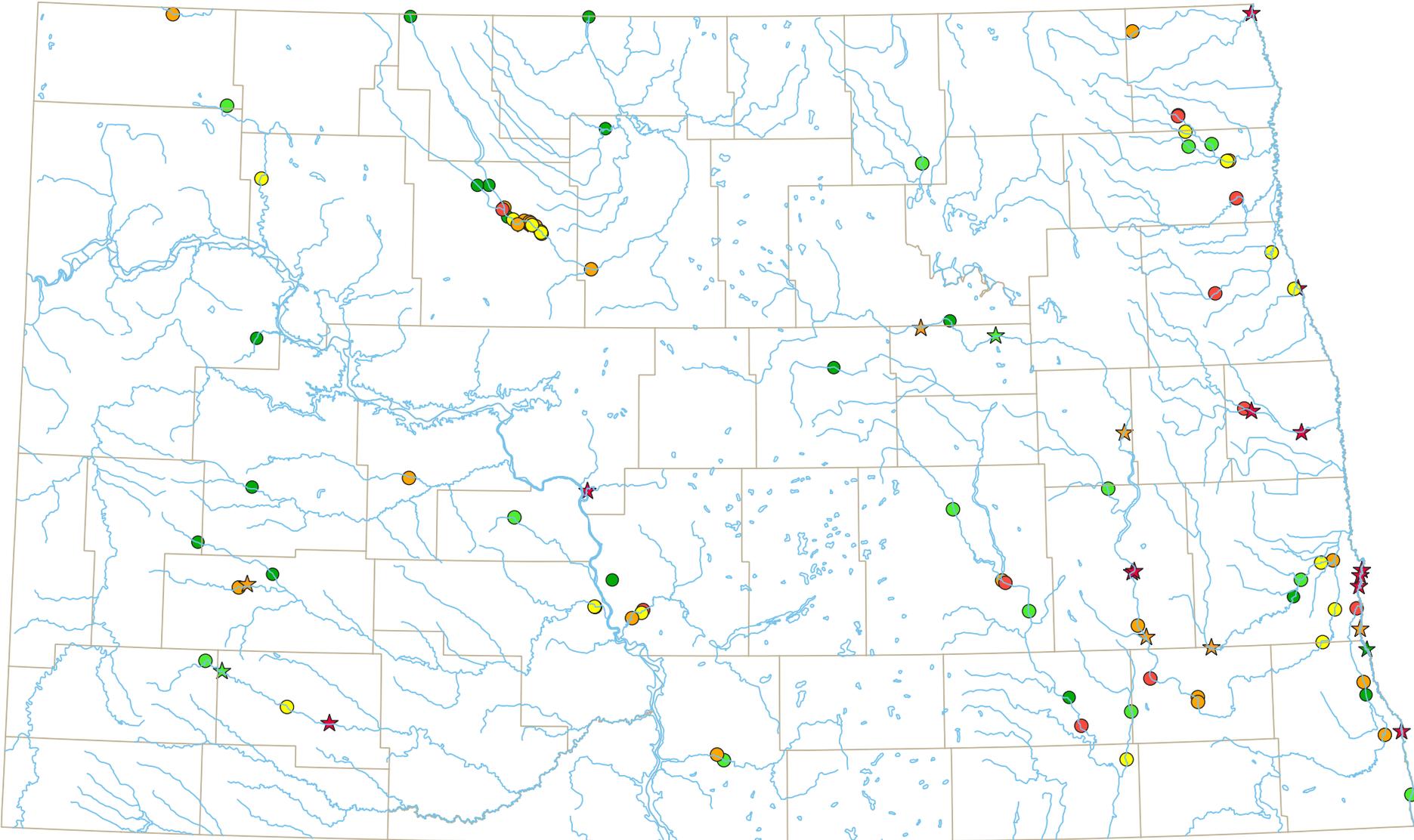
\*The dam ownership identified in this list represents the best available information in the Department of Water Resources' files and is presented for informational purposes only. It is in no way intended to represent a definitive legal determination of the ownership of, or responsibility for, these dams.

