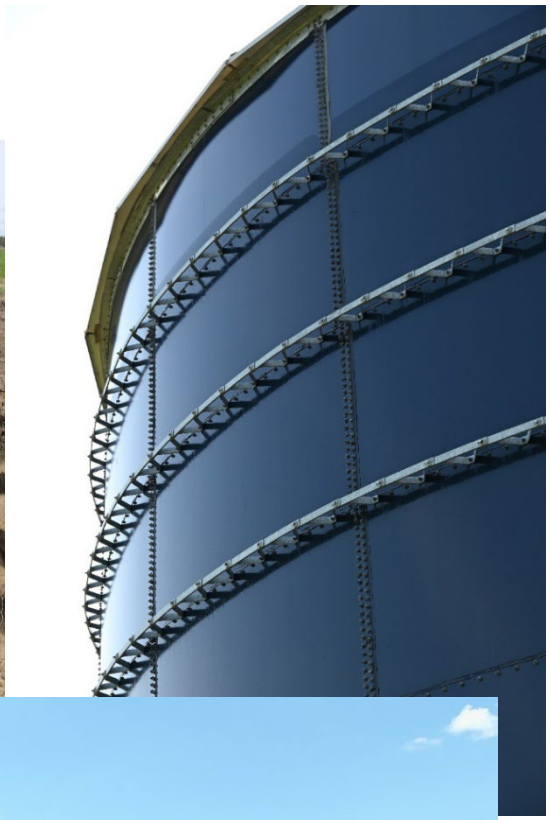

North Dakota State Water Commission

Regional Water Systems Governance and Finance Study

Final Observations and Considerations Report

May 29, 2026

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Glossary of Acronyms

AWWA – American Water Works Association
BND – Bank of North Dakota
CMMS – Computerized Maintenance Management System
CPI – Consumer Price Index
DSCR – Debt Service Coverage Ratio
DWR – Department of Water Resources
EPA – United States Environmental Protection Agency
GDCD – Garrison Diversion Conservancy District
KPI – Key Performance Indicator
LAWA – Lake Agassiz Water Authority
MR&I – Municipal, Rural, and Industrial federal funding program
NAWS – Northwest Area Water Supply
O&M – Operations & Maintenance
REM – Replacement & Extraordinary Maintenance
RRVWSP – Red River Valley Water Supply Project
RTF – Resources Trust Fund
SWA – Southwest Water Authority
SWC – State Water Commission
SWOC – Strengths, Weaknesses, Opportunities, and Challenges
SWPP – Southwest Pipeline Project
USACE – U.S. Army Corps of Engineers
WIRLF – Water Infrastructure Revolving Loan Fund

Executive Summary

Study Background and Scope

Regional water systems are vital to the public health, drought resilience, and economic development of the State of North Dakota (North Dakota or State). The State has made significant investments in regional water system development and is committed to supporting their effectiveness and sustainability. To pursue this commitment and to satisfy Section 21 of House Bill 1020 (2025), this study analyzes the current governance and financing approaches of three regional water systems in North Dakota – the Southwest Pipeline Project (SWPP), Northwest Area Water Supply Project (NAWS), and the Red River Valley Water Supply Project (RRVWSP) – and provides recommended options to strengthen their long-term governance and finances.

Approach, Processes, and Procedures

This study was conducted utilizing a three-phased approach as detailed below:

> **Phase 1**: **Discovery and Data Collection** – during Phase 1, the team conducted desktop research, interviewed 33 system stakeholders, and reviewed over 150 governance, regulatory, legislative, and legal documents to gather information on the history and current status of the three systems.
>
> **Phase 2: Governance and Finance Analysis** – during Phase 2, the team analyzed the current governance and financing approaches of each system to identify key strengths, weaknesses, opportunities, and challenges.
>
> **Phase 3: Options and Alternative Model Development** – during Phase 3, the team identified three recommended options for improving each system's governance and financing, assessed each option against a set of evaluation criteria, considered benefits and tradeoffs, and outlined implementation roadmaps.

The underlying goals throughout these three phases were to:

- Surface key information,
- Engage important stakeholders,
- Conduct independent and data-driven analysis, and
- Generate actionable and impactful recommended options for improving the governance and finance of SWPP, NAWS, and RRVWSP.

Additionally, the project study team engaged regularly with Department of Water Resources (DWR) staff to confirm that understanding and insights aligned with realities on the ground. The study team also provided formal project updates to the State Water Commission (SWC) and the State's Interim Legislative Water Topics Overview Committee.

Evaluation Criteria

The study developed and utilized nine evaluation criteria (in **Figure 1**) (the Evaluation Criteria) that focus on the critical components of good water system governance and financing. These Evaluation Criteria are customized to fit North Dakota's requirements while utilizing leading practices such as the United States Environmental Protection Agency's (EPA) effective utility

management attributes, American Water Works Association's (AWWA) utility benchmarking system, and the Baldridge Institute's organizational excellence framework. This framework was used to assess the current model for governance and finance for each of the systems and the impact of potential options to improve or replace those models.

