State Water Commission Meeting
Roughrider Room, State Capitol
600 E. Boulevard Ave.
Bismarck, North Dakota
August 12, 2021 - 12:00 p.m. CT

Meeting will be held in-person with an option to join Teams meeting on your computer or mobile app:  Click here to join the meeting
Or call in (audio only) +1 701-328-0950; Phone Conference ID: 990 421 34#

AGENDA

A. Roll Call (no attachment)

B. Consideration of Agenda (no attachment)

C. Consideration of Minutes
   1. Draft Minutes for June 8, 2021, Commission Meeting
   2. Draft Minutes for July 8, 2021, Joint Subcommittee Meeting

D. Financial Reports

E. Updated Glossary of Terms

F. Standard Operating Procedures

G. Water Development Plan - Projects Funded in 2019-21 Biennium

H. Strategic Governance and Finance Study Update (no attachment)

I. Northwest Area Water Supply – 2022 NAWS Interim Water Rate

J. Purpose Funding Summary

K. Flood Control and General Water

   1. Elm River Joint Water Resource District – Elm River Watershed Study - $36,000  PC
   2. Pembina County Water Resource District – Tongue River Cut-off Channel Improvement - $145,980  PC
   3. Sargent County Water Resource District – County Drain No. 9/11 - $35,618  PC
   4. Steele County Water Resource District – County Drain No. 1 Lateral A - $120,355  C
   5. Souris River Joint Water Resource District – Mouse River Enhanced Flood Protection Program - $84.5M  L
   8. Sargent County Water Resource District – County Drain No. 7 - $185,927  CI
   9. ND Cloud Modification Project - $429,980  O
   10. ND DEQ – Non-point Source Pollution Management Project - $200,000  O
L. Water Supply

1. GDCD Red River Valley Water Supply Project - $510,000  PC
2. Portland – 2021 Water System Improvements - $177,000  PC
3. Stanley – Country Estates Watermain Extension - $29,400  PC
4. Horace – Watermain Improvement District 2020-7 Connection to Cass Rural Water District – $1,232,250  C
5. Napoleon – Water Tower Replacement - $1,617,000  C
6. Hazen – Water System Improvements - $367,000  CI
7. Parshall – Water Tower - $703,200  CI

M. Rural Water – Rural Water Districts and Associations Map

1. East Central Regional Water District – WTP and Transmission Expansion – $521,000  PC
2. McLean-Sheridan Water District – System Improvements Phase 2 – $670,000  PC
3. Upper Souris Water District – 2021 Improvements and Expansion - $245,000  PC
4. Dakota Rural Water District – 2019 User Expansion - $1,877,000  C
5. East Central Regional Water District – Increased Capacity to Hatton - $1,220,000  C
6. East Central Regional Water District – 2019 Expansion Phase 4 – $0  O

N. Funding Partner Commitment Letter – Mandan/Lower Heart Flood Risk Reduction Project

O. Legal Updates (Presentation if time allows)

P. Project Updates (Presentations if time allows)

1. Devils Lake
2. Missouri River
3. Mouse River
4. Northwest Area Water Supply
5. Southwest Pipeline Project

Q. Adjourn

BOLD ITEMS REQUIRE SWC ACTION

PC Pre-Construction
C Construction
L Legislative
CI Cost Increase
O Other
The ND State Water Commission (Commission) held a meeting in the Rough Rider Room, State Capitol, 600 E. Boulevard Ave., Bismarck, ND, and via telephone conference on August 12, 2021. Governor Burgum called the meeting to order at 12:05 p.m. A quorum was present.

**STATE WATER COMMISSION MEMBERS PRESENT:**
Governor Burgum, Chairman
Doug Goehring, Commissioner, ND Department of Agriculture, Bismarck
Michael Anderson, Hillsboro
Richard Johnson, Devils Lake
James Odermann, Belfield
Connie Ova, Jamestown
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, Interim State Engineer
ND Department of Water Resources (DWR) Staff
Jennifer Verleger, General Counsel, Attorney General’s Office
Approximately 95 people interested in agenda items.

Governor Burgum welcomed Andrea Travnicek to the DWR, newly appointed Commissioners Odermann, Ova, Veeder, and Walker, and reappointed Commissioners Anderson, Johnson, Volk, and Zimmerman. Governor Burgum also thanked John Paczkowski, for his continued service as the Interim State Engineer.

**CONSIDERATION OF AGENDA**

The agenda for the August 12, 2021, SWC meeting was approved as presented.

**CONSIDERATION OF DRAFT MEETING MINUTES**

The draft minutes for the following meetings were reviewed and approved with correction:

- June 8, 2021, Commission meeting
- July 8, 2021, Subcommittee meeting

It was moved by Commissioner Goehring, seconded by Commissioner Volk, and unanimously carried, that the minutes for the June 8, 2021, Commission meeting, and July 8, 2021, Subcommittee meeting be approved with correction.
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 $305,985,290 through June 2021. The revised revenue for the 2019-21 biennium was $307M, which is $127M below the original projected revenue for the biennium.

Governor Burgum requested that Heide schedule a meeting with the newly appointed Commissioners to review the financial reports in detail. There were no questions.

GLOSSARY OF TERMS

Commissioners were provided an updated Glossary of Terms. Commissioners were asked to provide updates to DWR staff as needed. There were no questions.

STANDARD OPERATING PROCEDURES (SOPs)

Pat Fridgen, Planning and Education Division Director, presented proposed language to revise the current SOPs related to cost-share procedures to assist staff in bringing forward recommendations (APPENDIX A). The initial SOPs were approved in December 2019 and referenced the 2019-21 biennium specifically. DWR staff have redrafted the SOPs with the Commission’s updates as necessary and the proposed modifications relate to cost increases, projects not submitted to the Water Development Plan, low head dam repairs, removal of Economic Analysis covered in policy, and the Life Cycle Cost Analysis process.

Governor Burgum requested DWR staff provide an updated report to the Commission at the October 14, 2021, Commission meeting related to low head dam repairs, outreach made to determine outstanding repairs, and overall status of repairs.

There were no questions. The following motion was made:

It was moved by Commissioner Goehring and seconded by Commissioner Zimmerman the Commission approve the revised SOPs attached as APPENDIX A effective immediately.

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

COST-SHARE POLICY UPDATE

Pat Fridgen provided an update regarding the passage of HB 1353 during the 2021 Legislative Assembly which restructured and renamed the agency to the DWR effective August 1, 2021. The same legislation also named DWR's Director as Secretary to the Commission and removed reference to the Chief Engineer.

The Commission's current Cost-Share Policy, Procedure, and General Requirements (APPENDIX B) makes several references to duties of the Chief Engineer. It also allows the Chief Engineer latitude to consider administrative approvals of $75,000 or less, without Commission consideration. This authority granted by the Commission allows the agency to be more responsive to those smaller requests from sponsors that are sometimes time sensitive.
In order to bring the Commission's Cost-Share Policy, Procedure, and General Requirements into compliance with the newly established authorities of the DWR and its Director (as Secretary to the Commission), modifications are necessary.

The recommendation was to replace the words "Chief Engineer" with "Secretary" throughout the Commission's Cost-Share Policy, Procedure, and General Requirements, and in doing so, would reaffirm the Secretary's authority granted by the Commission to consider funding requests of $75,000 or less.

There were no questions. The following motion was made:

It was moved by Commissioner Goehring and seconded by Commissioner Walker the Commission approve replacing the words "Chief Engineer" with "Secretary" throughout the Commission's Cost-Share Policy, Procedure, and General Requirements, and in doing so, reaffirm the Secretary's authority granted by the Commission to consider funding requests of $75,000 or less.

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

**DROUGHT DISASTER LIVESTOCK WATER SUPPLY PROGRAM (DDLWSP)**

Pat Fridgen provided a history of the current declaration of the statewide drought disaster and activation of the State Emergency Operations Plan effective April 8, 2021. With the statewide drought disaster declaration and in support of the emergency declaration issued, the Commission reactivated the DDLWSP on April 8, 2021. Pat also provided a history of the Commission-approved reprogramming of the remaining 2017 DDLWSP funds and 2021 Commission approval of funds totaling $6,146,055 to date.

DWR continues to see an ongoing interest in the DDLWSP due to continued demonstrated need among North Dakota's livestock producers for support. Currently, DWR is receiving reimbursement requests from producers who purchased equipment or had services completed prior to officially applying for assistance through the DDLWSP. Producers purchased materials such as tanks, pipe, and power-related supplies as necessary, and many producers purchased before they applied to the DDLWSP.

For efficiency purposes, DWR proposed one "start of eligibility" date which is not prohibited by NDCC 61-34 or NDAC 89-11. DWR would also consider this an emergency as determined by the Chief Engineer/Secretary for work and costs incurred prior to a cost-share approval date under Commission Project Funding Policy, Procedure, and General Requirements.

In consideration of the unique circumstances with the severe drought, combined with supply chain impacts associated with COVID-19, DWR recommended a single eligibility date for the DDLWSP which would provide clarity to the state's livestock producers as well as DWR staff that implement the program.

There were no questions. The following motion was made:
It was moved by Commissioner Goehring and seconded by Commissioner Volk the Commission approve the establishment of April 8, 2021, as the beginning eligibility date for reimbursement of material and labor costs for applications received under the 2021 DDLWSP.

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

WATER DEVELOPMENT PLAN (WDP)

At the June 8, 2021, Commission meeting, Governor Burgum requested DWR staff review the number of projects that received funding during the 2019-21 biennium that were not presented in the WDP. Pat Fridgen provided the Commission with a summary related to the planning process, inventory development, and Commission approvals involving projects not included in the WPD (APPENDIX C).

Pat clarified that typically, the Commission funds projects included in the current biennium WDP and by highest priority for the first several months of each biennium. Projects not included in the WDP are typically brought to the Commission after the December meeting because projects listed in the WDP have then had a chance to be considered. Pat also clarified that DWR staff would continue to present projects not included in the WDP at the Subcommittee meetings for review and discussion prior to Commission meetings.

STRATEGIC GOVERNANCE AND FINANCE STUDY (STUDY)

Brent Bogar, Shawn Gaddie, and Rocky Schneider, AE2S/NEXUS, presented an Executive Summary and Study Overview and Recommendations for the Study (APPENDIX D). The purpose of the Study is to analyze past and current financing and governance structures of the state’s four largest regional water supply systems – Northwest Area Water Supply, Southwest Pipeline Project, Red River Valley Water Supply, and Western Area Water Supply. The Study also included recommendations related to future operation, governance, and financing options for all four systems. The draft Study and a supplemental document titled DRAFT Funding, Finance, and Delivery Options For Larger Water Projects In North Dakota will be made available for review on the DWR’s website. Constituents and stakeholders were asked to provide comments to DWR by August 27, 2021.

During discussion, the following action items were requested:

- AE2S will incorporate adjustments to finance models utilizing possible future ARPA/federal funding.
- Consider discussions with Legislature to provide general funds for project shortfalls.
- DWR to ensure sponsors' engineering firms hold contractors accountable for work.
- DWR director to meet with the four regional water supply systems leadership to discuss proposed finance and governance models.
- Continue discussions with the Water Topics Overview Committee.
- Incorporate the proposed finance and governance models and offer same type of cost-share for smaller entities and water projects.
- Comments received will be incorporated into the Study and presented at the September 9, 2021, Subcommittee meeting.
The NAWS water service agreements require an annual review and adjustment of water rates to go into effect January 1 of the following year.

Tim Freije, NAWS Project Manager, presented a request for approval of the NAWS interim water rates for the 2022 calendar year.

After discussion, the following motion was made:

It was moved by Commissioner Goehring and seconded by Commissioner Zimmerman the Commission approve NAWS interim water rates for the 2022 calendar year of $3.29/1,000 gallons for the NAWS contract customers and remain at $0.41/1,000 gallons for Minot contract customers with the understanding that if future adjustments are needed to the supply and treatment rate and operations and maintenance for NAWS contract customers, further review and approval will be needed from the Commission.

Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Governor Burgum 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 August 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.

ELM RIVER JOINT WATER RESOURCE DISTRICT - ELM RIVER WATERSHED STUDY - $36,000 (SWC Project No. 2154)
The Elm River Joint Water Resource District (ERJWRD) requested additional cost-share for the Elm River Watershed Study (Project). The purpose of the Project is to evaluate alternatives for addressing deficiencies with Elm River Dams No. 1 and 2. The dams are identified in the 2021 WDP.

In 2020, the Chief Engineer previously approved cost-share at 60 percent of eligible costs for the Project in the amount of $72,000. Following input received at a public meeting, the ERJWRD has determined that the scope of the Project should be expanded to include the study of two additional alternatives.

The total eligible cost increase is $60,000 with 60 percent cost-share of $36,000. The total cost-share for the Project would be $108,000. The Project meets requirements of the Commission’s cost-share policy and 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 Walker the Commission approve the request of the ERJWRD for an
additional $36,000 at 60 percent of eligible costs. 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.

PEMBINA COUNTY WATER RESOURCE DISTRICT – TONGUE RIVER CUT-OFF CHANNEL IMPROVEMENTS - $145,980
(SWC Project No. 1999)
Pembina County Water Resource District (PCWRD) requested cost-share for the Tongue River cut-off channel improvements (Project). The Project is preliminary engineering for the Tongue River cut-off channel and is identified in the 2021 WDP.