Dam Name	Primary Owner*	Stream	Risk Rank	Hazard Signs Issued
Eastside Estates Dam 1	City of Minot	Mouse River	3	2
157-053-13		Park River	3	
138-050-24	USGS	Sheyenne River	3	
139-081-33		Heart River	3	
137-050-33	USGS	Sheyenne River	3	
134-094-18	USGS	Cannonball River	3	
White Earth Low Release Structure	Mountrail County WRD	White Earth River	3	
Hoople Dam	Walsh County WRD	Park River	3	
Manvel Dam	Grand Forks WRD	Turtle River	3	
132-059-28	USGS	Bear Creek	3	
138-079-09	USGS	Apple Creek	3	
Eastside Estates Dam 2	Clty of Minot	Mouse River	3	2
Eastside Estates Dam 3	Clty of Minot	Mouse River	3	2
140-050-21		Maple River	3	
155-083-17	USGS	Mouse River	3	
Paulson Dam	Walsh	Middle Branch Park River	2	
143-059-02	USGS	Baldhill Creek	2	
150-061-04	USGS	Tolna Coulee	2	
Brownlee Dam	Maple River WRD	Maple River	2	
132-076-17		Beaver Creek	2	
157-066-01	USGS	Mauvais Coulee	2	
Knoke Dam	Sioux County WRD	Cedar Creek	2	
143-065-31	USGS	Pipestem Creek	2	
ND No Name Dam 296	LaMoure County WRD	Bear Creek	2	
Ypsilanti Dam	Stutsman County WRD	James River	2	
Nystrom Dam	Slope County WRD	Cannonball River	2	
Fairmount Dam		Bois de Sioux River	2	
Bubel Dam	Oliver County WRD	Square Butte Creek	2	
Donelly Dam	Walsh County WRD	Park River	2	
Green River Dam	Stark County WRD	Green River	1	
Ambercrombie Dam	Richland County WRD	Wild Rice River	1	
Minot Country Club Dam	Minot Country Club	Mouse River	1	2
Memorial Park Dam	LaMoure County WRD	James River	1	2
143-095-06	USGS	Knife River	1	
156-084-05	USGS	Mouse River	1	
140-080-30C	USGS	Burnt Creek	1	
156-085-02	USGS	Des Lacs River	1	
Fessenden Dam	Wells County WRD	James River	1	
164-079-30	USGS	Mouse River	1	
Great Northern Railroad Dam	Cass County WRD	Maple River	1	
150-094-30	USGS	Bear Den Creek	1	
141-098-14	USGS	Green River	1	
164-087-33	USGS	Mouse River	1	
159-079-22	USGS	Deep River	1	

\*The dam ownership identified in this list represents the best available information in the Department of Water Resources' files and is presented for informational purposes only. It is in no way intended to represent a definitive legal determination of the ownership of, or responsibility for, these dams.