Recommended Options for Systems Improvements

SWPP, NAWS, and RRVWSP are each unique in their scope, purpose, timing, and funding approach and, as a result, this study does not pursue a comparative analysis of the three projects but rather focuses on how to improve the governance and financing of each system on an individual basis. **Table 1** summarizes each system's current key governance and finance challenges and the potential options to improve or replace those models.

Figure 1: Introduction to Evaluation Criteria

Evaluation Criteria
1. Alignment of Risk Burden with Decision-Making Authority
2. Effectiveness of Current Governance Structure and Authority
3. Level of Stakeholder Representation, Transparency, and Public Accountability
4. Alignment of Structure, Capacity and Capabilities with Stated Policy, Strategy and Goals
5. Feasibility and Relative Impact of Implementing Recommendations
6. Efficient Use of State and Local Resources and Availability of Alternatives
7. Long Term Affordability for Stakeholders
8. Structured to Address Future Risks and Facilitate Sustainability
9. Ability to Attract Federal, State and Local Investment

Each of the recommended options identified in the study has associated benefits, costs, and tradeoffs (discussed more in depth in the detailed analysis), which must be weighed by State leadership in determining the best path forward for these water systems. By identifying the State's priorities and taking appropriate and relevant action, these three systems can be positioned to efficiently utilize the State's resources and improve the health and economic opportunity of North Dakotans for decades to come.

Table 1: Executive Summary Table

	Southwest Pipeline Project	Northwest Area Water Supply Project	Red River Valley Water Supply Project
System Background	• Wholesale and retail water supply system in southwest North Dakota • Owned by the State • Day-to-day management, operations, and maintenance (O&M) by the Southwest Water Authority (SWA) • 100% upfront construction funding from State with perpetual capital repayment funded from user fees	• Wholesale water supply system in northern North Dakota (in final construction) • Owned and operated by the State • Local interests represented by NAWS Authority • 65% State / 35% Local Cost-share (funded with 1% sales tax in Minot)	• Drought mitigation project to deliver supplemental water from McClusky Canal to Red River Valley • Pipeline owned and operated (when complete) by Garrison Diversion Conservancy District • Downstream distribution to be managed by Lake Agassiz Water Authority •75% State/ 25% Local Cost-share
Key Challenges	• Limited formal local control over buildout decisions • Potential incentive mismatch in buildout decisions due to no upfront local investment • Replacement and Extraordinary Maintenance (REM) fund reserves may not be sufficient • Indefinite capital repayment obligations limit the ability to reinvest those funds back into project if ownership is transferred • Lack of a clear and strategic long-term buildout and financial plan	• Lack of definition of authority and role for NAWS Authority to play in decision-making processes • NAWS Authority currently has no staff to support its operations • Communities in the NAWS service area pay different water rates • Some communities in the NAWS service area must remain rural water customers • Long-term financial strategy and plan not yet developed • No clear key performance indicators (KPIs) for tracking cost effectiveness and O&M	• Significant disagreements and lack of trust between GDCD and LAWA • Decision-making authority not well-aligned with risk • Scope, roles, and responsibilities are not enforced in line with the Cooperation Agreement • Critical elements of project planning and structure still to be developed • Long-term financial strategy and business plan not yet defined
Option 1	Keep State ownership and O&M by SWA; formalize a collaborative short- and long-term planning process	Keep State ownership and O&M; formalize and strengthen Authority consultation, strategy, staffing, and performance tracking	Maintain the current governance structure with improvements to address the weaknesses of the current model and reduce conflict, including increased informal engagement and mediation by DWR
Option 2	Keep State ownership and O&M by SWA; use capital repayment to backstop long-term financing	Keep existing structure through construction; build NAWS Authority capacity to assume O&M after completion	Integrate SWC into a formal oversight and leadership role for the project
Option 3	Transfer ownership to SWA; keep capital repayment in-system and use it to backstop long-term financing	Keep existing structure through substantial completion; outsource O&M with oversight performed by DWR and supported by NAWS Authority	Transfer ownership and operational authority of the project to SWC

Introduction to Study

Study Background and Scope

North Dakota has made significant investments in the development of regional water systems that underpin community well-being, strengthen the State's ability to withstand drought, and help sustain economic activity. The State is focused on ensuring these systems can remain effective and sustainable over time. To advance this commitment, North Dakota's 69th Legislative Assembly passed Section 21 of House Bill 1020 (HB 1020),[1] which directed SWC to study the long-term governance and finance models of three major regional water supply systems in the State: SWPP, NAWS, and RRVWSP, along with the key operational and organizational factors that shape how each system functions.

In furtherance of this mandate, SWC and DWR sought out an independent and objective vendor to analyze the current governance and finance approaches of SWPP, NAWS, and RRVWSP and provide recommended options to strengthen the long-term governance and finance of the three systems. This study report is intended to satisfy the requirements of Section 21 of HB 1020.