In 2020, the Chief Engineer approved $72,000 for a feasibility study associated with the cut-off channel; that study has now been completed. The current request is to complete preliminary engineering to bring the project to a bid-ready status.

The total eligible cost is $324,400 with 45 percent cost-share of $145,980. The Project meets requirements of the Commission’s cost-share policy and the recommendation was to approve the cost-share request.

There were no questions. The following motion was made:

It was moved by Commissioner Anderson and seconded by Commissioner Volk the Commission approve the request of the PCWRD for $145,980 at 45 percent of eligible costs. 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.

SARGENT COUNTY WATER RESOURCE DISTRICT – COUNTY DRAIN NO. 9/11 - $35,618
(SWC Project No. 1221)
The Sargent County Water Resource District (SCWRD) requested cost-share for Sargent County Drains 9 and 11 outlet improvements (Project) and both are identified in the 2021 WDP.

The SCWRD indicated that due to the complexity of the Project, they requested funding at this time only to bring the Project to an assessment vote (rather than bid-ready) status. Upon receipt of a positive assessment vote, the SCWRD intends to request cost-share for the remaining preliminary engineering. The assessment vote is expected to take place during winter 2021/2022.

The total eligible cost is $79,152 with 45 percent cost-share of $35,618. The Project meets requirements of the Commission’s cost-share policy and the recommendation was to approve the cost-share request.

There were no questions. The following motion was made:

It was moved by Commissioner Anderson and seconded by Commissioner Volk the Commission approve the request of the SCWRD for $35,618 at 45 percent of eligible costs.
percent of eligible costs. 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.

STEELE COUNTY WATER RESOURCE DISTRICT – COUNTY DRAIN NO. 1 LATERAL A - $120,355 (SWC Project No. 2162)
The Steele County Water Resource District (SCWRD) requested cost-share for the Steele County Drain 1 Lateral A final design and construction phase (Project). The Project is identified in the 2021 WDP.

An assessment vote for the Project was held with a positive outcome and Drain Permit 5570 was approved. SCWRD is in the process of obtaining the necessary land rights, and construction is anticipated to begin September 2021. The economic analysis performed for the project returned a benefit-to-cost ratio of 1.291.

The total eligible cost is $267,455 with 45 percent cost-share of $120,355. The Project meets requirements of the Commission’s cost-share policy and the recommendation was to approve the cost-share request.

There were no questions. The following motion was made:

It was moved by Commissioner Anderson and seconded by Commissioner Volk the Commission approve the request of the SCWRD for $120,355 at 45 percent of eligible costs. 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.

SOURIS RIVER JOINT WATER RESOURCE DISTRICT – MOUSE RIVER ENHANCED FLOOD PROTECTION PROJECT - $84.5M (SWC Project No. 1974)
The Souris River Joint Board (SRJB) requested approval of the $84.5M in funds appropriated during the 2021 legislative session for Mouse River flood control through House Bill 1431 in the amount of $74.5M and House Bill 1020 in the amount of $10M.

In the 2019-21 biennium, the SRJB’s work plan identified $4.3M for acquisitions outside of Minot with a state cost-share amount for the acquisitions of $3.225M. During that time, three industrial properties outside of Minot were acquired at a cost of $2.1M for Phase MI-5 that allowed the elimination of two railroad crossings. The Talbott’s nursery site was also acquired at a cost of $400,000, which eliminated the need for levee construction at that location. These two acquisitions reduced the overall project cost by approximately $58M but were made after the 2019-21 budget for rural acquisitions was exhausted.

The SRJB requested the funds be distributed as follows:

- $13.15M for acquisitions inside of Minot acquisitions at 75 percent cost-share;
• $71.35M for rural acquisitions outside of Minot at 75 percent cost-share and 65 percent cost-share for construction and engineering activities; and
• Apply cost-share for the 2021-23 biennium toward acquisitions completed in advance of Commission authorization.

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 SRJB to distribute the $84.5M as follows:

• $13.15M for acquisitions inside of Minot at 75 percent cost-share;
• $71.35M for rural acquisitions outside of Minot at 75 percent and 65 percent cost-share for construction and engineering activities; and
• Apply cost-share for the 2021-23 biennium toward acquisitions completed in advance of Commission authorization.

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

UPPER SHEYENNE RIVER JOINT WATER RESOURCE BOARD – UPPER SHEYENNE RIVER WATERSHED PILOT PROGRAM - $1.1M
(SWC Project No. WRD/UPP)

The Upper Sheyenne River Joint Water Resource District (USRJWRD) requested cost-share for the Upper Sheyenne River Watershed Pilot Project (Project). The Project consists of seven individual bank stabilization projects within the Upper Sheyenne River watershed in Eddy, Nelson, and Griggs counties.

House Bill 1020, as adopted by the 2021 Legislature, authorized up to $100,000 to reimburse water resource districts for costs incurred in the development of a basin-wide water plan identifying water conveyance, flood control, and other water projects to be undertaken in the basin, and up to $1,000,000 for implementation of the plan and stated these funds are not subject to Commission cost-share policy.

USRJWRD requested that Barr Engineering’s 2019 Upper Sheyenne River Corridor Erosion and Sedimentation Risk Assessment study report be considered equivalent to the required basin-wide plan for the purpose of grant eligibility. The economic analysis performed for the Project returned a benefit-to-cost ratio of 0.831.

The total eligible cost of the Project is $3,868,093, of which $2,698,093 is the total expected federal contribution and local contribution of $70,000. USRJWRD requested cost-share from the Commission in the amount of $1,100,000 and the recommendation was to approve the cost-share request.

Commissioner Zimmerman inquired why the project would not be placed for bids until February 2023 and construction would not begin until April 2023. Ben Varnson, USRJWRD Manager, stated that the USRJWRD would be engaging with their federal partners within the next few months, and the project would advance quickly. Peter Hinck, Barr Engineering, stated that the design is not complete and state regulatory, construction, and Army Corps of Engineer permits
need to be obtained. Currently, there is a fair amount of work to be completed prior to the bid process. Mr. Varnson also stated that Rep. Jim Schmidt indicated support for the project during the 2023-25 legislative session if needed.

After discussion, the following motion was made:

It was moved by Commissioner Goehring and seconded by Commissioner Johnson the Commission approve the request of the USRJWRD for reimbursement of costs related to development of the Project not to exceed $100,000, and for implementation-related costs not to exceed $1,000,000, for a total of not more than $1,100,000. Reimbursements will not be subject to matching fund requirements or cost-share policy per Section 9 of House Bill 1020.

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

GRAND FORKS-TRAILL JOINT WATER RESOURCE DISTRICT – THOMPSON DRAIN IMPROVEMENT DISTRICT 72 - $168,148
(SWC Project No. 2140)
The Grand Forks-Traill County Joint Water Resource District (GFTCJWRD) requested additional cost-share for the Thompson Drainage Improvement District No. 72 (Project).

In 2020, the Commission previously approved cost-share at 45 percent of eligible engineering and construction costs associated with the Project in the amount of $688,107. The Project was bid in June 2021, with the low bid for construction exceeding the previous estimate. The GFTCJWRD requested an additional cost-share of $168,148.

The economic analysis yielded a benefit-to-cost ratio of 1.002. The Project was identified in the 2021 WDP and meets the 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 Johnson the Commission approve the request of the GFTCJWRD for an additional $168,148 at 45 percent of eligible costs. The approval is contingent on available funding.

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

SARGENT COUNTY WATER RESOURCE DISTRICT – COUNTY DRAIN NO. 7 - $185,927
(SWC Project No. 1650)
The Sargent County Water Resource District (SCWRD) requested cost-share for the Sargent County Drain 7 Channel Improvements (Project). The project is identified in the 2021 WDP.

The Commission previously provided cost-share to reconstruct the upstream portion of the drain and the current request is for improvement of the downstream portion of the drain.
The economic analysis performed for the Project returned a benefit-to-cost ratio of 0.46.

The total eligible cost is $898,200 with 45 percent cost-share adjusted for the benefit-to-cost ratio in the amount of $185,927. The project meets the requirements of the Commission’s cost-share policy and the recommendation was to approve the cost-share request.

The SCWRD requested a waiver to fund the cost-share request at 45 percent without an adjustment due to the benefit-to-cost ratio because it is a major arterial road crossing and is important for crop transport. The crossing is on County Road 12. Governor Burgum requested the DWR meet with ND Department of Transportation (DOT), Sargent County DOT, and project sponsors to identify any additional funding sources.

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 SCWRD for $185,927 at 45 percent of eligible costs adjusted for the benefit-to-cost ratio. The approval is contingent on available funding and follow-up with the DOT on any additional potential funding sources.

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

NORTH DAKOTA CLOUD MODIFICATION PROJECT (NDCMP) - $429,980
Darin Langerud, Atmospheric Resource Division Director, provided an overall history of the NDCMP and requested cost-share from general water funds in the amount of $429,980 for NDCMP operations during the 2021-23 biennium. The cost-share amount is a 34 percent cost-share match to 66 percent local funding. The recommendation was to approve the cost-share request.

Commissioner Goehring and Governor Burgum requested the DWR determine whether or not the biennial funding for operations could be made directly through an appropriation line item during each Legislative session, eliminating the need to approve funding from DWR general funds every two years.

After discussion, the following motion was made:

It was moved by Commissioner Goehring and seconded by Commissioner Veeder the Commission approve the request for NDCMP state cost-share participation in an amount not to exceed $429,980.

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

NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY (NDDEQ) – NON-POINT SOURCE POLLUTION MANAGEMENT PROJECT - $200,000
(SWC Project No. 1859)
The NDDEQ requested continued funding assistance in the amount of $200,000 for the 2021-2023 biennium. Cost-share support will be used to maintain support for engineering services associated with non-point source pollution management (NPS) projects in the state. The project was identified in the 2021 WDP.
Commission cost-share will be used as the 40 percent non-federal match for the program, with the federal share provided through a Federal Clean Water Act Section 319(h) grant. The Commission has provided $200,000 toward NPS projects each biennium since the 2001-2003 biennium. Initially, cost-share was provided from funds appropriated to the Commission specifically for this purpose, but subsequent approvals have not been made through cost-share requests. The recommendation was to approve the request.

Governor Burgum requested the DWR work with the NDDEQ to determine whether or not the biennial funding could be made directly through an appropriation line item during each Legislative session, eliminating the need to approve funding from DWR general water funds every two years.

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 the NDDEQ for the NSP project in an amount not to exceed $200,000 for the 2021-23 biennium. The approval is contingent on available funding.

Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Governor Burgum 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.

GARRISON DIVERSION CONSERVANCY DISTRICT (GDCD) RED RIVER VALLEY WATER SUPPLY PROJECT (RRVWSP) - $510,000 (SWC Project No. 325)
The GDCD requested additional cost-share for the RRVWSP engineering for pipeline construction, operational modeling, and asset management with a cost of $680,000. The request was for an additional 75 percent cost-share of $510,000, bringing the total cost-share for the RRVWSP to $36,910,000. The project meets requirements of the Commission’s cost-share policy and is in the 2021 WDP. 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 GDCD for state cost-share participation at 75 percent of eligible costs for an additional amount of $510,000, with total cost-share not to exceed $36,910,000. The approval is contingent on available funding for the 2021-23 biennium.

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

PORTLAND – 2021 WATER SYSTEM IMPROVEMENTS - $177,000 (SWC Project No. 2050-POR)
Portland requested pre-construction cost-share for constructing a 150,000-gallon elevated storage tank to replace the existing 50,000-gallon elevated tank. Portland has an additional 133,000-gallons in an underground storage reservoir. The project also improves fire flows
throughout the city. Fire protection requires additional storage when combined with the current internal pumping capacity. Portland currently receives water from the East Central Regional Water District (District).

The life cycle cost analysis considered three alternatives and the preferred alternative was to construct the new 150,000-gallon water tower to address storage for fire protection.

The total eligible cost for pre-construction costs is $295,000 with 60 percent cost-share of $177,000. The project is in the 2021 WDP and meets the requirements of the Commission’s cost-share policy. The recommendation was to approve the cost-share request.

Commissioner Johnson indicated he was informed that the District may be able to provide Portland’s water system improvements and fire protection through additional regionalization. Portland’s Mayor Mickels stated the regionalization option was reviewed; however water flow and fire protection would have been an issue with current connections. Neal Breidenbach, District System Manager, indicated that additional regionalization would be an option for further review.

Governor Burgum requested DWR staff, Portland, and the District further meet to determine if regionalization with the District would be of better benefit than the water tower.

After discussion, the following motion was made:

It was moved by Commissioner Goehring and seconded by Commissioner Zimmerman the Commission table the request by Portland until further review of regionalization as an option is discussed and determination is brought forward to Commission.

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

STANLEY – COUNTRY ESTATES WATERMAIN EXTENSION - $29,400
(SWC Project No. 2050-STA)
Stanley requested cost-share for pre-construction costs for the installation of a watermain to connect the Country Estates Subdivision. The life cycle cost analysis considered two alternatives and the preferred option was to connect users to the city system.

The total eligible pre-construction is $49,000 with 60 percent cost-share of $29,400. Stanley would provide the local share. The project is in the 2021 WDP 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 Stanley for state cost-share participation at 60 percent of eligible costs for $29,400. The approval is contingent on available funding for the 2021-2023 biennium.

Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. The motion carried.
HORACE – WATERMAIN IMPROVEMENT DISTRICT 2020-7 CONNECTION TO CASS RURAL WATER DISTRICT – $1,232,250  
(SWC Project No. 2050-HOR)  
Horace requested cost-share for the installation of a transmission line to connect with Cass Rural Water Users District (CRWUD). Horace’s existing water supply is not sufficient to meet the water needs of the projected increased population size. The project will connect Horace Proper with CRWUD to regionalize the central area. Horace has a separate pending cost-share request which includes a watermain extension that will loop the system and allow water from the CRWUD connection to be distributed to the industrial areas in the southern portion of the city.

The life cycle cost analysis considered three alternatives to address the projected water needs with the preferred alternative to connect to CRWUD. The total eligible cost is $1,744,000 with 75 percent cost-share of $1,308,000. Pre-construction costs were approved for 75 percent cost-share of $75,750 in February 2021. The request is for additional cost-share of $1,232,250. The local share would be from the Drinking Water State Revolving Loan Fund.

Horace submitted a treatment plant alternative to the 2019 WDP, but has transitioned to the more cost effective regionalization alternative. The project meets requirements of the Commission’s cost-share policy and the recommendation was to approve the cost-share request.

After discussion, the following motion was made:

\[ \text{It was moved by Commissioner Goehring and seconded by Commissioner Zimmerman the Commission approve the request by Horace for state cost-share participation at 75 percent of eligible costs for an additional } \$1,232,250, \text{ with the total amount not to exceed } \$1,308,000. \text{ The approval is contingent on available funding for the 2021-2023 biennium.} \]

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

NAPOLEON – WATER TOWER REPLACEMENT - $1,617,000  
(SWC Project No. 2050-NAP)  
Napoleon requested cost-share for construction of a 300,000-gallon water tower to replace the existing 50,000-gallon water tower. The life cycle cost analysis considered two alternatives with the preferred alternative to replace the tower. The total eligible cost is $2,990,000 with 75 percent cost-share of $1,794,000. Pre-construction costs were approved for 60 percent cost-share of $177,000 in June 2021. The request was for additional cost-share of $1,617,000.

This project was not in the 2019 WDP, but was approved for cost-share in 2019-2021, 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:

\[ \text{It was moved by Commissioner Volk and seconded by Commissioner Zimmerman the Commission approve the request by Napoleon for state cost-share participation at 60 percent of eligible costs for an additional } \$1,617,000, \text{ with the total amount not to exceed } \$1,794,000. \text{ The approval is contingent on available funding for the 2021-2023 biennium.} \]
Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. The motion carried.

HAZEN – WATER SYSTEM IMPROVEMENTS - $367,000 (SWC Project No. 2050-HAZ)

Hazen requested additional cost-share for constructing a new 750,000-gallon water storage tank based on receiving bids that were higher than the engineer’s estimate. The existing 750,000-gallon storage volume has been adequate but Hazen is currently experiencing low water pressure in the higher elevation areas of the system as well as deterioration of the interior and exterior coatings on the storage tank.

The life cycle cost analysis considered four alternatives with the preferred alternative for the new concrete tank at a different higher elevation site, which offers lower maintenance costs and corrects the low-pressure issue.

The total eligible cost is $2,995,000 with 60 percent cost-share of $1,797,000. The city received cost-share of $1,430,000 in February 2020. The city plans to fund the local share of the project with local funds. The project is in the 2019 WDP 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 Hazen for state cost-share participation at 60 percent of eligible costs for an additional $367,000, with the total amount not to exceed $1,797,000. The approval is contingent on available funding for the 2021-2023 biennium.

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

PARSHALL – WATER TOWER - $703,200 (SWC Project No. 2050-PAR)

Parshall requested additional funding of $703,200 for construction of a new 500,000-gallon elevated water tower and upgrades to the pump station discharge piping and facility process water piping.

The original estimated project cost was $2,235,600, had eligible costs of $2,205,000, and was approved for cost-share of $1,323,000, in April 2020. The project was bid March 2021, but due to rising steel prices and increased labor costs, the current project cost is now $3,386,980, an increase of $1,151,380. The project began construction in April 2021.

The total eligible cost is $3,377,000 with 60 percent cost-share of $2,026,200, and requires an additional $703,200. The project is in the 2019 WDP 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 Johnson the Commission approve the request by Parshall for state cost-share participation at 60 percent of eligible costs for an additional $703,200,
with the total amount not to exceed $2,026,200. The approval is contingent on available funding for the 2021-2023 biennium.

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

EAST CENTRAL REGIONAL WATER DISTRICT – WATER TREATMENT PLANT AND TRANSMISSION EXPANSION – $521,000
(SWC Project No. 2050-EAS)
The East Central Regional Water District (ECRWD) requested cost-share for pre-construction costs for the water treatment plant expansion.

The total eligible cost is $8,450,667 with $694,667 for pre-construction, and 75 percent cost-share of $6,338,000. The current request is $521,000 for pre-construction. The project is in the 2021 WDP 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 Veeder the Commission approve the request by ECRWD for state cost-share participation at 75 percent of eligible costs for $521,000. The approval is contingent on available funding for the 2021-2023 biennium.

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

MCLEAN-SHERIDAN WATER DISTRICT – SYSTEM IMPROVEMENTS PHASE 2 – $670,000
(SWC Project No. 2050-MCL)
McLean-Sheridan Rural Water District (MSRWD) requested cost-share for pre-construction costs to expand its current distribution. The life cycle cost analysis considered three alternatives with the preferred being to expand the existing system to address capacity problems, and add 80 users.

The total eligible cost is $10,500,000 with pre-construction costs of $893,333 and 75 percent cost-share of $670,000. The project is in the 2021 WDP 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 Anderson the Commission approve the request by MSRWD for state cost-share participation at 75 percent of eligible costs not to exceed $670,000. The approval is contingent on available funding for the 2021-2023 biennium.

Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. The motion carried.
UPPER SOURIS WATER DISTRICT – 2021 IMPROVEMENTS AND EXPANSION - $245,000
(SWC Project No. 2050-UPP)
Upper Souris Water District (USWD) requested cost-share for pre-construction costs to expand and improve capacity in much of their water system.

The life cycle cost analysis considered two alternatives with the preferred being to expand the existing system to address the system capacity problem and add 35 users. The total eligible cost is $4,073,333, with 75 percent cost-share of $3,055,000. This request is for pre-construction costs of $326,666 at 75 percent cost-share of $245,000. The project is in the 2021 WDP 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 Anderson the Commission approve the request by USWD for state cost-share participation at 75 percent of eligible costs not to exceed $245,000. The approval is contingent on available funding for the 2021-2023 biennium.

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

DAKOTA RURAL WATER DISTRICT – 2019 USER EXPANSION - $1,877,000
(SWC Project No. 2050-DAK)
Dakota Rural Water District (DRWD) requested cost-share for costs to expand the water system transmission and distribution pipeline to loop the system and increase the capacity to several regions across their system. The life cycle cost analysis considered three alternatives with the preferred alternative to loop several lines and add new users.

The total eligible cost of this phase is $2,502,717 with 75 percent cost-share of $1,877,000. The expansion project was approved for cost-share of $461,250 in June 2019, and $4,188,750 in April 2020. The additional request of $1,877,000 would bring the total cost-share to $6,527,000. The project is in the 2021 WDP 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 Anderson and seconded by Commissioner Odermann the Commission approve the request by DRWD for state cost-share participation at 75 percent of eligible costs for an additional $1,877,000 not to exceed $6,527,000. The approval is contingent on available funding for the 2021-2023 biennium.

Commissioners Anderson, Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Governor Burgum voted aye. There were no nay votes. The motion carried.
EAST CENTRAL REGIONAL WATER DISTRICT – INCREASED CAPACITY TO HATTON - $1,220,000  
(SWC Project No. 2050-EAS)  
East Central Regional Water District (ECRWD) requested cost-share for construction costs to increase capacity to Hatton by increasing the size of the pipeline between two of the ECRWD’s reservoirs.

The life cycle cost analysis considered three alternatives with the preferred to install a 12-inch pipeline to address the system capacity. The total eligible cost is $1,726,666 with 75 percent cost-share of $1,295,000. The pre-construction costs of $100,000 were approved in April 2021.

This request is for an additional construction cost-share of $1,220,000. The project is in the 2021 WDP 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 Johnson the Commission approve the request by ECRWD for state cost-share participation at 75 percent of eligible costs for an additional $1,220,000 not to exceed $1,295,000. The approval is contingent on available funding for the 2021-2023 biennium.

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

EAST CENTRAL REGIONAL WATER DISTRICT – 2019 EXPANSION PHASE 4 – $0  
(SWC Project No. 2050-EAS)  
The East Central Regional Water District (ECRWD) requested a change of scope on the previously approved cost-share for construction costs of a system expansion and increase capacity of the system.

The change in scope would add a mile of pipeline to address capacity issues. The change will not require additional cost-share because the ECRWD will fund this change with cost-share being offset from a previously approved raw water pipeline segment using a recently approved federal drought resiliency grant through the Bureau of Reclamation.

The project was approved for 75 percent cost-share of $4,086,000 with pre-construction in October 2019 and construction in October 2020. The expansion total eligible cost is $6,366,666 with 75 percent cost-share of $4,775,000. The drought resiliency grant of $689,000 leaves the approved cost-share amount at $4,086,000. The project is in the 2019 WDP 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 ECRWD for change of scope from ECRWD using existing state cost-share participation at 75 percent of eligible costs with a total amount not to exceed $4,086,000. The approval is contingent on available funding for the 2021-2023 biennium.
Commissioners Johnson, Odermann, Ova, Veeder, Volk, Walker, Zimmerman, Goehring, and Governor Burgum voted aye. Commissioner Anderson abstained. There were no nay votes. The motion carried.

MANDAN/LOWER HEART FLOOD RISK REDUCTION PROJECT

Pat Fridgen presented a request from the Lower Heart Water Resource District for a letter of support related to the Mandan and Lower Heart Flood Risk Reduction Project (Project). Until recently, the project sponsors were planning to fund most of the Project through a cooperative cost-share effort between themselves and the Commission.

In October 2020, the Commission approved cost-share in the amount of $1.2M to cover design costs and efforts related to a FEMA Conditional Letter of Map Revision (CLOMR). In terms of estimated project costs, the sponsors indicated in the 2021 WDP that costs would likely total just under $22M.

More recently, the project sponsors learned that the federal government has shifted emphasis to the Building Resilient Infrastructure and Communities (BRIC) grant process – leading them to pursue federal funding for the Project. Under the BRIC grant process, through FEMA’s Hazard Mitigation Grant Program, projects are eligible for up to 75 percent in federal assistance. However, an important element of FEMA’s criteria is identification of non-federal funding partners, and securing commitment letters from those potential sources.

The Project continues to be a high priority for the state and the Commission. In addition, a large contribution by the federal government to this Project would substantially reduce the state’s anticipated overall commitment. The recommendation was to approve the attached letter (APPENDIX E).

Governor Burgum requested the DWR inquire with North Dakota’s Congressional leaders to determine whether or not they have also written letters of support.

After discussion, the following motion was made:

It was moved by Commissioner Goehring and seconded by Commissioner Volk the Commission approve the letter of commitment (APPENDIX E) specifying the local project sponsors would be eligible for up to 50 percent of remaining and eligible non-federal costs per the Commission’s Project Funding Policy, Procedure, and General Requirements.

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

LEGAL UPDATE

Jennifer Verleger, General Counsel, Attorney General’s Office, provided a brief update on current Commission and the DWR litigation. There were no questions.

PROJECT UPDATES

DWR staff provided brief updates on the following projects:

- Jon Kelsch, Water Development Division Director, Devils Lake Outlet
• Chris Korkowski, Investigations Section Chief, Missouri River and Mouse River
• Tim Freije, NAWS Project Manager, NAWS
  Governor Burgum requested a follow-up be made to the Turtle Mountain Band of
  Chippewa Indians for a representative and recommendation to add a non-voting
  member to the NAWS Advisory Board.
• Sindhuja S.Pillai-Grinolds, SWPP Project Manager, SWPP

There being no further business to come before the Commission, Governor Burgum adjourned
the meeting at 5:18 p.m.

[Signature]
Doug Burgum, Governor
Chairman, State Water Commission

[Signature]
Andrea Travnicke, Ph.D.
Director, North Dakota Department of Water
Resources, and Secretary to the State Water
Commission

August 12, 2021
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COST INCREASES

The following are various types of projects for which sponsors request cost increase assistance.

1. Projects approved for cost-share during the current biennium, and are requesting additional cost-share funding for cost increases.

   **SOP**
   - Requests in excess of $75,000 will be presented to the Commission for consideration.
   - Requests of $75,000 or less will be considered by the Director.

2. Projects approved for cost-share during past biennia, and are requesting current biennium cost-share funding or available carryover funds for cost increases.

   **SOP**
   - Requests in excess of $75,000 may be deferred for the first six months of the biennium before being presented to the Commission for consideration.
   - Requests of $75,000 or less may be deferred for the first six months of the biennium before being considered by the Director.