Dam Name	Primary Owner*	Stream	Previous Risk Rank	Hazard Signs Issued
<b>Modification Complete - Roller Effect Mitigated</b>				
Fargo 12th Avenue North Dam	City of Fargo	Red River	5	2
Fargo 32nd Avenue South Dam	City of Fargo	Red River	5	2
Fargo 4th Street South Dam	City of Fargo	Red River	5	2
Grand Forks Riverside Park Dam	City of Grand Forks	Red River	5	Pending Response
Hillsboro Dam	City of Hillsboro	Goose River	5	2
Kidder Power Plant Dam	City of Wahpeton	Red River	5	2
Mayville Dam 2	City of Mayville	Goose River	5	2
Enderlin Park Dam	Enderlin Park Board	Maple River	4	2
Hickson Dam	City of Fargo	Red River	4	5
Kathryn Dam	Barnes County WRD	Sheyenne River	4	2
Sheyenne River Dam	Eddy County WRD	Sheyenne River	4	
Warwick Dam	Eddy County WRD	Sheyenne River	2	
Christine Dam	City of Fargo	Red River	1	2
<b>Modification Pending (SWC Cost-Share)</b>				
Dam Name	Primary Owner*	Stream	Risk Rank	Hazard Signs Issued
Katz Dam	McLean County WRD	Painted Woods Creek	5	2
Minot Water Supply Dam	City of Minot	Mouse River	5	2
Mott City Dam	City of Mott	Cannonball River	5	2
Pembina City Dam	City of Pembina	Pembina River	5	2
Valley City Mill Dam	Valley City Mun. Utility	Sheyenne River	5	4
Valley City Park Dam (Little Dam)	Barnes County WRD	Sheyenne River	5	4
East Broadway Dam	City of Dickinson	Heart River	4	2
Ueland Dam	City of Cooperstown	Sheyenne River	4	2
Karey Dam	Hettinger County WRD	Cannonball River	2	2
Bouret Dam	Benson County WRD	Sheyenne River	1	2
<p>*The dam ownership identified in this list represents the best available information in the Department of Water Resources' files and is presented for informational purposes only. It is in no way intended to represent a definitive legal determination of the ownership of, or responsibility for, these dams.</p>				

# LOW HEAD DAM RISK ASSESSMENT



NORTH  
**Dakota** | Water Resources  
Be Legendary.

Dam Risk Rank

- 1 Low
- 2 Low-Medium
- 3 Medium
- 4 Medium-High
- 5 High

Modifications

- ★ Modified / Pending



Minot Country Club Dam  
Ward County



Bouret Dam Circa 1957



## BOURET DAM...

was originally a rubble masonry low head dam constructed in 1939, which got to a point of disrepair. It is located near Minnewaukan in Benson County. In 2020 the original dam was removed and replaced with a low head dam consisting of rock riffles, which greatly reduces the potential danger associated with hydraulic roller effects. The total project cost was estimated at **\$889,000**, with a total DWR cost-share of **\$666,750**.