Having an effective governance and finance approach is essential for North Dakota's regional water systems. Effective governance clarifies:

- Who owns assets,
- Who makes decisions, and
- Who is accountable for performance, risk, and long-term outcomes.

Additionally, effective financing:

- Enables stable, transparent funding that aligns costs with benefits,
- Supports affordability for users, and
- Sustains operations, maintenance, and future capital needs, especially as conditions shift with drought, growth, and regulatory requirements.

Together, effective governance and financing improve reliability, cost-effectiveness, and public trust, helping the State maximize the impact of its limited water funding.

SWPP, NAWS, and RRVWSP have been developed with different objectives, circumstances and funding models, creating a variety of approaches to ownership, decision rights, cost-share, and long-term fiscal sustainability. Given the unique characteristics of each system, this study seeks to identify opportunities to strengthen the governance and finance of each individual system within its own context to enable each system to effectively and efficiently serve the needs of its users, steward State resources, engage stakeholders, make informed decisions, and drive its

[1] Section 21 of HB 1020 (2025) states: "During the 2025-26 interim, the state water commission shall study the long-term governance and finance models of select regional water systems in the state. The study must include the operational and organizational aspects of the southwest pipeline project, northwest area water supply project, and Red River valley water supply project. The state water commission is not subject to procurement requirements under chapter 54-44 for the purpose of contracting with a consultant for this study and may contract for the study only with an entity that does not receive direct or indirect benefits from any regional, municipal, or rural water system within the state. Funding for the study is included in the appropriation in the discretionary funding line item in section 1 of this Act. The state water commission shall provide a draft report to the legislative management by March 31, 2026, regarding the results of and any recommendations from the regional water systems governance and finance study."

long-term sustainability. To identify those opportunities, the study includes an assessment of the strengths, weaknesses, opportunities, and challenges of the current model for governance and financing of each of the three systems, opportunities for improving the existing models, and potential alternative models, including benefits and tradeoffs, and implementation roadmaps for each option.

The study has generated actionable insights for impactful decision-making that can maximize the benefits of the three regional water systems for the State for decades to come.

Water in North Dakota

Statewide water governance and financing is driven by two bodies in North Dakota – SWC and DWR. SWC functions to promote water resource development throughout the state and reviews requests for water projects seeking financial assistance. DWR has the authority to investigate, plan, construct, and develop water related projects. DWR also functions as a mechanism to financially support these water projects throughout North Dakota.

SWC is chaired by the Governor and made up of the Commissioner of Agriculture and eight Governor-appointed members, each serving six-year terms and representing statewide water basins and interests. DWR is headed by its Director, who is a member of the Governor's cabinet and provides overall leadership and decision-making.

North Dakota's water supply story is shaped by extremes of recurring drought cycles that affect communities, agriculture, and infrastructure across the entire State. Major historical droughts include the Dust Bowl era and the 1988 drought, which drove agricultural losses exceeding $1B. More recently, the 2020–2021 Missouri River Basin drought contributed to multibillion dollar losses across water resources, ecosystems, and agricultural systems.

North Dakota's water supply challenges are both quantity related and quality related. The Missouri River carries about 96% of the State's river and stream flow annually and serves as the main source for major water supply projects across the state. From a quantity perspective, reliance on this key supply feature magnifies the impacts of droughts on residents and businesses. From a quality perspective, groundwater has often failed to meet secondary drinking water standards. For example, communities across Northwest North Dakota experience significantly elevated total dissolved solids, including iron, manganese, sodium, sulfate, and other contaminants.

To reduce vulnerability to local groundwater limitations and variable surface-water conditions, North Dakota has built and expanded regional and rural water systems that treat and deliver water over long distances to communities, farms, and businesses. These systems are critical where local sources are insufficient or of poor quality. In addition to the financial assistance from the State, these systems are supported by technical, managerial, and financial assistance from entities such as the North Dakota Rural Water Systems Association. Some of the largest-scale initiatives include:

- The Southwest Pipeline Project, which delivers Missouri River water to tens of thousands across communities and rural connections in southwest North Dakota,
- The Northwest Area Water Supply Project, a wholesale water system designed to alleviate quality and quantity challenges in north central North Dakota, and

- The Red River Valley Water Supply Project, a pipeline in development to strengthen drought resilience in central and eastern North Dakota by delivering Missouri River water from the McClusky Canal after treatment to the Sheyenne/Red River system.

These investments intersect with major water-using sectors such as agriculture, where water is used to support higher-value and more consistent production, and energy, which uses water for electricity production and hydraulic fracturing.