3. Projects that were denied or deferred for cost increase funding during the previous biennium.

   **SOP**
   - Requests in excess of $75,000 may be deferred for the first six months of the biennium before being presented to the Commission for consideration.
   - Requests of $75,000 or less may be deferred for the first six months of the biennium before being considered by the Director.

PROJECTS NOT SUBMITTED TO THE WATER DEVELOPMENT PLAN

Project sponsors will sometimes request cost-share funding for projects that are eligible under the agency’s cost-share policy, but were not submitted or included in the current Water Development Plan (WDP). The following are various types of projects that are not included in the current WDP, but are submitted for cost-share consideration.

1. Projects that were, or were not identified in the previous biennium WDP, and are not included in the current WDP.
SOP

• These projects will be deferred for the first six months of the biennium for Commission consideration. (Exceptions are those projects considered to be an emergency – directly impacting human health and safety.)

LOW HEAD DAM REPAIRS – ROLLER EFFECT MITIGATION

Under the revised “Dam Safety and Emergency Action Plans” section of the Water Commission’s cost-share policy, the Commission will provide 75% cost-share to mitigate public dangers associated with low head dam roller effects. The following are various types of low head dam improvement projects that are submitted for cost-share consideration.

1. Dam breaches, removals, or rock rip rap.

SOP

• The Water Commission may cost-share up to 75% to mitigate public dangers associated with low head dam roller effects. Cost-share funding will be considered under this category for dam removals, or the placement of rock rip rap, but not both.

• Modifications, repairs, or removals that go beyond what is minimally required to mitigate roller effects may be cost-shared at lesser amounts – depending on the purpose for which the supplemental modifications or repairs are being made (i.e. recreation, water supply, flood control, irrigation, etc).

LIFE CYCLE COST ANALYSIS FOR PRECONSTRUCTION & CONSTRUCTION REQUESTS

Under the “Life Cycle Cost Analysis” section of the Water Commission’s cost-share policy, project sponsors seeking cost-share for construction of water supply projects must complete and submit the Commission’s Life Cycle Cost Analysis worksheet. In addition, effective February 2021, the Commission considers cost-share requests and issues agreements under a two-tier process. Cost-share for pre-construction activities are considered first, followed by requests for construction-related expenses.

1. Projects seeking pre-construction cost-share funding.

SOP

• The Water Commission and Director will require the submittal of life cycle cost analysis results with cost-share applications.

2. Projects seeking construction cost-share funding.

SOP

• The Water Commission and Director will require updated life cycle cost analysis results with cost-share applications.

PROJECTS WITH BENEFIT TO COST RATIOS OF LESS THAN 1

Deleted: it states “The intent of these projects is to return the dam to a state of being safe from the condition of failure, damage, error, accidents, harm or other events.”

Deleted: Flood control and water conveyance projects with a total cost of $200,000 or more are required to complete the Water Commission’s economic analysis worksheet, with the results ultimately presented to the Commission. The following are various types of results that a project may yield after completion of the economic analysis worksheet.

1. Projects that yield a benefit to cost ratio of 1:1 or greater.

SOP

These projects will be considered by the Commission at the next regularly scheduled meeting.

1. Projects that yield a benefit to cost ratio of less than 1:1.

SOP

These projects may be deferred for the first six months of the biennium for Commission consideration.

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APPENDIX B

PROJECT FUNDING POLICY, PROCEDURE, AND GENERAL REQUIREMENTS

The State Water Commission has adopted this policy to support local sponsors in development of sustainable water related projects in North Dakota. This policy reflects the State Water Commission’s cost-share priorities and provides basic requirements for all projects considered for prioritization during the agency’s budgeting process. Projects and studies that receive funding from the agency’s appropriated funds are consistent with the public interest. The State Water Commission values and relies on local sponsors and their participation to assure on-the-ground support for projects and prudent expenditure of funding for evaluations and project construction. It is the policy of the State Water Commission that only the items described in this document will be eligible for cost-share upon approval by the State Water Commission, unless specifically authorized by State Water Commission action.
I. DEFINITIONS

A. CAPITAL IMPROVEMENT FUND is money set aside using a portion of user fees for future asset replacement and a cost-share application shall include documentation of the following:
   1. Current capital improvement fund balance
   2. Existing and new assets
   3. Replacement cost of assets
   4. Average life of assets
   5. Current and future monthly reserve per user

B. CONSTRUCTION COSTS include earthwork, concrete, mobilization and demobilization, dewatering, materials, seeding, rip-rap, crop damages, re-routing electrical transmission lines, moving storm and sanitary sewer system and other underground utilities and conveyance systems affected by construction, mitigation required by law related to the construction contract, water supply works, irrigation supply works, and other items and services provided by the contractor. Construction costs are only eligible for cost-share if incurred after State Water Commission approval and if the local sponsor has complied with North Dakota Century Code (N.D.C.C.) in soliciting and awarding bids and contracts, and complied with all applicable federal, state, and local laws.

C. COST-SHARE means funds appropriated by the legislative assembly or otherwise transferred by the Commission to a local entity under Commission policy as reimbursement for a percentage of the total approved cost of a project approved by the Commission.

D. ECONOMIC ANALYSIS means an estimate of the economic benefits and direct costs that result from the development of a project.

E. ENGINEERING SERVICES include pre-construction and construction engineering. Pre-construction engineering is the engineering necessary to develop plans and specifications for permitting and construction of a project including preliminary and final design, material testing, flood insurance studies, hydraulic models, and geotechnical investigations. Construction engineering is the engineering necessary to build the project designed in the pre-construction phase including construction contract management, and construction observation. Administrative and support services not specific to the approved project are not engineering services. Engineering services are eligible costs if incurred after State Water Commission approval. If the total anticipated engineering costs are greater than the threshold stipulated in NDCC 54-44.7-04, then the local sponsor must follow the engineering selection process provided in NDCC 54-44.7 and provide a copy of the selection committee report to the Secretary. The local sponsor will be considered to have complied with this requirement if they have completed a selection process for a general engineering services agreement at least once every three years and have formally assigned work to a firm or firms under an agreement. The local sponsor must inform the Secretary of any change in the provider of general engineering services.

F. EXPANSIONS are construction related projects that increase the project area or users served. Expansions do not include maintenance, replacement, or reconstruction activities.

Effective August 12, 2021
G. EXTRAORDINARY MAINTENANCE COSTS include the repair or replacement of portions of facilities or components that extends the overall life of the system or components that are above and beyond regular or normal maintenance. Extraordinary maintenance activities extend the asset’s useful life beyond its originally predicted useful life.

H. GRANT means a one-time sum of money appropriated by the legislative assembly and transferred by the Commission to a local entity for a particular purpose. A grant is not dependent on the local entity providing a particular percentage of the cost of the project.

I. IMPROVEMENTS are construction related projects that upgrade a facility to provide increased efficiency, capacity, or redundancy. Improvements do not include any activities that are maintenance, replacement, or reconstruction.

J. LIFE CYCLE COST ANALYSIS means the summation of all costs associated with the anticipated useful life of a project, including project development, land, construction, operation, maintenance, and disposal or decommissioning.

K. LOAN means an amount of money lent to a sponsor of a project approved by the Commission to assist with funding approved project components. A loan may be stand-alone financial assistance.

L. LOCAL SPONSOR is the entity submitting a cost-share application and must be a political subdivision, state entity, or commission legislatively granted North Dakota recognition that applies the necessary local share of funding to match State Water Commission cost-share. They provide direction for studies and projects, public point of contact for communication on public benefits and local concerns, and acquire necessary permits and rights-of-way.

M. REGULAR MAINTENANCE COSTS include normal repairs and general upkeep of facilities to allow facilities to continue proper operation and function. These maintenance items occur on a regular or annual basis. Regular maintenance activities simply help ensure the asset will remain serviceable throughout its originally predicted useful life.

N. SUSTAINABLE OPERATION, MAINTENANCE, AND REPLACEMENT PLAN is a description of the anticipated operation, maintenance, and replacement costs with a statement that the operation, maintenance, and replacement of the project will be sustainable by the local sponsor. For water supply projects, a summary of the project sponsor’s Capital Improvement Fund must also be included.

O. WATER CONVEYANCE PROJECT means any surface or subsurface drainage works, bank stabilization, or snagging and clearing of water bodies.

II. INELIGIBLE ITEMS excluded from cost-share include:

1. Administrative costs, including salaries for local sponsor members and employees as well as consultant services that are not project specific and other incidental costs incurred by the sponsor;

2. Property and easement acquisition costs paid to the landowner unless specifically identified as eligible within the Flood Recovery Property Acquisition Program, the Flood Protection Program, or Water Retention Projects;
3 Work and costs incurred prior to a cost-share approval date, except for emergencies as determined by the Secretary.

4 Project related operation and regular maintenance costs;

5 Funding contributions provided by federal, other state, or other North Dakota state entities that supplant costs;

6 Work incurred outside the scope of the approved study or project; or

7 Local requirements imposed beyond State and Federal requirements for the project may be ineligible.

III. COST-SHARE APPLICATION AND APPROVAL PROCEDURES

The State Water Commission will not consider any cost-share applications unless the local sponsor first makes an application to the Secretary. No funds will be used in violation of Article X, § 18 of the North Dakota Constitution (Anti-Gift Clause).

A. APPLICATION REQUIRED. An application for cost-share is required in all cases and must be submitted by the local sponsor on the State Water Commission Cost-Share Application form. Applications for cost-share are accepted at any time. Applications received less than 45 days before a State Water Commission meeting will not be considered at that meeting and will be held for consideration at a future meeting unless specifically exempted by the Secretary. The application form is maintained and updated by the Secretary. A completed application must include the following:

1 Category of cost-share activity

2 Location of the proposed project or study area shown on a map

3 Description, purpose, goal, objective, narrative of the proposed activities

4 Delineation of costs

5 Anticipated timeline of project from preliminary study through final closeout

6 Potential federal, other state, or other North Dakota state entity participation

7 Documentation of an engineering selection process if engineering costs are anticipated to be greater than the threshold provided in NDCC 54-44.7-04

8 Engineering plans, if applicable

9 Status of required permitting

10 Potential territorial service area conflicts or service area agreements, if applicable

11 Sustainable operation, maintenance, and replacement plan for projects

12 Completed economic analysis worksheet for water conveyance and flood-related projects expected to cost two hundred thousand dollars or more. (Required at the time applications include a request for construction cost-share.)

Effective August 12, 2021.
13. Completed life cycle cost analysis worksheet for water supply construction projects. The completed worksheet must include a no action alternative, and up to three additional plausible alternatives— including repair, replacement, and regionalization options. If repair, replacement, and regionalization alternatives are excluded from the life cycle cost analysis, justification must be provided by the project sponsor.

14. Additional information as deemed appropriate by the Secretary

Applications for cost-share are separate and distinct from the State Water Commission biennial project information collection effort that is part of the budgeting process and published as the State Water Plan. All local sponsors are encouraged to submit project financial needs for the State Water Plan. Projects not submitted as part of the State Water Plan development process may be held until action can be taken on those that were included during budgeting, unless determined to be an emergency that directly impacts human health and safety or that are a direct result of a natural disaster.

B. PRE-APPLICATION. A pre-application process is allowed for cost-share of assessment projects. This process will require the local sponsor to submit a brief narrative of the project, and a delineation of costs. The Secretary will then review the material presented, make a determination of project eligibility, and estimate the cost-share funding the project may anticipate receiving. A project eligibility letter will then be sent to the local sponsor noting the percent of cost-share assistance that may be expected on eligible items as well as listing those items that are not considered to be eligible costs. In addition, the project eligibility letter will state that the Secretary will recommend approval when all cost-share requirements are addressed. The local sponsor may use the project eligibility letter to develop a project budget for use in the assessment voting process. Upon completion of the assessment vote and all other requirements an application for cost-share can be submitted.

C. REVIEW. Upon receiving an application for cost-share, the Secretary will review the application and accompanying information. If the Secretary is satisfied that the proposal meets all requirements, the local sponsor will be asked to present the application, and the Secretary will provide a recommendation to the State Water Commission for its action. The Secretary’s review of the application will include the following items and any other considerations that the Secretary deems necessary and appropriate.

1. Applicable engineering plans;
2. Field inspection, if deemed necessary by the Secretary;
3. The percent and limit of proposed cost-share determined by category of cost-share activity and eligible expenses;
4. Assurance of sustainable operation, maintenance, and replacement of project facilities by the local sponsor;
5. Status of permitting and service area agreements;
6. Available funding in the State Water Commission budget, if in the State Water Plan, and a priority ranking when appropriate;
7. Results of economic analysis of water conveyance or flood-related projects, when applicable; and

Effective August 12, 2021
8 Results of life cycle cost analysis for water supply projects, when applicable.

For cost-share applications over $100 million, additional information requested by the State Water Commission will be used to determine cost-share.

The Secretary is authorized to approve cost-share up to $75,000 and also approve cost overruns up to $75,000 without State Water Commission action. The Secretary will respond to such requests within 60 days of receipt of the request. A final decision may be deferred if warranted by funding or regulatory consideration.

D. NOTICE. The Secretary will give a 10-day notice to local sponsors when their application for cost-share is placed on the tentative agenda of the State Water Commission's next meeting.