Bouret Dam Circa 2016



Bouret Dam Circa 2021

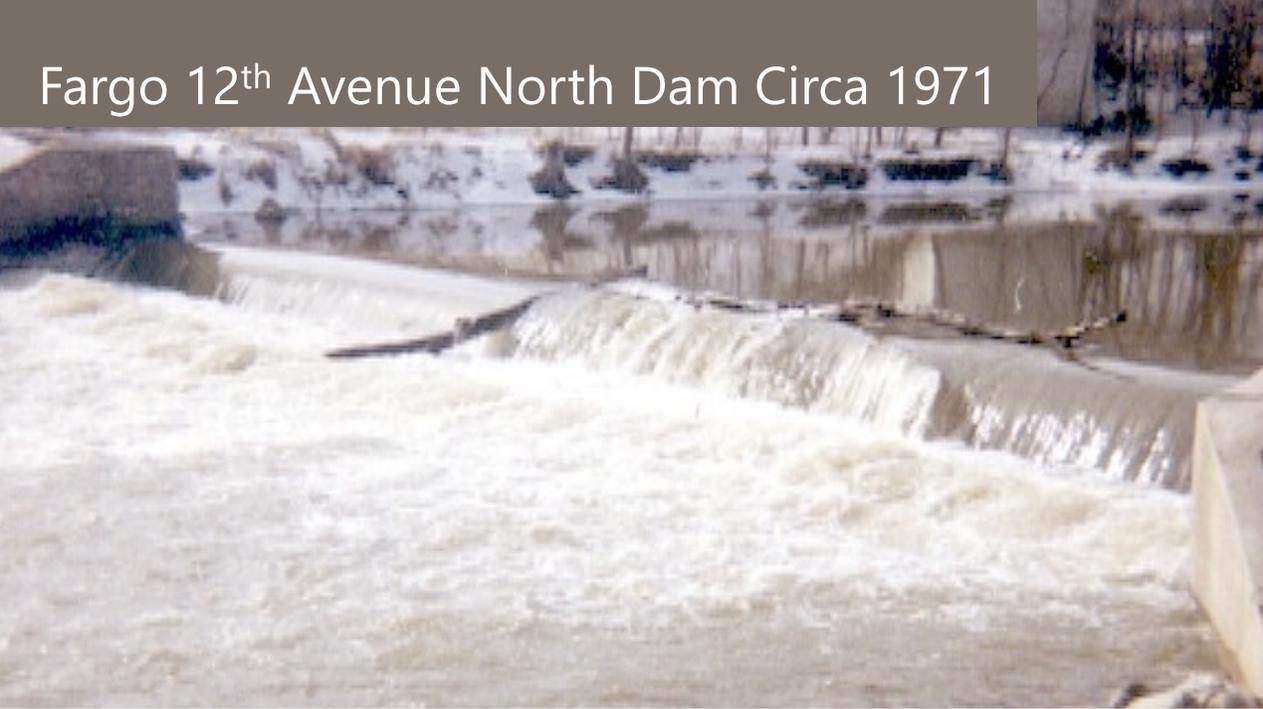


Following Modification

Bouret Dam Following Demolition & Replacement With Rock Riffles In 2020.



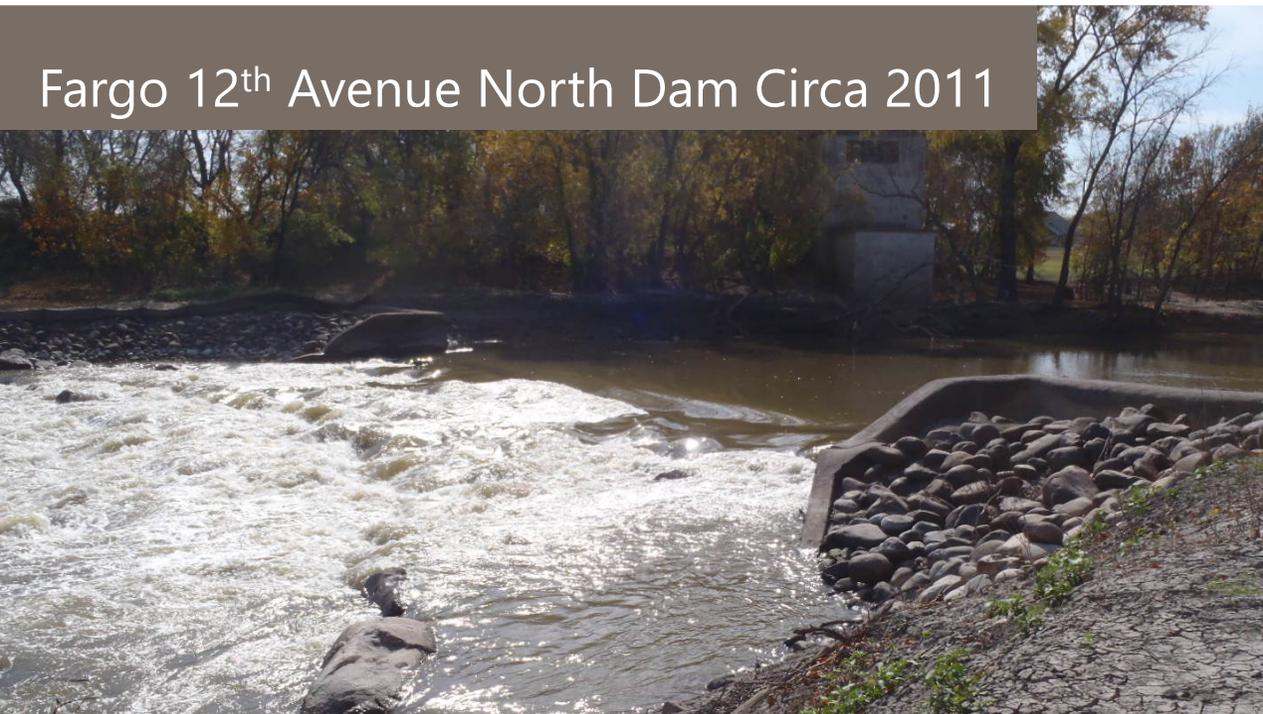
Fargo 12<sup>th</sup> Avenue North Dam Circa 1971