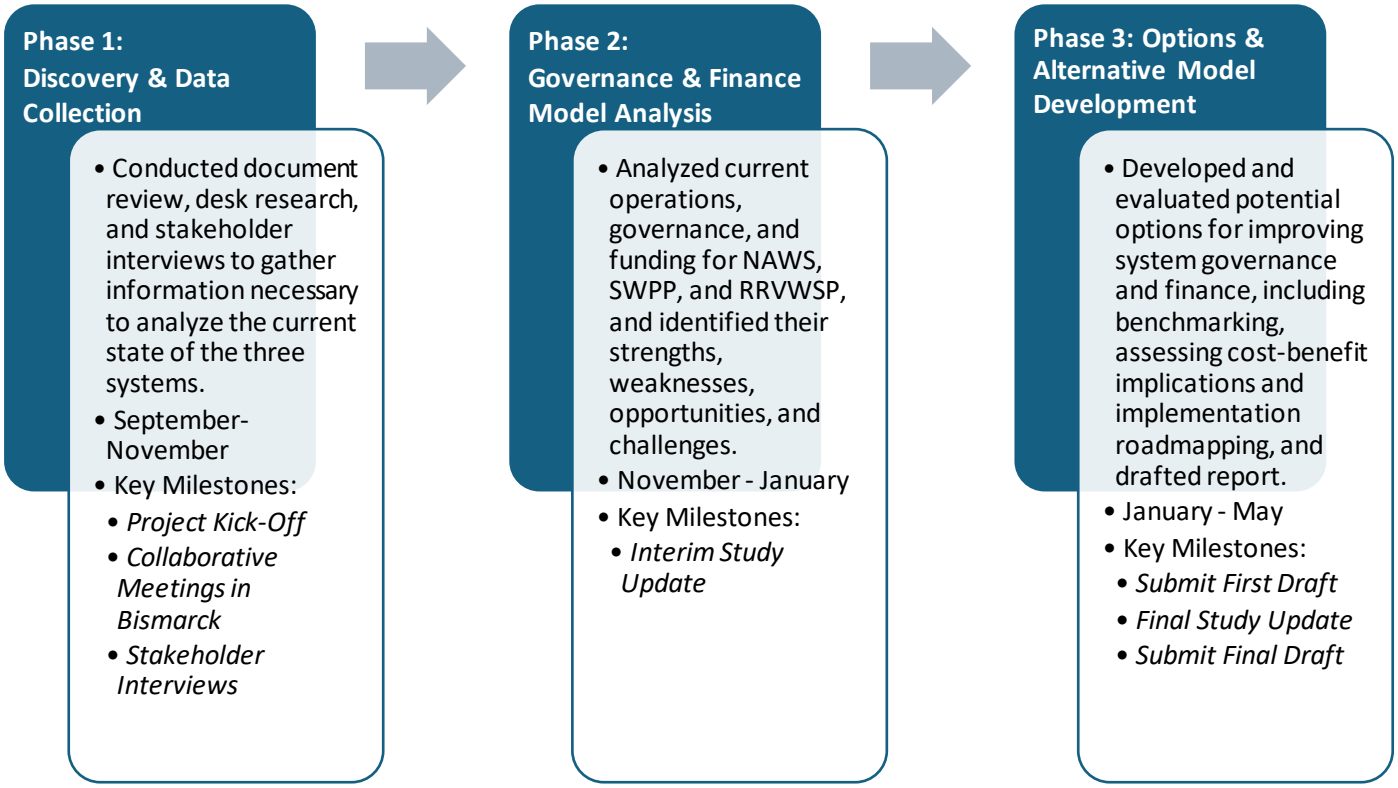
North Dakota's oil resources have played a critical role in the development of the State's water infrastructure. In North Dakota, 20.5% of oil extraction tax revenue is allocated to the Resources Trust Fund (RTF), which serves as the primary state funding source for water development projects. RTF funds and certain federal funds are legislatively appropriated to DWR and allocated towards SWC-approved projects, usually alongside local cost-sharing requirements and sometimes federal matching funds. With oil extraction tax revenue projected to decline, there is a strong likelihood that the demand for RTF funding for water infrastructure projects will exceed supply over the next decade. Large regional water projects like SWPP, NAWS, and RRVWSP represent a large portion of the State water funding from the RTF, making it important that funding for the regional water systems is used efficiently and cost-effectively.

Analysis Approach and Evaluation

Approach, Processes, and Procedures

This study was conducted utilizing a three-phased approach (see **Figure 2**) that was designed to surface key information, engage important stakeholders, conduct independent and data-driven analysis, and generate actionable and impactful recommended options for improving the governance and finance of SWPP, NAWS, and RRVWSP. Throughout these three phases, the team engaged regularly with DWR staff to confirm the understanding and insights aligned with realities on the ground and provided formal project updates to SWC and the Interim Legislative Water Topics Overview Committee at multiple phases of the project. The three-phased approach is described more fully below:

Figure 2: Multi-Phase Analysis Approach



Phase 1: The study engaged in extensive discovery and data collection to understand the history and current state of each system, its governance, and its financing mechanisms. This included gathering and analyzing over 150 legal, legislative, financial, and governance documents and conducting extensive desktop research on the three systems and similar regional water systems in other states. To align research and analysis with the current circumstances of the systems, the team engaged with a wide selection of relevant stakeholders, including interviewing 33 board members and leadership staff of all of the key organizations engaged with the governance of the three regional water systems, including SWC, DWR, Southwest Water Authority (SWA), Northwest Area Water Supply Authority (NAWS Authority), Garrison Diversion Conservancy District (GDCD), and Lake Agassiz Water Authority (LAWA).