E. AGREEMENT AND DISTRIBUTION OF FUNDS. No funds will be disbursed until the State Water Commission and local sponsor have entered into an agreement for cost-share participation. No agreement for construction funding will be entered into until all required State Engineer permits have been acquired.

For construction projects, the agreement will address indemnification and vicarious liability language. The local sponsor must require that the local sponsor and the state be made an additional insured on the contractor's commercial general liability policy including any excess policies, to the extent applicable. The levels and types of insurance required in any contract must be reviewed and agreed to by the Secretary. The local sponsor may not agree to any provision that indemnifies or limits the liability of a contractor.

For any property acquisition, the agreement will specify that if the property is later sold, the local sponsor is required to reimburse the Commission the percent of sale price equal to the percent of original cost-share.

The Secretary may make partial payment of cost-sharing funds as deemed appropriate. Upon notice by the local sponsor that all work or construction has been completed, the Secretary may conduct a final field inspection. If the Secretary is satisfied that the work has been completed in accordance with the agreement, the final payment will be disbursed to the local sponsor, less any partial payment previously made.

The project sponsor must provide a progress report to the Commission at least once every two years if the term of the project exceeds two years. If a progress report is not received in a timely fashion, or if after a review of the progress report the Commission determines the project has not made sufficient progress, the Commission may terminate the agreement for project funding. The project sponsor may submit a new application to the Commission for funding for a project for which the Commission previously terminated funding.

F. LITIGATION. If a project submitted for cost-share is the subject of litigation, the application may be deferred until the litigation is resolved. If a project approved for cost-share becomes the subject of litigation before all funds have been disbursed, the Secretary may withhold funds until the litigation is resolved. Litigation for this policy is defined as legal action that would materially affect the ability of the local sponsor to construct the project, that would delay construction such that the authorized funds could not be spent, or is between political subdivisions related to the project.

Effective August 12, 2021.
G. ECONOMIC ANALYSIS. Project sponsors seeking cost-share for construction of flood control or water conveyance projects with a total cost of two hundred thousand dollars or more must complete the Water Commission’s economic analysis worksheet. The results of the economic analysis must be provided with the sponsor’s application for cost-share assistance for agency review. When the results of the economic analysis are determined by the agency to be accurate, the results will then be presented to the State Water Commission for their consideration as part of the cost-share request.

H. LIFE CYCLE COST ANALYSIS. Project sponsors seeking cost-share for construction of water supply projects must complete the Water Commission’s life cycle cost analysis worksheet. The completed worksheet must include no action alternative, and up to three additional plausible alternatives - including repair, replacement, and regionalization options. If repair, replacement, and regionalization alternatives are excluded from the life cycle cost analysis, justification must be provided by the project sponsor.

The results of the life cycle cost analysis must be provided with the sponsor’s application for cost-share assistance for agency review. When the results of the life cycle cost analysis are determined by the agency to be accurate, the results will then be presented to the State Water Commission for their consideration as part of the cost-share request.

IV. COST-SHARE CATEGORIES

The State Water Commission supports the following categories of projects for cost-share. Engineering expenses related to construction are cost-shared at the same percent as the construction costs when approved by the State Water Commission. The Commission will consider cost-share requests and issue agreements under a two-tier process. Cost-share for pre-construction expenses will be considered first, followed by construction-related expenses after completion of pre-construction activities, including plans and specifications for bidding project construction.

A. PRE-CONSTRUCTION EXPENSES. The State Water Commission supports local sponsor development of feasibility studies, engineering designs, and mapping as part of pre-construction activities to develop support for projects within this cost-share policy. The following projects and studies are eligible.

1. Feasibility studies to identify water related problems, evaluate options to solve or alleviate the problems based on technical and financial feasibility, and provide a recommendation and cost estimate of the best option to pursue.

2. Engineering design to develop plans and specifications for permitting and construction of a project, including associated cultural resource and archeological studies.

3. Mapping and surveying to gather data for a specific task such as flood insurance studies and flood plain mapping, LiDAR acquisition, and flood imagery attainment, which are valuable to managing water resources.

Copies of the deliverables must be provided to the Secretary upon completion. The Secretary will determine the payment schedule and interim progress report requirements.

B. WATER SUPPLY

1. RURAL AND MUNICIPAL WATER SUPPLY PROJECTS. The State Water Commission supports water supply efforts. The local sponsor may apply for funding, and the application will be
reviewed to determine project priority. Debt per capita, water rates and financial need may be considered by the Commission when determining an appropriate cost-share percentage. The Commission reserves flexibility to adjust percentages on a case by case basis, but generally:

Up to 75% cost-share may be provided for:
- Rural Water System Expansions and Improvements
- Connection of communities to a regional system
- Improvements required to meet primary drinking water standards

Up to 60% cost-share may be provided for:
- Municipal Water Supply Expansions and Improvements
- Connection of new rural water customers located within extraterritorial areas of a municipality

Water Depots for industrial use receiving water from facilities constructed using State Water Commission funding or loans have the following additional requirements:

a) Domestic water supply has priority over industrial water supply in times of shortage. This must be explicit in the water service contracts with industrial users.

b) If industrial water service will be contracted, public notice of availability of water service contracts is required when the depot becomes operational.

c) Public access to water on a non-contracted basis must be provided at all depots.

2 FEDERAL MUNICIPAL, RURAL, AND INDUSTRIAL WATER SUPPLY PROGRAM. The Municipal, Rural, and Industrial Water Supply Program, which uses federal funds, is administered according to North Dakota Administrative Code Article 89-12.

3 DROUGHT DISASTER LIVESTOCK WATER ASSISTANCE PROGRAM. This program is to provide assistance with water supply for livestock impacted during drought declarations and is administered according to North Dakota Administrative Code Article 89-11.

C. FLOOD CONTROL. The State Water Commission may provide cost-share for eligible items of flood control projects protecting communities from flooding and may include the repair of dams that provide a flood control benefit.

1 FLOOD RECOVERY PROPERTY ACQUISITION PROGRAM. This program is used to assist local sponsors with flood recovery expenses that provide long term flood damage reduction benefits through purchase and removal of structures in areas where flood damage has occurred. All contracted costs directly associated with the acquisition will be considered eligible for cost-share. Contracted costs may include: appraisals, legal fees (title and abstract search or update, etc.), property survey, closing costs, hazardous materials abatement needs (asbestos, lead paint, etc.), and site restoration.

The State Water Commission may provide cost-share of the eligible costs of approved flood recovery expenses that provide long term flood reduction benefits based on the following criteria and priority order:

Effective August 12, 2021.
a) Local sponsor has flood damage and property may be needed for construction of temporary or long-term flood control projects, may be cost-shared up to 75 percent.

b) Local sponsor has flood damage and property would increase conveyance or provide other flood control benefits, may be cost-shared up to 60 percent.

Prior to applying for assistance, the local sponsor must adopt and provide to the Secretary an acquisition plan (similar to plans required by Hazard Mitigation Grant Program (HMGP)) that includes the description and map of properties to be acquired, the estimated cost of property acquisition including contract costs, removal of structures, the benefit of acquiring the properties, and information regarding the ineligibility for HMGP funding. Property eligible for HMGP funding is not eligible for this program. The acquisition plan must also include a description of how the local sponsor will insure there is not a duplication of benefits.

Over the long-term development of a flood control project following a voluntary acquisition program, the local sponsor’s governing body must officially adopt a flood risk reduction plan or proposal including the flow to be mitigated. The flow used to develop the flood risk reduction plan must be included in zoning discussions to limit new development on other flood-prone property. An excerpt of the meeting minutes documenting the local sponsor’s official action must be provided to the Secretary.

The local sponsor must fund the local share for acquisitions. This requirement will not be waived. Federal funds are considered “local” for this program if they are entirely under the authority and control of the local sponsor.

The local sponsor must include a perpetual restrictive covenant similar to the restrictions required by the federal HMGP funding with the additional exceptions being that the property may be utilized for flood control structures and related infrastructure, paved surfaces, and bridges. These covenants must be recorded either in the deed or in a restrictive covenant that would apply to multiple deeds.

The local sponsor must provide justification, acceptable to the Secretary, describing the property’s ineligibility to receive federal HMGP funding. This is not meant to require submission and rejection by the federal government, but rather an explanation of why the property would not be eligible for federal funding. Example explanations include: permanent flood control structures may be built on the property, project will not achieve required benefit-cost analysis to support HMGP eligibility; or lack of available HMGP funding. If inability to receive federal funding is not shown to the satisfaction of the Secretary, following consultation with the North Dakota Department of Emergency Services, the cost-share application will be returned to the local sponsor for submittal for federal funding prior to use of these funds.

2 FLOOD PROTECTION PROGRAM. This program supports local sponsor efforts to prevent future property damage due to flood events. The State Water Commission may provide cost-share up to 60 percent of eligible costs. For projects with federal participation, the cost-share may be up to 50 percent of eligible non-federal costs. The State Water Commission may consider a greater level of cost participation for projects involving a total cost greater than $100 million and having a basin wide or regional benefit.

Effective August 12, 2021
Local share must be provided on a timely basis. The State Water Commission may lend a portion of the local share based on demonstrated financial need.

Property acquisition costs limited to the purchase price of the property that is not eligible for HMGP funding and within the footprint of a project may be eligible under this program. The local sponsor must include a perpetual restrictive covenant on any properties purchased under this program similar to the restrictions required by the federal HMGP funding with the additional exceptions being that the property may be utilized for flood control structures and related infrastructure, paved surfaces, and bridges. These covenants must be recorded either in the deed or in a restrictive covenant that would apply to multiple deeds.

Costs for property acquired, by easement or fee title, to preserve the existing conveyance of a breakout corridor recognized as essential to FEMA system accreditation may be eligible under this program.

The cost-share application must include the return interval or design flow for which the structure will provide protection. The Commission will calculate the amount of its financial assistance, based on the needs for protection against:

1. One-hundred year flood event as determined by a federal agency;
2. The national economic development alternative; or
3. The local sponsor’s preferred alternative if the Commission first determines the historical flood prevention costs and flood damages and the risk of future flood prevention costs and flood damages, warrant protection to the level of the local sponsor’s preferred alternative.

Storm water management is not an eligible cost-share category. In order to differentiate between a flood control project and storm water management, the Commission may reduce the cost-share provided by the percentage of the contributing watershed that is located within the community’s corporate limits as calculated on an acreage basis.

3 FEMA LEVEE SYSTEM ACCREDITATION PROGRAM. The State Water Commission may provide cost-share up to 60 percent for eligible services for FEMA 44 CFR 65.10 flood control or reduction levee system certification analysis. The analysis is required for FEMA to accredit the levee system for flood insurance mapping purposes. Typical eligible costs include site visits and field surveys to include travel expenses, hydraulic evaluations, closure evaluations, geotechnical evaluations, embankment protection, soils investigations, interior drainage evaluations, internal drainage hydrology and hydraulic reports, system modifications, break-out flows, and all other engineering services required by FEMA. The analysis will result in a comprehensive report to be submitted to FEMA and the Secretary.

Administrative costs to gather existing information or to recreate required documents, maintenance and operations plans and updates, and emergency warning systems implementation are not eligible.

4 WATER RETENTION PROJECTS. The goal of water retention projects is to reduce flood damages by storing floodwater upstream of areas prone to flood damage. The State Water Commission may provide cost-share up to 60 percent of eligible costs for water retention projects including purchase price of the property. For projects with federal participation, the cost-share may be up to 50 percent. Water retention structures constructed with State
Water Commission cost-share must meet state dam safety requirements, including the potential of cascade failure. A hydrologic analysis including an operation plan and a quantification of the flood reduction benefits for 25, 50, and 100-year events must be submitted with the cost-share application.

5 INDIVIDUAL RURAL AND FARMSTEAD RING DIKE PROGRAM. This program is intended to protect individual rural homes and farmsteads through ring dike programs established by water resource districts. All ring dikes within the program are subject to the Commission’s Individual Rural and Farmstead Ring Dike Criteria provided in Attachment A. Protection of a city, community or development area does not fall under this program but may be eligible for the flood control program. The State Water Commission may provide up to 60 percent cost-share of eligible items for ring dikes up to a limit of $55,000 per ring dike.

Landowners enrolled in the Natural Resource Conservation Service's (NRCS) Environmental Quality Incentive Program (EQIP) who intend to construct rural or farmstead ring dikes that meet the State Water Commission’s elevation design criteria are eligible for a cost-share reimbursement of 20 percent of the NRCS construction payment, limited to a combined NRCS and State Water Commission contribution of 80 percent of project costs.

D. WATER CONVEYANCE.

1 RURAL FLOOD CONTROL. These projects are intended to improve the drainage and management of runoff from agricultural sources. The State Water Commission may provide cost-share up to 45 percent of the eligible items for the construction of drains, channels, or diversion ditches. Construction costs for public road crossings that are integral to the project are eligible for cost-share as defined in N.D.C.C. § 61-21-31 and 61-21-32. If an assessment-based rural flood control project involves multiple districts, each district involved must join in the cost-share application.

Cost-share applications for rural assessment drains will only be processed after the assessment vote has passed, and a drain permit has been obtained. If the local sponsor wishes to submit a cost-share application prior to completion of the aforementioned steps, a pre-application process will be followed.