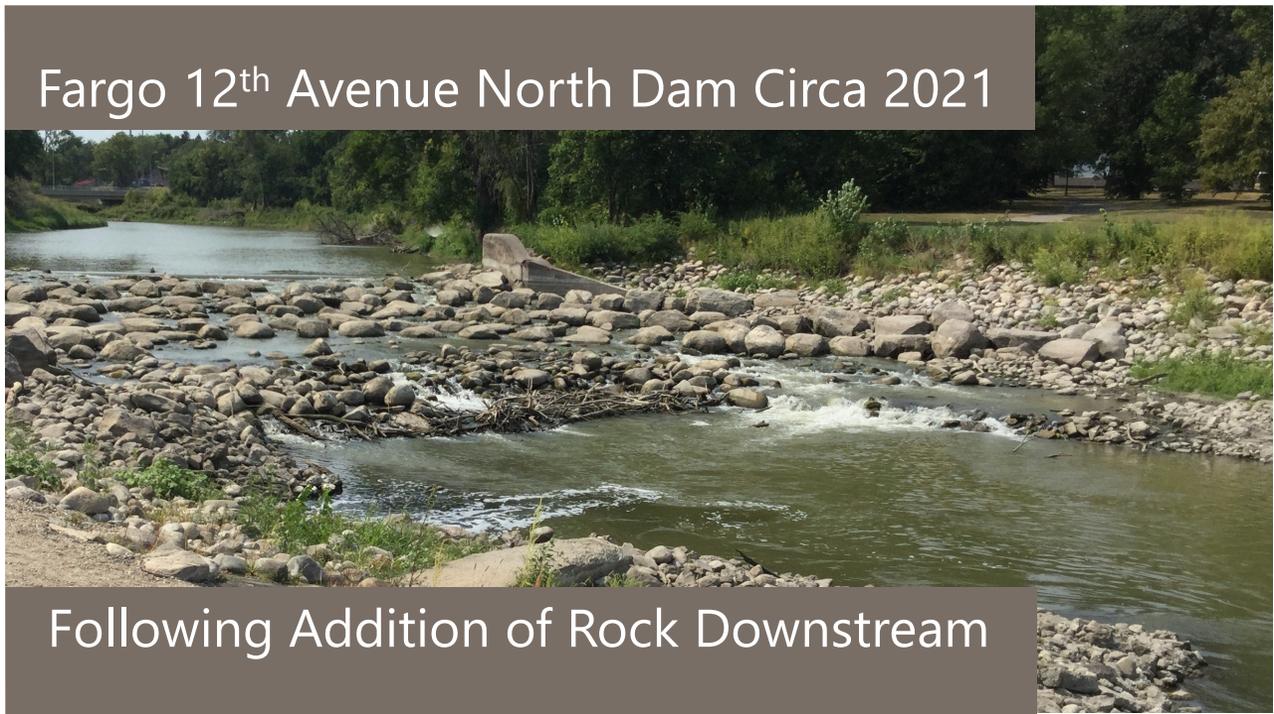
## Fargo 12<sup>th</sup> Ave. North Dam...

was originally a rubble masonry low head dam constructed in 1933. In 2000, rock was added downstream of the dam for fish passage, which also reduces the potential danger associated with hydraulic roller effects. The total project cost was **\$352,000** with a DWR cost-share of **\$13,862**.