Phase 2: Insights from document review, research, and stakeholder interviews were used to analyze the governance and financing mechanisms of the three systems. The team created the Evaluation Criteria (described more fully in **Table 2**) drawing on leading practices in governance and finance of water systems. The Evaluation Criteria were then used to conduct an analysis of the strengths, weaknesses, opportunities, and challenges (SWOC Analysis) of the governance and financing structures of each of the three systems.

Phase 3: The study focused on developing potential options for addressing the weaknesses and challenges of the governance and financing of the three systems identified in Phase 2, including enhancements to the current model and potential alternative models and approaches to strengthen the three systems. These efforts included identifying peer water systems and collecting leading practices for use in North Dakota; identifying performance metrics to track efficacy of improvements to system governance and financing; assessing the cost-benefit implications of potential models; identifying potential legal or institutional hurdles for improvements; and developing an implementation roadmap for each identified option. Phase 3 culminated in the development of this report, which provides observations, considerations, and options for decision-makers to evaluate the best path forward for each of the three systems.

Stakeholder Engagement

A critical component of the data collection and analysis was direct engagement with leadership and staff of the various State and regional authorities involved in planning, operating, and managing the SWPP, NAWS, and RRVWSP projects. The study team reached out to leadership and staff of each authority and requested the opportunity to interview key stakeholders about their unique perspectives. Based on suggestions provided by the authorities and DWR staff, the study team conducted 33 interviews with leadership, staff, and board members of SWA, NAWS Authority, GDCD, and LAWA, as well as five of nine SWC Commissioners and numerous DWR staff. These conversations shaped the background context and understanding of key priorities, challenges, and opportunities faced by each system. These stakeholders provided unique insight into operational difficulties, structural headwinds, and hurdles to good governance that were not readily apparent from the desk review and research.

Evaluation Criteria

To support a multi-dimensional assessment and evaluation of the current status of the governance and financing of the three regional water systems and potential improvements and alternative models for those systems, the study developed and utilized nine Evaluation Criteria that focus on the critical components of good water system governance and financing (described in **Table 2**). The Evaluation Criteria were developed utilizing leading practices in water systems governance, including frameworks such as EPA's effective utility management attributes, AWWA’s utility benchmarking system, and the Baldridge Institute's organizational excellence framework. While qualitative in nature, the Evaluation Criteria guided the identification of strengths and weaknesses of governance and finance models, as well as the benefits and tradeoffs of improvements and alternative models.

Table 2: Evaluation Criteria Framework

Evaluation Criteria	Dimensions/Components
Alignment of Risk Burden with Decision-Making Authority	• Authority and decision-making structures • Responsibility for future funding requirements, including future Operations and Maintenance • Alignment of risk with decision authority (operational, financial, and reputational risks might require different alignments)
Effectiveness of Current Governance Structure and Authority	• Speed and efficiency of decision-making • Clearly documented roles and responsibilities (board, management, staff) • Clear decision-making processes and parameters • Strong conflict resolution infrastructure
Level of Stakeholder Representation, Transparency, and Public Accountability	• Representation diversity (geographic, demographic, sectoral) • Formal disclosure mechanisms, frequency of public disclosure documents/events • Accessibility of board decisions and meeting minutes, transparency of information • Accessibility of project financing decisions and meeting minutes through expected channels • Regularity and openness of meetings • Ethics and conflicts of interest policies
Alignment of Structure, Capacity, and Capabilities with Stated Policy, Strategy, and Goals	• Documented strategy/mission/vision • Regular action plans in line with strategy/mission • Mechanisms for long term planning • Adaptation plan/strategy • Use of leading practices or management models • Equitable stakeholder representation • Reliable service to customers
Feasibility and Relative Impact of Implementing Recommendations	• Level of effort required to change to new structure or model • Impact of change relative to level of effort • Legal viability, potential for legal challenges costing time and money • Availability/viability of alternative models • Governance/financial benefits
Efficient Use of State and Local Resources and Availability of Alternatives	• Efficient use of State and local capital • Analytics and metrics to track performance of capital, construction, and operations • Proactive risk forecasting and mitigation
Long Term Affordability for Stakeholders	• Clear and consistent rate structure • Proactive rate change and long-term planning communication to rate payers • Cost-Share designed for long term sustainability • Appropriate balance of current circumstances and potential future emergencies
Structured to Address Future Risks and Facilitate Sustainability	• Proactive focus on risk and sustainability • Invest in mitigating impacts of future risks • Long term strategy and planning • Flexibility to adjust to new challenges
Ability to Attract Federal, State, and Local Investment	• Financing-friendly ownership and governance structures • Willingness/ability of management to seek additional partnerships and collaborations

Important Assumptions and Limitations to Study

While this study is intended to be a robust review and analysis of the governance and finance models of SWPP, NAWS, and RRVWSP, there are some important assumptions and limitations to the scope of this study and the related analysis that should be noted, including:

- The documents reviewed only included those provided by DWR staff and stakeholders, as well as independent research, listed in the attached bibliography;
- The study team only interviewed those stakeholders who were chosen by the relevant organizations and did not include any customers of the systems;
- The study focuses on the governance and finance approach for each of the systems based on the current purpose and scope for the project and any deviations from or expansions of that purpose and scope may require additional study and analysis (e.g., branch pipelines for RRVWSP);
- Water rights issues that extend beyond the scope of the three systems (e.g., water rights at Baldhill Dam and Lake Ashtabula) were not within the scope of this study and were not specifically considered nor addressed in the analysis; and
- Each of SWPP, NAWS, and RRVWSP are unique in their scope, purpose, timing, and funding approach and as a result, this study does not do a comparative analysis of the three systems. Rather, it focuses on how to improve the governance and finance of each of the three individual systems.

Regional Water Systems Detailed Analysis

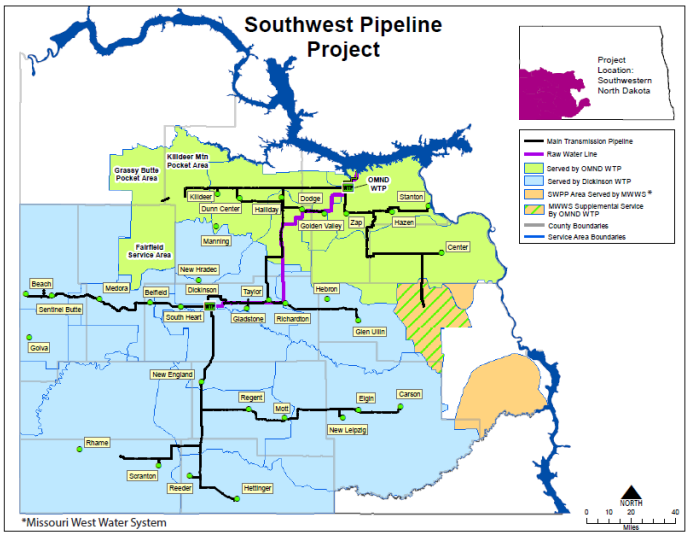
This section of the Study provides a detailed assessment of each of the three regional water systems, including its history, status, current governance, and finance structures, a SWOC Analysis, opportunities to improve the current model, and alternative models to strengthen the governance and finance of the system. While some weaknesses cut across all three systems (see Common System Governance Enhancement Opportunities and Common System Finance Enhancement Opportunities sections below), the analysis and options are tailored to the specific regional water system being addressed.

Southwest Pipeline Project

Project Development History and Current Status

SWPP is a regional water supply initiative intended to address chronic water supply constraints in southwestern North Dakota by developing a pipeline transmission and retail delivery system to supply water for domestic, rural, industrial, and municipal uses. Construction of the system began in 1986, and the project's scope broadened in 1989 to integrate rural water distribution into the development approach. Today, SWPP is a State-owned system with over 5,200 miles of pipelines that serve more than 58,000 customers across 33 communities and approximately 7,700 rural service locations. The project provides over two billion gallons of treated water to its customers annually.

Figure 3: SWPP Map



SWPP currently has four primary areas of focus beyond servicing its current customer base:

1. There are roughly 1,700 customers waiting for service, and SWA considers it a top priority to expand the system to connect these potential customers.
2. The Southwest Water Treatment Plant (SWTP) is currently being expanded to grow capacity from 6 million gallons per day (MGD) capacity to an ultimate 18 MGD, with construction expected to be completed in 2027. With funding secured for the SWTP expansion, successful completion of this project will provide reliable water treatment capacity for SWPP.
3. SWPP has identified microbiologically influenced corrosion (MIC) as a driver of accelerated internal deterioration in certain metallic pipeline segments. MIC creates structural integrity risk and is forcing the program to address key uncertainties such as the true extent and pace of MIC across the pipeline network, optimization of the replacement through improved inspection, condition assessment and prioritization, and

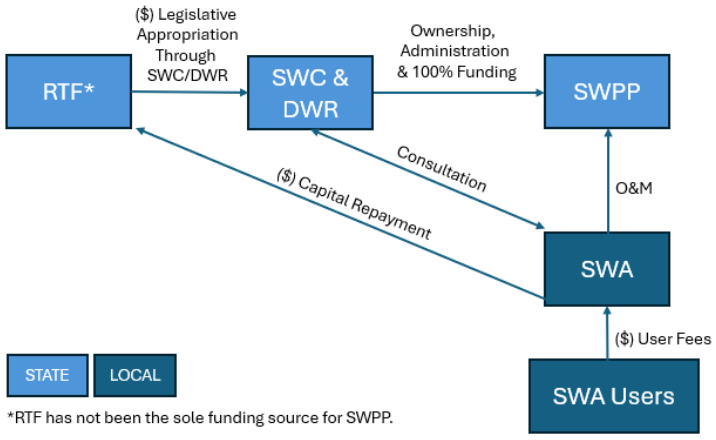
identification of additional segments due to constructability constraints and inflationary pressures.