A sediment analysis must be provided with any application for cost-share assistance for reconstruction of an existing drain. The analysis must be completed by a qualified professional engineer and must clearly indicate the percentage volume of sediment removal involved in the project. The cost of that removal must be deducted from the total for which cost-share assistance is being requested.

2 BANK STABILIZATION. The State Water Commission may provide cost-share up to 50 percent of eligible items for bank stabilization projects on public lands or those lands under easement by federal, state, or political subdivisions. Bank stabilization projects are intended to stabilize the banks of lakes or watercourses, as defined in N.D.C.C. § 61-01-06, with the purpose of protecting public facilities. Drop structures and outlets are not considered for funding as bank stabilization projects, but may be eligible under other cost-share program categories. Bank stabilization projects typically consist of a rock or vegetative design and are intended to prevent damage to public facilities including utilities, roads, or buildings adjacent to a lake or watercourse.

Effective August 12, 2021
3. SNAGGING AND CLEARING. Snagging and clearing projects consist of the removal and disposal of fallen trees and associated debris encountered within or along the channel of a natural watercourse. Snagging and clearing projects are intended to prevent damage to structures such as bridges, and maintain the hydraulic capacity of the channel during flood flows. The Water Commission may provide cost-share for up to 50 percent of the eligible items for snagging and clearing as well as any sediment that has accumulated in the immediate vicinity of snags and any trees in imminent danger of falling in the channel or watercourses as defined in N.D.C.C. § 61-01-06. Items that are not eligible include snagging and clearing of man-made channels; the dredging of watercourses for sediment removal; the clearing and grubbing of cattails and other plant vegetation; or the removal of any other unwanted materials.

E. RECREATION. The State Water Commission may provide cost-share up to 40 percent for projects intended to provide water-based recreation. Typical projects provide or complement water-based recreation associated with dams.

F. IRRIGATION. The State Water Commission may provide cost-share for up to 50 percent of the eligible items for irrigation projects. The items eligible for cost-share are those associated with the off-farm portion of new central supply works, including water storage facilities, intake structures, wells, pumps, power units, primary water conveyance facilities, and electrical transmission and control facilities. The Commission will only enter into cost-share agreements with political subdivisions, including irrigation districts, and not with individual producers.

G. DAMS AND EMERGENCY ACTION PLANS. The State Water Commission supports projects that address dam safety, deficiencies, repairs, and removals, as well as emergency action plans. In addition to the following cost-share percentages, the State Water Commission may lend a portion of the local share based on demonstrated financial need. For dams and emergency action plans, the Water Commission may:

1. Provide cost-share for up to 60 percent of the eligible items for dam deficiency or repair projects and dam breach or removal projects.

2. Provide cost-share up to 75 percent to mitigate public dangers associated with low head dam roller effects.

3. Provide cost-share up to 80 percent for emergency action plans of each dam classified as high or medium/significant hazard. The cost of a dam break model is only eligible for reimbursement for dams classified as a high hazard.
ATTACHMENT A
INDIVIDUAL RURAL AND FARMSTEAD RING DIKE CRITERIA

MINIMUM DESIGN CRITERIA

- Height: The dike must be built to an elevation 2 ft above either the 100-year flood or the documented high water mark of a flood event of greater magnitude, whichever is greater.

- Top Width:
  - If dike height is 5 ft or less: 4 ft top width
  - If dike height is between 5 ft and 14 ft: 6 ft top width
  - If dike height is greater than 14 ft: 8 ft top width

- Side Slopes: 3 horizontal to 1 vertical

- Strip topsoil and vegetation: 1 ft

- Adequate embankment compaction: Fill in 6-8 inch layers, compact with passes of equipment

- Spread topsoil and seed on ring dike

LANDOWNER RESPONSIBILITY

Landowners are responsible to address internal drainage on ring dikes. If culverts and flap gates are installed, these costs are eligible for cost-share. The landowner has the option of completing the work or hiring a contractor to complete the work.

IF CONTRACTOR DOES THE WORK, payment is for actual costs with documented receipts.

IF LANDOWNER DOES THE WORK, payment is based on the following unit prices:

- Stripping, spreading topsoil, and embankment fill Secretary will determine rate schedule based on current local rates.

- Seeding: Cost of seed times 200%

- Culverts: Cost of culverts times 150%

- Flap gates: Cost of flap gates times 150%

OTHER FACTS AND CRITERIA

- The topsoil and embankment quantities will be estimated based on dike dimensions. Construction costs in excess of the 3:1 side slope standard will be the responsibility of the landowner. Invoices will be used for the cost of seed, culverts, and flap gates.

- Height can be determined by existing FIRM data or known elevations available at county floodplain management offices. Engineers or surveyors may also assist in establishing height elevations.

Effective August 12, 2021

Deleted: Chief Engineer

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- The projects will not require extensive engineering design or extensive cross sections.
- A dike permit is required if the interior volume of the dike consists of 50 acre-feet, or more.
NORTH DAKOTA’S WATER DEVELOPMENT PLAN
The Process, Inventory Development, & SWC Approvals
### 2021 Water Development Plan Timeline & Milestones

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PROJECT INVENTORY & SWC APPROVALS

In WDP
87 (~$284.7M)

Total Projects
120 (~$295.2M)

Not In WDP
33 (~$10.5M)

In WDP
96.5% ($284.7M)

APPROVED
($295.2M)

Not In WDP
3.5% ($10.5M)
PROJECT INVENTORY & SWC APPROVALS

THE 33 NOT IN THE WDP (3.5% OF FUNDING APPROVALS)...

33 = Projects Not In Water Development Plan
14 of 23 Unique Sponsors Submitted Other Projects

19 = Remaining Projects Not Submitted
($7.2M or 2.4% Of The $295.2M Approved By SWC)
9 of 15 Unique Sponsors Submitted Other Projects

14 = Change Of Scope, Snag & Clear, Or Govt-Related Projects/Programs/Coop. Agreements

19

33 Total

Change Of Scope, Snag & Clear, Or Govt-Related Projects/Programs/Coop. Agreements

14

19 = Remaining Projects Not Submitted
($7.2M or 2.4% Of The $295.2M Approved By SWC)
9 of 15 Unique Sponsors Submitted Other Projects
THANK YOU!
Executive Summary

Currently cost-share percentages range from 31% to 80% or higher. By capping state cost-share to 65%, the recommended scenario is anticipated to lower state RTF costs by more than $350M.

$170M ARPA 1-TIME FEDERAL INVESTMENT
To offset higher local costs from cost-share capping ARPA funding investments were used to offset a cost increase for ALL four systems.

40-YEAR 2% Loan for Local Costs with Flexible Principle and Interest Return (i.e., State Level WIFIA)

OBJECTIVES OF STUDY
- Efficient Use of State Resources
- Local Affordability
- Equity and Consistency Amongst Systems

RESOURCES TRUST FUND EFFICIENCY
Migrating to the proposed governance and cost-share structure allows for greater resource deployment at both the state and local level, allowing for project acceleration and broader water project implementation state-wide. The study demonstrates the feasibility of completing all four regional water supply projects within 3 bienniums.

1-TIME STATE LOAN PROGRAM

ACCELERATED DELIVERY

ELIMINATE CAPITAL REPAYMENT REQUIREMENTS FOR SWPP

GOVERNANCE MIGRATION

EQUITABLE GOVERNANCE

OWNERSHIP:
Southwest Pipeline Project (SWPP) From State to Local Ownership to apply consistent governance and finance models to all major regional water systems.
Northwest Area Water Supply (NAWS) From State Ownership to 3rd Party Ownership for inter-basin, raw water supply elements and Local Ownership for potable water treatment and delivery.
Red River Valley Water Supply Project (RRVWSP) Third Party Ownership for inter-basin, raw water supply and Local Ownership for all in-basin transmission pipelines.

REGULATORY OVERSIGHT:
Western Area Water Supply (WAWS) From the Industrial Commission to the State Water Commission to provide consistent state-level regulatory oversight.

APPENDIX D
Developing Solutions to Address Major Regional Water Supply Project Variabilities and Challenges

**Total Area Served by Regional Water System in North Dakota**

- **RRVWSP**: 37%
- **SWPP**: 20%
- **NAWS**: 15%
- **OTHER**: 16%

**Percentage of North Dakotans Served per Regional Water System**

- **RRVWSP**: 50%
- **NAWS**: 13%
- **WAWS**: 8%
- **OTHER**: 8%
- **SWPP**: 8%

4 Major Systems Benefit 79% of North Dakotans!

Approximate Taxable Sales by Project Area

- **SWPP**: 9%
- **NAWS**: 12%
- **WAWS**: 14%
- **RRVWSP**: 47%
- **OTHER**: 18%

4 Major Systems Support Economies that Provide 82% of the Taxable Sales
Strategic Finance and Governance Study
SWPP | NAWS | WAWS | RRVWSP

Study Overview and Recommendations

August 12, 2021
Study Team Overview

ND STATE WATER COMMISSION

- Brent Bogar
  Project Manager

- Shawn Gaddie, PE
  Principal-in-Charge

- Commission

- Commissioner
  Mark Owan

- Commissioner
  Jay Volk

GOVERNANCE AND LEGAL
FINANCE AND PROJECT DELIVERY
MODELING AND STAKEHOLDER ENGAGEMENT

NDSWC STAFF

- Sindhuja S. Pillai-Grinolds
- Jonathan Kelsch
- Tim Dodd
- Duane Pool
- Pat Fridgen

NDSWC WORKING GROUP

- Commission

- Commissioner
  Mark Owan

- Commissioner
  Jay Volk
Purpose of the Study

» Addressing regional water systems governance/funding challenges and inconsistencies

» Driving completion of major regional water supply projects

» Comparative screening of alternative governance and finance frameworks

» Migrating to solutions not bound by historic constraints
Developing Solutions to Address Major Regional Water Supply Project Variabilities and Challenges

- Evaluating Inconsistent Governance and Funding Models
- Developing RTF Sustainability through Effective Cost-Share Policy
- Analyzing State Level Affordability and Reducing Funding Volatility
- Legislative, Agency, and Local System Outreach
- Understanding and Addressing Local Level Affordability Concerns
- Identifying Governance and Funding Model Migration Challenges
Defining Goals to Move Major Regional Water Supply Project Funding Forward

- Goals helped establish what scenarios are useful to decision making
- Analysis balanced State & local priorities for:

  - Efficiency (With State Resources)
  - Consistency Among Projects
  - Affordability (To Local Users)
  - Risk Tolerance (Delivery vs. Financial)

Primary Goal from the RFP: Cost-Effective Use of Limited State Resources
4 Major Regional Water Supply Projects

Benefits to North Dakotans by Percentage

- 50% RRVWSP
- 13% NAWS
- 8% WAWS
- 8% SWPP
- 21% OTHER

4 Major Systems Benefit 79% of North Dakotans
Historical Major Regional Water Supply Project Governance and Funding

Project-specific governance and funding approach was tailored to the project needs & the time it was authorized, considering:

- Federal Participation
- Permitting Requirements
- Purpose/Need of the Project
- Growth Demands
- Project Progress
- Primary/Secondary Supply Need
- Industrial/Ag Demands
- Affordability Concerns
Historic Cost-Share Policies

17 Iterations of Cost-Share Policy since 2005-2007 Biennium

2005 - Water Supply funded at 50%
2012 - Water Supply increased to 60%
2015 - Most Substantial Changes
  • Preconstruction expenses at 35%
  • Water Supply varies from 60% to 75% depending on project type
2018 - Removes preconstruction distinction

IMPORTANT, BUT DOES NOT DIRECTLY COVER REGIONAL PROJECTS
Approved Cost-Share by Project
(through 19-21 Biennium)

(Source: SWC Financials and data from project representatives)

* SWPP cost-share does not include repayment through Capital Repayment - $79.42M through February 2021
Projected Cost-Share to Completion
(through 31-33 Biennium)

(Source: SWC Financials and data from project representatives)

* SWPP cost-share does not include repayment through Capital Repayment - $79.42M through February 2021
## Major Regional Water Supply Systems Needs to Completion

<table>
<thead>
<tr>
<th>$500M</th>
<th>$1.55B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total approved State funding to date for 4 major water supply systems</td>
<td>Total projected state cost-share required for 4 major systems to completion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>54%</th>
<th>$540M</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 major systems projected need compared to all other RTF needs over next 12-years</td>
<td>Projected total deficit of the RTF over next 12-years</td>
</tr>
</tbody>
</table>
Existing System Ownership

- **Local**
- **State**
- **Third Party**
- **TBD**

Location Names:
- Williston
- Dickinson
- Minot
- Bismarck
- Biota WTP
- Devils Lake
- Jamestown
- Valley City
- Grand Forks
- Fargo
- Wahpeton

Service Area:
- WAWs
- NAWS
- RRVWSP

Key Locations:
- Bismarck
- Minot
- Williston
- Dickinson
- Fargo
- Wahpeton

Map Legend:
- Red: Local
- Orange: State
- Yellow: Third Party
- Pink: TBD
## Current Governance Variability & Inconsistencies