Fargo 12<sup>th</sup> Avenue North Dam Circa 2011



Fargo 12<sup>th</sup> Avenue North Dam Circa 2021

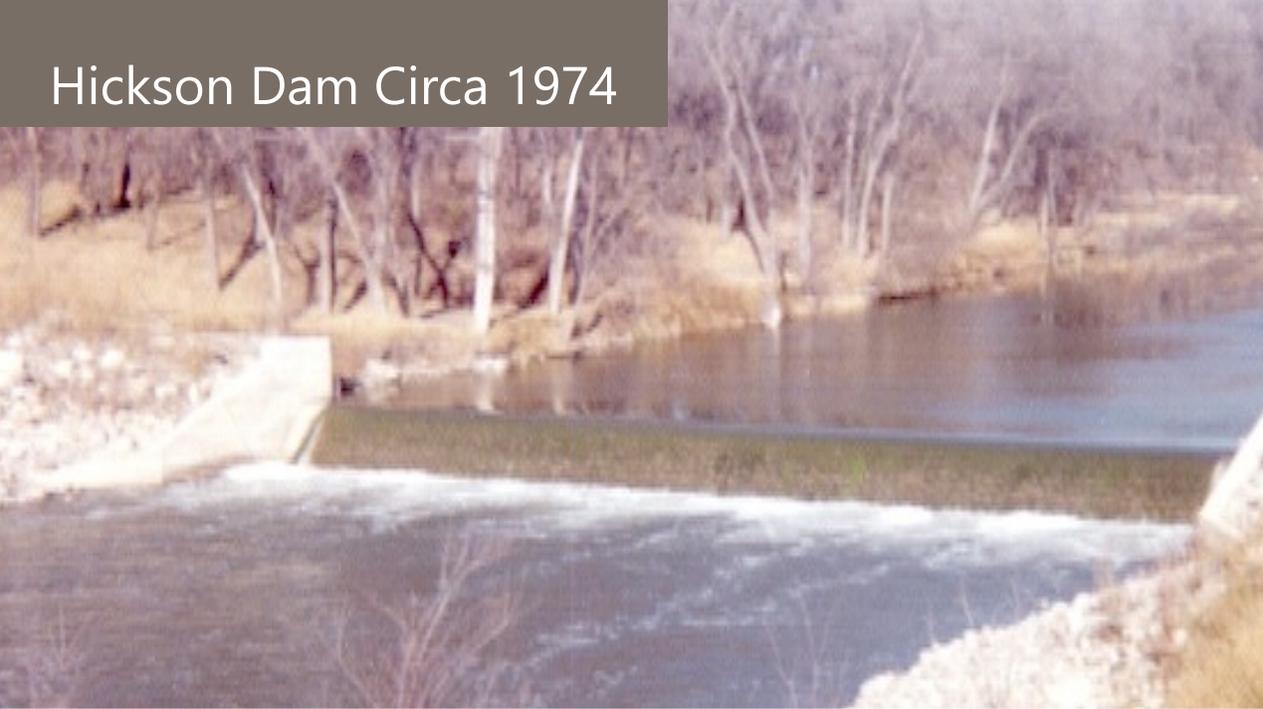


Following Addition of Rock Downstream



Fargo 12<sup>th</sup> Avenue North Dam Circa 2021 Following Addition of Rock Downstream In 2000.

Hickson Dam Circa 1974



## Hickson Dam...

was originally constructed in 1937 as a rubble masonry low head dam. It is located near Hickson in Cass County. In 2011, rock riffles were added downstream from the dam to reduce the potential danger associated with hydraulic roller effects. The total project cost was **\$821,474** with a DWR cost-share of **\$44,280**.