4. A supplementary raw water intake for SWPP has been in the plans since 2012. With three failed drilling attempts and extended time lost due to the failures, successful completion of the supplementary raw water intake is critical for the project.

Current Governance and Financing Structure

SWPP is a State-owned project administered and developed by SWC and DWR. The project is operated and maintained by SWA. As owner, SWC and DWR are responsible for managing capital construction and investment for SWPP. Instead of a traditional cost-share approach used by other systems, the State funds 100% of the upfront costs of SWPP capital construction in exchange for the perpetual stream of capital repayment, which is collected by SWA as part of user fees (adjusted annually using the Consumer Price Index (CPI) as noted in the agreement that transferred management and operations and maintenance (O&M) to SWA) and repaid into the RTF. Capital repayments currently amount to approximately $7M per year and will continue indefinitely without regard to any target cost-share percentage. SWA reports that customers have repaid over $109M in capital repayment through 2025.

Figure 4: SWPP Current Structure



SWA has been responsible for the day-to-day management, operations, and maintenance of SWPP since 1996 under a contract with SWC. SWA, a political subdivision established in 1991, is governed by a 15-member Board of Directors representing 12 counties in southwest North Dakota and the cities of Dickinson and Mandan. SWA employs a full-time Manager/CEO who leads SWA's customer-facing administration, and O&M of the system. When it comes to overall system stewardship, SWA supports the State in ongoing development, planning, and preparing biennium funding requests. SWA is also responsible for customer administrative practices such as user fee collection. This governance split effectively separates statewide program stewardship (State ownership and administration) from regionally managed operations and maintenance (SWA as the operating authority).

SWA collects user fees from its customers based on water usage that fall into three broad types and purposes. First, the bulk of the user fees are base water use fees that fund regular expenses such as salaries, operating and regular maintenance costs, and administrative overhead. Second, SWA collects a formula-based capital repayment fee that is paid back to the State in the form of perpetual capital repayment, adjusted annually according to increases in CPI. Third, user fees contribute to the growth of a fund established for replacement and extraordinary maintenance (REM) to enable at least portions of future large-scale capital investment to maintain the system.

In support of continuing capital needs, SWPP's 2023–2025 biennium request totaled $131.6M across major initiatives (treatment expansion, transmission improvements, hydraulic improvements, and supplementary intake pump station) with $130M appropriated by the Legislature. In the 2025-2027 biennium, the request totaled $150M with $101M appropriated by the Legislature. The request and appropriation illustrate ongoing reliance on State capital appropriations alongside fee-based repayment and reserves.

Key Governance and Financing Challenges

Several critical governance and financing challenges have emerged from the SWOC Analysis for SWPP, which is summarized in **Table 3**. SWPP's primary governance challenge arises around decision-making related to the control and prioritization of system expansion and infrastructure improvements. With over 1,700 potential customers remaining on the waitlist there is significant need for continued capital investment, but the cost per new connection of these investments continues to escalate as the connections become more complex and remote. While DWR staff consults with SWA regarding SWPP expansion and prioritization decisions, the State, as owner of SWPP and sole upfront funder of capital investments, has the ultimate decision-making authority for the execution of system expansion.

Figure 5: SWPP Current State

Evaluation Criteria	Status
Alignment of Risk Burden with Decision Making Authority	Medium
Effectiveness of Current Governance Structure & Authority	High
Level of Stakeholder Representation, Transparency & Public Accountability	High
Alignment of Structure, Capacity & Capabilities with Stated Policy, Strategy & Goals	High
Efficient Use of State and Local Resources and Availability of Alternatives	Medium
Long Term Affordability for Stakeholders	Medium
Structured to Address Future Risks and Facilitate Sustainability	Medium
Ability to Attract Federal, State and Local Investment	Medium

To complicate matters, the capital repayment model creates potential financial misalignment between the interests of SWC and SWA in system expansion decisions. Unlike a traditional cost-share model that requires some upfront local investment (i.e., "skin in the game"), under the current capital repayment approach, the State funds all upfront investment and the capital repayment collected from the system users remains unchanged no matter the cost-effectiveness of a capital investment (subject to an agreed upon cap on the cost per new connection). Thus, the State has an interest in managing the upfront buildout costs, while SWA has limited incentive to prioritize cost-effectiveness in reaching the 1,700+ customers on the waiting list. This disconnect between interests, incentives, and decision-making has the potential to lead to increased misalignment between SWC and SWA going forward as investment decisions become more complex, particularly without shared strategic and financial plans and a strong performance monitoring system.

SWPP has been operational for many years, and the aging pipeline system will likely incur significant REM expenses in the near future. While a REM reserve fund has been established to help cover those costs as required by N.D.C.C.§ 61-24.5-21, concerns were expressed by certain stakeholders that those funds may not be sufficient over the longer term. This represents a considerable risk particularly if ownership of the project is transferred to SWA.