<table>
<thead>
<tr>
<th>GOVERNANCE</th>
<th>PROJECT</th>
<th>Southwest Pipeline Project (&quot;SWPP&quot;)</th>
<th>Western Area Water Supply (&quot;WAWS&quot;)</th>
<th>Northwest Area Water Supply Project (&quot;NAWS&quot;)</th>
<th>Red River Valley Water Supply Project (&quot;RRVWSP&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Type</td>
<td></td>
<td>Wholesale and Rural Retail: Primary Potable Supply</td>
<td>Domestic and Industrial Wholesale: Primary Potable Supply</td>
<td>Wholesale: Primary Potable Supply</td>
<td>Wholesale: Supplemental / Emergency Raw Water</td>
</tr>
<tr>
<td>Ownership</td>
<td></td>
<td>SWC (State)</td>
<td>WAWS* (Local)</td>
<td>SWC (State)</td>
<td>GDCD (in consultation and per agreement w/ LAWA) (3rd Party)</td>
</tr>
<tr>
<td>Operation</td>
<td></td>
<td>SWA - (SWC transferred Operations and Maintenance to SWA through an agreement. Transfer agreement has provisions for SWC taking over O&amp;M in case of emergency)</td>
<td>WAWS*</td>
<td>SWC (in consultation with NAWS Advisory Committee)</td>
<td>GDCD (in consultation and per agreement w/ LAWA)</td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
<td>SWA - (SWC transferred Operations and Maintenance to SWA through an agreement. Transfer agreement has provisions for SWC taking over O&amp;M in case of emergency)</td>
<td>WAWS*</td>
<td>SWC (in consultation with NAWS Advisory Committee)</td>
<td>GDCD (in consultation and per agreement w/ LAWA)</td>
</tr>
<tr>
<td>Rate Setting</td>
<td></td>
<td>SWC and SWA - SWC specifically approves the Capital Repayment and REM rate. Other water rate indirectly approved through the approval of the annual budget.</td>
<td>WAWS (with input from the Industrial Commission on industrial rate reimbursement to member entities)</td>
<td>SWC (in consultation with NAWS Advisory Committee)</td>
<td>GDCD (in consultation and per agreement w/ LAWA&quot;&quot;)</td>
</tr>
<tr>
<td>Primary Regulatory Oversight</td>
<td></td>
<td>SWC</td>
<td>Industrial Commission</td>
<td>SWC</td>
<td>SWC</td>
</tr>
</tbody>
</table>
Key Governance / Ownership Considerations:

**State Ownership:**
State constructed and owned assets as in the case of SWPP and NAWS.

**Local Ownership:**
WAWSA is the closest project to a locally owned water supply project through the Authority and Members (4 water systems).

**Third Party Agency Ownership:**
RRVWSP is proposed to be owned and operated by GDCD on behalf of LAWA (35 water systems). GDCD is proposed to operate as a wholesale utility providing raw water supply to the individual members of LAWA.
Governance and Funding Model
Alternatives Analysis Overview

- What potential variables of change are there?
- Is it a good idea and is it worth it to change?
- What are the primary considerations and steps needed to enact changes?

1. Established Baseline
   - What does project completion and cost look like to State and locals under current policy?

2. Developed Alternatives from Baseline
   - How are changes in funding expected to compare against baseline financial metrics for both the State and local users?

3. Analyzed Alternative Performance Against Baseline

4. Screen Governance Change Implications

5. Migration Recommendations
Financial Scenarios Evaluation
Comparative Screening of Alternative Funding Models
Baseline Financial Scenario

Cost-Share ➔ No change to current cost-share policy

Timing ➔ Projects/needs as outlined in State Water Plan

Local Financing ➔ WAWSA, NAWS, RRVWSP access existing 30-year 2% Loan Programs, SWPP continues with Capital Repayment structure

RTF Revenues ➔ Per Forecast plus inflationary growth

Major Flood Protection Funding ➔ FM Diversion funded outside of the RTF. Mouse River funded at $86M per biennium in the 2023-2031 biennia ($344M total)
## Baseline Scenario - Results

<table>
<thead>
<tr>
<th>Key State Cost Consideration</th>
<th>Baseline Scenario Results (Nominal$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources Trust Fund Revenue</td>
<td>$2.2B</td>
</tr>
<tr>
<td>Federal MR&amp;I Revenues</td>
<td>$82M</td>
</tr>
<tr>
<td>Total Capital Repayment Returned to the RTF from SWPP</td>
<td>$77M</td>
</tr>
<tr>
<td>Total State Cost-Share for Major Water Supply Projects</td>
<td>$1.55B</td>
</tr>
<tr>
<td>Peak Biennium Deficit</td>
<td>$169M</td>
</tr>
<tr>
<td>Total Deficit across Modeled Period</td>
<td>$540M</td>
</tr>
</tbody>
</table>

### Graph

<table>
<thead>
<tr>
<th>Year Range</th>
<th>SWPP</th>
<th>NAWS</th>
<th>WAWSA</th>
<th>RRVWS</th>
<th>Other SWC Costs</th>
<th>Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021-2023</td>
<td>$100,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023-2025</td>
<td>$200,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025-2027</td>
<td>$300,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2027-2029</td>
<td>$400,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2029-2031</td>
<td>$500,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2031-2033</td>
<td>$600,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Achieving Goals | Levers to Pull

<table>
<thead>
<tr>
<th>Revisions to Cost-Share Policy</th>
<th>60%</th>
<th>65%</th>
<th>70%</th>
<th>75%</th>
<th>80%</th>
<th>85%</th>
<th>90%</th>
<th>95%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost-Share Change Approach</td>
<td>Restructuring</td>
<td>Future Looking Adjustment</td>
<td>Regional and Non-Regional Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost-Share Variability</td>
<td>Per Current Policy</td>
<td>Specific to Project</td>
<td>Common to all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governance/Ownership</td>
<td>Status Quo</td>
<td>State Owned</td>
<td>Locally Owned</td>
<td>Privatization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Prioritization</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Delivery Timing</td>
<td>As Scheduled</td>
<td>Accelerated</td>
<td>Deferred</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative State Delivery/Funding</td>
<td>Pay Go</td>
<td>Bonding</td>
<td>P3 (DBF, DBFOM, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RTF Revenue Availability</td>
<td>Low</td>
<td>Forecast</td>
<td>High</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash/Carryover Management Changes</td>
<td>No</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative Local Financing (State Loan Program)</td>
<td>30-year / 2%</td>
<td>40-year / 2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Financing Flexibility</td>
<td>Level Debt Terms</td>
<td>Debt Shaping / P&amp;I Return Flexibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Funding Model Scenarios Considered

**Scenario A “65%”**
Reduced cost-share, historic restructuring, 40-year flexible debt, State bonding to cover deficit

**Scenario B “75%”**
No historic restructuring, 40-year level debt, State bonding to cover deficit

**Scenario C “60%”**
No historic restructuring, 40-year flexible debt, accelerated project timing

**Scenario D “100%”**
State ownership of all with Capital Repayment, no historic restructuring
## Scenario Comparison Analysis

*Balancing State and Local Impacts between Scenarios*

<table>
<thead>
<tr>
<th>Evaluation criteria</th>
<th>Net State Cost (Savings over Baseline)</th>
<th>Net State Deficit/ Bonding Requirements</th>
<th>Net Local Cost (Relative to Baseline)</th>
<th>Local Annual Cost of Capital at Completion (Relative to Baseline)</th>
<th>Local Annual Cost of Capital at Peak (Relative to Baseline)</th>
<th>Accelerated Project Delivery</th>
<th>Financial Scenario Summary Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario A (65% - Shaped)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>+4</td>
</tr>
<tr>
<td>Scenario B (75% - Level)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>0</td>
</tr>
<tr>
<td>Scenario C (60% - Shaped)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>+2</td>
</tr>
<tr>
<td>Scenario D (100%)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>-3</td>
</tr>
</tbody>
</table>

**Red = -1 | Yellow = 0 | Green = +1**
Scenario A “65%” – Total Local Cost Outlay

Scenario A:
- Primarily meets the financial goals and objectives of the Study for the state and two of the four projects (SWPP and WAWS)
- RRVWSP and NAWS resulted in higher total local system costs (NPV basis) over the life of repayment.
- **Scenario A further analyzed for improvement options for NAWS and RRVWSP**

### Project Costs

- **SWPP**: $92M
- **NAWS**: ($20M)
- **WAWS**: $86M
- **RRVWSP**: ($128M)
Scenario A + ARPA

- State received more than $1 billion through the American Rescue Plan Act (ARPA). ARPA authorized use of funds includes investment into “Water Infrastructure.”
- An opportunity to offset the cost increases (with a time value of money factor) and maintain local affordability while still achieving the reduced state cost share goal.
  - RRVWSP would receive a one-time local capital investment of $149M
  - NAWS would receive a one-time local capital investment of $21M
### Scenario A – Local Cost of Capital Impacts

#### Projected Annual Cost of Capital per Kgal at *Project Completion* (2021$)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Scenario A + ARPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWPP</td>
<td>$2.00</td>
<td>$1.40</td>
</tr>
<tr>
<td>NAWS</td>
<td>$0.84</td>
<td>$0.76</td>
</tr>
<tr>
<td>WAWS</td>
<td>$2.92</td>
<td>$1.04</td>
</tr>
<tr>
<td>RRVWSP</td>
<td>$0.82</td>
<td>$0.49</td>
</tr>
</tbody>
</table>

#### Projected Annual Cost of Capital per Kgal at *Peak Annual Cost* (2021$)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Scenario A + ARPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWPP</td>
<td>$2.00</td>
<td>$1.39</td>
</tr>
<tr>
<td>NAWS</td>
<td>$0.84</td>
<td>$0.76</td>
</tr>
<tr>
<td>WAWS</td>
<td>$3.02</td>
<td>$1.04</td>
</tr>
<tr>
<td>RRVWSP</td>
<td>$0.82</td>
<td>$0.57</td>
</tr>
</tbody>
</table>

### What does Cost of Capital per kgal represent?

- Representation of annualized total system capital cost per unit of water usage - $/kgal values are not a rate calculation
- Metric to determine effectiveness in right-sizing repayment requirements with projected user growth over time
- Calculation incorporates time value of money and user base growth considerations
Governance Model Evaluation
Comparative Screening of Alternative Governance Models
Governance Screening Analysis

Regional Water Systems
- Southwest Pipeline Project (SWPP)
- Northwest Area Water Supply (NAWS)
- Western Area Water Supply (WAWS)
- Red River Valley Water Supply Project (RRVWSP)

Governance Models
- State Ownership
- Local Ownership
- 3rd Party Public Entity Ownership
- Privatization (P3)
## Governance Screening Analysis - Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weighting Factor</th>
<th>Summary of Additional Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need Changes to State Law</td>
<td>1</td>
<td>Changes in governance will likely require changes to state law, but the transfer to or from a public entity is already established in current law and so it is within the power of the state to make modifications.</td>
</tr>
<tr>
<td>State Cost of Capital</td>
<td>5</td>
<td>The affordability for the state is a top priority of this study and of the screening analysis. A key assumption in this report was to utilize SWPP as the model to compare State Ownership with other governance models.</td>
</tr>
<tr>
<td>Local Cost of Capital</td>
<td>5</td>
<td>The affordability for local users is a top priority of this study and the screening analysis. A key assumption in this report was to utilize SWPP as the model to compare State Ownership with other governance models.</td>
</tr>
<tr>
<td>Gaining Consensus of Governing Parties</td>
<td>4</td>
<td>Migrating governance requires consensus of stakeholders, including the local water supply entity, any sub-member systems, the SWC, the Governor, and the Legislature; Federal participation is also a key consideration.</td>
</tr>
<tr>
<td>Timeline to Implement</td>
<td>2</td>
<td>The ability to migrate is impacted by the length of time to implement the changes.</td>
</tr>
<tr>
<td>Ongoing Litigation Consideration</td>
<td>4</td>
<td>How governance change would impact ongoing litigation and potentially litigation already resolved.</td>
</tr>
<tr>
<td>New System Resources and Staffing</td>
<td>3</td>
<td>The ability to stand up a new form of governance, including the ongoing budget commitment to hire and retain staff, is essential to a successful migration.</td>
</tr>
<tr>
<td>Ability to Meet Overall Policy Objectives</td>
<td>3</td>
<td>Ability to meet the overall policy objectives of the study; including equity between systems and balanced state and local project governance, authority, infrastructure ownership, responsibility, accountability, and cost-share.</td>
</tr>
</tbody>
</table>
### Rating
(measuring impact from/effort to migrate ownership):

<table>
<thead>
<tr>
<th>High (-1)</th>
<th>Medium (0)</th>
<th>Low (1)</th>
</tr>
</thead>
</table>