Hickson Dam Circa 2011



Hickson Dam Circa 2021



Following Addition of Rock Downstream

Hickson Dam Circa 2021 Following Addition of Rock Riffles Downstream In 2011.



Karey Dam Circa 1966



## Karey Dam...

was originally constructed in 1930 as a rubble masonry low head dam which got to the point of disrepair. Karey Dam is located near New England in Hettinger County. In 2020 the original dam was removed and replaced with a low head dam consisting of rock riffles which greatly reduced the potential danger associated with hydraulic roller effects. The total project cost was estimated at **\$1,295,100**, with a total DWR cost-share of **\$971,325**.

Karey Dam Circa 2019



Karey Dam Circa 2021



Following Replacement

Karey Dam Following Demolition of Original Dam & Replacement With Rock Riffles In 2020.



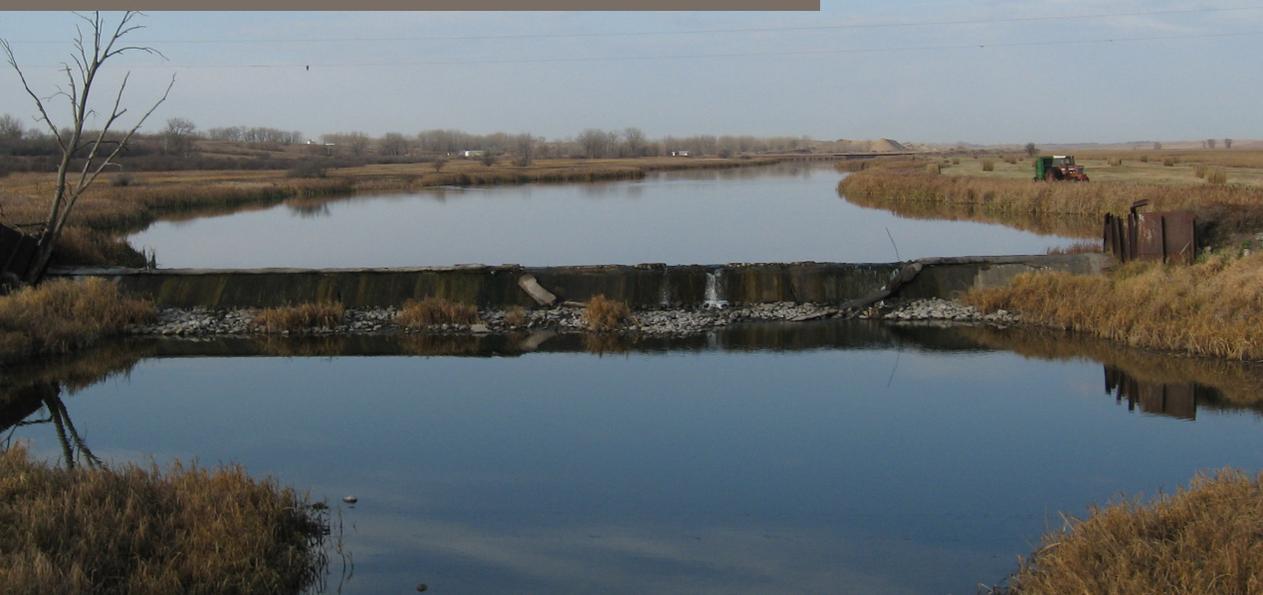
Sheyenne River Dam Circa 1985



## Sheyenne River Dam...

was originally constructed in 1936 as a rubble masonry low head dam. It is located north of Sheyenne in Eddy County. In 2008, rock was added downstream of the dam for fish passage, which also reduces dangers associated with hydraulic roller effects. The project was completed by the DWR Construction Crew and the total associated project cost was **\$101,025**.

Sheyenne River Dam Circa 2007



Sheyenne River Dam Circa 2021



Following Addition of Rock Downstream

Sheyenne River Dam Circa 2021 Following Addition of Rock Downstream In 2008.