#### Xenon

<table>
<thead>
<tr>
<th>Evaluation criteria</th>
<th>Need Changes to State Law</th>
<th>State Cost of Capital</th>
<th>Local Cost of Capital</th>
<th>Gaining Consensus of Governing Parties</th>
<th>Timeline to Implement</th>
<th>Ongoing Litigation Considerations</th>
<th>New System Resources and Staffing</th>
<th>Ability to Meet Overall Policy Objectives</th>
<th>SCORE (Weighting Factor x Rating)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SWPP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintain State Ownership</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>5</td>
</tr>
<tr>
<td>Migrate to Local Ownership</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>17</td>
</tr>
<tr>
<td>Migrate to 3rd Party Public Entity Ownership</td>
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<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>8</td>
</tr>
<tr>
<td>Migrate to Privatization</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>■</td>
<td>-17</td>
</tr>
</tbody>
</table>

| **MUPS**            |                           |                       |                       |                                        |                        |                                   |                                        |                                        |                                  |
| Maintain State Ownership | ■                       | ■                     | ■                     | ■                                      | ■                      | ■                                 | ■                                      | ■                                      | -3                               |
| Migrate to Local Ownership | ■                       | ■                     | ■                     | ■                                      | ■                      | ■                                 | ■                                      | ■                                      | 0                                |
| Migrate to 3rd Party Public Entity Ownership | ■                       | ■                     | ■                     | ■                                      | ■                      | ■                                 | ■                                      | ■                                      | 3                                |
| Migrate to Privatization | ■                       | ■                     | ■                     | ■                                      | ■                      | ■                                 | ■                                      | ■                                      | -21                              |

| **WANPS**           |                           |                       |                       |                                        |                        |                                   |                                        |                                        |                                  |
| Migrate to State Ownership | ■                       | ■                     | ■                     | ■                                      | ■                      | ■                                 | ■                                      | ■                                      | -24                              |
| Maintain Local Ownership | ■                       | ■                     | ■                     | ■                                      | ■                      | ■                                 | ■                                      | ■                                      | 19                               |
| Migrate to 3rd Party Public Entity Ownership | ■                       | ■                     | ■                     | ■                                      | ■                      | ■                                 | ■                                      | ■                                      | -5                               |
| Migrate to Privatization | ■                       | ■                     | ■                     | ■                                      | ■                      | ■                                 | ■                                      | ■                                      | -16                              |

| **RANPS**           |                           |                       |                       |                                        |                        |                                   |                                        |                                        |                                  |
| Migrate to State Ownership | ■                       | ■                     | ■                     | ■                                      | ■                      | ■                                 | ■                                      | ■                                      | -9                               |
| Migrate to Local Ownership | ■                       | ■                     | ■                     | ■                                      | ■                      | ■                                 | ■                                      | ■                                      | 8                                |
| Maintain 3rd Party Public Entity Ownership | ■                       | ■                     | ■                     | ■                                      | ■                      | ■                                 | ■                                      | ■                                      | 13                               |
| Migrate to Privatization | ■                       | ■                     | ■                     | ■                                      | ■                      | ■                                 | ■                                      | ■                                      | -21                              |
# Governance Screening Analysis - Conclusions

<table>
<thead>
<tr>
<th>Ownership Type</th>
<th>Score: (-24) and 5</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Ownership</td>
<td></td>
<td>Wide variance influenced by the baseline ownership.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ownership Type</th>
<th>Score: 0 and 19</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Ownership</td>
<td></td>
<td>Local Ownership saw a lot of benefits when migrating from State Ownership due to results of financial analysis.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ownership Type</th>
<th>Score: (-2) and 13</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Party Public Entity Ownership</td>
<td></td>
<td>Unless there is already established 3rd Party Public Entity available, did not score as well as transferring to Local Ownership.</td>
</tr>
</tbody>
</table>

| Ownership Type                          | Score: (-21) and (-2) | Note                                                                 |
|----------------------------------------|                      | Untested nature in state greatly reduced its score due to difficulty in modifying NDCC to address private utility. |
Recommendations
and
Migration Considerations
Primary Migration Recommendations

Migrate to Common Local Ownership and Governance Model

Cap and Restructure Cost-Share at 65%

Implement Flexible and Affordable Local Financing
Primary Migration Recommendations (Cont.)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Migrate to Common Ownership and Governance Model:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>1.</strong></td>
<td>Traditional water supply assets owned and governed locally (customary supply, treatment, transmission, storage, distribution)</td>
</tr>
<tr>
<td><strong>2.</strong></td>
<td>Non-traditional water supply assets owned and governed by common 3rd Party state agency (biota treatment and inter-basin transfers)</td>
</tr>
<tr>
<td><strong>3.</strong></td>
<td>Migrate primary state regulatory oversight of WAWS to SWC from Industrial Commission (all systems primary oversight transitioned to SWC)</td>
</tr>
</tbody>
</table>
Primary Migration Recommendations (Cont.)

Cap and Restructure Cost-Share:

• Migrate all major water supply systems to total of 65% state cost-share at completion

• Adjust future cost-share requests through deductions or credits to achieve better equity amongst systems

• Key Items to Note:
  • Eliminate Capital Repayment structure for SWPP
  • Refinance and transfer state-backed loans for WAWS
Primary Migration Recommendations (Cont.)

Implement Flexible & Affordable Local Financing

• Cost-share reduction without flexible financing will be unaffordable for local systems

• Recommend the State expand existing revolving loan programs to allow for ease of transition to higher local cost-share

• Consistent with Federal Programs such as WIFIA, amend terms of the programs to better reflect:
  • Scale and life of the assets being financed:
    • 40-year loan terms
    • 2% interest rates

  • Multi-generational benefits:
    • Flexible debt-shaping for return of principal and interest
    • Allows projects and their user base to “grow” into cost of capital
    • Balancing cost-burden across entire repayment period
Primary Migration Benefits

By lowering state cost-share to 65%, the recommended scenario is anticipated to save the RTF nearly $350M over the next 10 years.

By providing affordable state financing for local costs and restructuring of cost-share, the recommended scenario is projected to lower the local cost of capital for all four system as compared to their current funding structure.

Migrating to the proposed governance and cost-share structure allows for greater resource deployment at both the state and local level, allowing for project acceleration and broader water project implementation state-wide.

Migrating to a more consistent state and local governance and cost-share model to balance accountability and fairness between projects.

By migrating all projects’ primary oversight to the SWC, state governance will be simplified and common for all four systems.

Third Party ownership of non-standard inter-basin water supply assets allows local systems to focus on local assets and provides efficiencies from 3rd Party agency in the management of inter-basin raw water supply.
Primary Migration Benefits (Cont.)

Lowering State Costs:

$350M
Projected RTF cost-share savings for recommended 65% cost-share alternative over baseline

Affordable Local Water Costs:

10% to 64%
Projected reduction in the annual cost of capital at completion from recommended alternative across all projects

Getting Projects Done Sooner:

10-years
Delivering critical water supply with all major projects completed in less than 10-years
Primary Migration Benefits (Cont.)

Simplifying State Governance:
State governance by common agency (DWR) removing primary ownership responsibilities

Balancing Equity Amongst Systems:
Migrating to common cost-share and governance model

Removing Extraordinary Burden:
Common oversight of inter-basin transfers by one agency (GDCD)
What does this mean to SWPP?

Primary Migration Considerations for Southwest Pipeline Project

- **Ownership Migration**: Migrate ownership from State Ownership to Local Ownership.

- **Eliminate Capital Repayment**: Eliminating Capital Repayment provides immediate local funding/financing flexibility to the project.

- **Local Share Funding Structure**: Make state financing available for all future local project costs allowing for 40-year repayment term, 2% interest rate, and debt shaping with flexible principal and interest return requirements. Estimated to save an NPV of nearly $84M over the 45-year modeled scenario.

- **Restructure Cost-Share Approach**: To achieve cost-share equity at a 65% level, adjust future cost-share applications across the next 3 biennia for SWPP to receive a restructuring deduction totaling $93M.

- **Development of a Local Authority**: Establish local governance with appropriate cross-section representation and balanced voting authority.

- **Maintain Staffing Expertise**: Provide for continuation of staffing and benefits to current SWPP staff at a local level.
What does this mean to SWPP?

Projected Annual Cost of Capital for SWPP with Scenario A (2021-2066)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Scenario A</th>
<th>% Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWPP</td>
<td>$2.00</td>
<td>$1.40</td>
<td>30%</td>
</tr>
</tbody>
</table>

SWPP Projected Annual Cost of Capital

![Graph showing projected cost over time with years 2021 to 2066]
What does this mean to NAWS?

**Ownership Migration:**
Migrate ownership from State Ownership to 3rd Party Ownership for inter-basin, raw water supply elements. All local potable supply, treatment, and transmission transferred to Local Ownership under new governance authority/board.

**Restructure Cost-Share Approach:**
Receive a restructuring deduction totaling $24M.

**Local Share Funding Structure:**
Make state financing available for all future local project costs allowing for 40-year repayment term, 2% interest rate, and debt shaping with flexible principal and interest return requirements.

**Federal ARPA Investment:**
Utilization of a one-time ARPA investment of $21M to maintain local affordability while still achieving the reduced state-cost share goal of 65%.

**Develop Governing Board:**
Opportunity to empower local representation and authority.

**Maintain Staffing Expertise:**
Provide for continuation of staffing and benefits to current NAWS staff at a 3rd Party and local level.
Projected Annual Cost of Capital for NAWS with Scenario A + ARPA (2021-2066)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Scenario A + ARPA</th>
<th>% Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAWS</td>
<td>$0.84</td>
<td>$0.76</td>
<td>10%</td>
</tr>
</tbody>
</table>

What does this mean to NAWS?
What does this mean to WAWS?

**Ownership Governance:**
Maintain existing WAWS ownership, but to achieve an equitable state regulatory oversight, migrate primary oversight from the ND Industrial Commission to the ND State Water Commission.

**Local Share Funding Structure:**
Make state financing available for all future local project costs allowing for 40-year repayment term, 2% interest rate, and debt shaping with flexible principal and interest return requirements. Migrate existing state backed loans to local financing and refinance into modified state loan program.

**Restructure Cost-Share Approach:**
Receive a restructuring credit totaling $37M adjustment to be applied to the oldest debt first to fully satisfy those loans and ensure the term of the loan did not surpass the useful life of the asset.
What does this mean to WAWS?

Projected Annual Cost of Capital for WAWS with Scenario A (2021-2066)

| Projected Annual Cost of Capital per Kgal at Project Completion (2021$) |
|-------------------------------------------------|-----------------|-----------------|
| Baseline                                       | Scenario A      | % Reduction     |
| WAWS                                           | $2.92           | $1.04           | 64%             |

Western Area Water Supply Project

[Graph showing WAWS Projected Cost of Capital over years 2021 to 2066, with projected costs for Baseline and Scenario A "65%" scenarios.]
What does this mean to RRVWSP?

Ownership Governance:
Maintain 3rd Party ownership and combined local governance for inter-basin supply, while developing future in-basin transmission assets with local ownership/governance.

Restructure Cost-Share Approach:
Receive a restructuring deduction totaling $12.8M.

Local Share Funding Structure:
Make state financing available for all future local project costs allowing for 40-year repayment term, 2% interest rate, and debt shaping with flexible principal and interest return requirements.

Federal ARPA Investment:
Utilization of a one-time ARPA investment of $149M to maintain local affordability while still achieving the reduced state-cost share goal of 65%.

Accelerated Construction Schedule:
To realize maximum cost savings and minimize indexation risks, reduce RRVWSP from current 6 biennia plan to a 3 biennia plan.
What does this mean to RRVWSP?

Projected Annual Cost of Capital for RRVWSP with Scenario A + ARPA (2021-2066)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Scenario A + ARPA</th>
<th>% Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>RRVWSP</td>
<td>$0.82</td>
<td>$0.49</td>
<td>40%</td>
</tr>
</tbody>
</table>

Red River Valley Water Supply Project
Addressing Final Comments:
Staff and Commissioner comments will be collated with responses summarized into a common form.

Major Project Stakeholder Engagement on Next Steps:
Study considers large shifts in current project funding and governance structure and further outreach and consensus are required.

2021 Legislative Direction to Study Ownership of NAWS and RRVWSP:
Work with interim committee and legislative council on relevance to address directive.

Water Topics Overview Committee Presentation Request:
Study team expected to present study results and findings to interim committee.

Strategic Investment of Federal ARPA:
ARPA investments in water will require legislative approval and further coordination is required to develop best strategy.

Further Coordination Needed with Staff and Legal on Legislative Changes to Address Migration:
If Recommendations are approved, several proposed changes to NDCC will be required. Study team willing to work with legislative counsel as requested to address study migration.
Thank you!
brent.bogar@ae2s.com
August 13, 2021

Bill Robinson, Chairman
Lower Heart Water Resource District
P.O. Box 395
Mandan, ND 58554

Dear Chairman Robinson,

The Water Commission and Department of Water Resources (DWR) received your June 22, 2021, request for a letter of commitment for the Mandan and Lower Heart Flood Risk Reduction Project (Project) – as required for the FEMA BRIC Grant application process.

The Commission and DWR are very aware that the Lower Heart Water Resource District and the City of Mandan have been working to advance this Project for several years. In fact, in October 2020, the Water Commission approved cost-share in the amount of $1.2 million to cover design costs and efforts related to acquisition of a FEMA Conditional Letter of Map Revision (CLOMR).

The Mandan and Lower Heart Flood Risk Reduction Project continues to be a high priority for the state and was specifically identified in the Water Commission’s 2021 Water Development Plan as a high priority. Furthermore, per the Water Commission’s Project Funding Policy, Procedure, and General Requirements, the Mandan and Lower Heart Flood Risk Reduction Project would be eligible for up to 50 percent of non-federal eligible costs. Having said that, Commission approvals are always subject to the availability of funds, and compliance with applicable state and federal requirements.

In closing, the State Water Commission and Department of Water Resources affirm our ongoing commitment to the continued support of your project. And we wish you success in your bid to acquire federal funding through FEMA’s BRIC Grant process.

Sincerely,

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

AT:pf/2131