Finally, the capital repayment approach to cost-share has some weaknesses that are exacerbated by the current funding environment and alternative ownership models. As identified in a study of the cost-share program performed in parallel to this study, there is a projected near-term shortfall in the RTF, which will make it more challenging for the State to pay 100% of the upfront costs of the remaining SWPP buildout. In addition, if ownership is transferred to SWA without changes to the current capital repayment structure, the perpetual capital repayment obligation would limit the ability of SWA to reinvest those funds back into the project over the long-term and would likely make the economics of the project unworkable for SWA. While this does not mean that the capital repayment approach should be abandoned, it does require that options are considered to address these limitations.

Table 3: SWPP SWOC Analysis

Strengths	Weaknesses
• Well-functioning system that is generating revenue and delivering water to the customer base in southwest North Dakota • Have been able to expand initial project scope and customer base over life of the project • Clear understanding of project scope and purpose • Have capital repayment stream built into rates, which has generated the equivalent of 32% of State funding and 23% of total project funding as of December 2025 • SWA has a sufficient CEO and staff structure to support operations • O&M Agreement in place	• While DWR/SWA collaboration has been strong, limited formal local control over system buildout decisions • Potential incentive mismatch in buildout decisions due to no upfront local investment • Reserves for REM may not be sufficient • Indefinite capital repayment obligations of $7M+ per year limits the ability to reinvest those funds directly back into project • Lack of a clear and strategic long-term buildout and financial plan • No clear KPIs or performance measurements for determining cost effectiveness of O&M
Opportunities	**Challenges**
• Exploring alternative operations and delivery models to address current challenges • Additional unmet demand for water supply (1,700+ potential customers on waiting list) • Potential to restructure perpetual capital repayment into something mutually beneficial for the State and SWPP • Create mutually beneficial partnerships with private industry to advance economic development	• Significant investment still required to reach unmet customer demand and the cost per new connection is increasing • Declining expected oil extraction tax revenues invested in the RTF could make future funding less certain

Recommended Options to Improve Governance and Finance Models

After analyzing the current governance and finance model for SWPP and assessing potential solutions to the major weaknesses and challenges for the governance of the project using the Evaluation Criteria, the study has identified three potential options for improving the governance and finance model of SWPP:

- Option 1: Keep State ownership and SWA operations and implement collaborative planning process to align on buildout decision-making.
- Option 2: Keep State ownership and SWA operations and use capital repayment to backstop a long-term loan or bond issuance.
- Option 3: Transfer ownership to SWA and keep capital repayment in-system and use it to backstop a long-term loan or bond issuance.

Table 4: SWPP Peer Project Spotlight

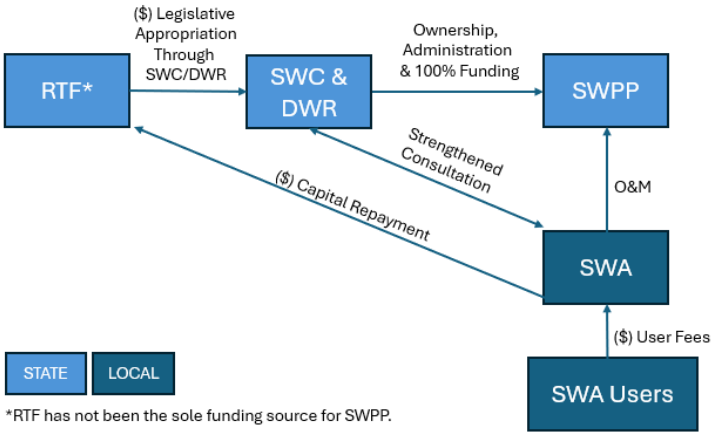
Lewis and Clark Regional Water System (SD/IA/MN) – A Similar System in Similar Context
Like SWPP, the Lewis and Clark Regional Water System (LCRWS) that spans parts of South Dakota, Iowa and Minnesota is a large, phased regional water supply system built to solve long-term water quality and quantity challenges for a mix of cities, rural users, and rural water systems. Both systems deliver supplemental water from a major river source and have sought to expand their original configurations as demand grew. SWPP can draw on a couple of practical lessons from the Lewis and Clark system. First, LCRWS shows the value of stronger member-driven capital alignment, where beneficiaries co-fund additional construction and commit early to future capacity increases, which can improve expansion discipline as SWPP pursues growth. And second, LCRWS demonstrates the benefit of diversified and flexible financing, including pursuing funding from a variety of sources to keep construction moving when outside funding pressure grows, a model SWPP could adapt for priority expansions instead of relying so heavily on a single state-centered repayment structure.

Option 1 — Keep State ownership and O&M by SWA, implement collaborative planning process to align on buildout decision-making, and deploy a performance monitoring program

This option preserves the current governance split between State ownership and SWA responsibility for O&M and focuses on removing one of the biggest points of uncertainty: how remaining buildout decisions should be made to fully incorporate local understanding of outstanding needs. This option seeks to better align SWA and SWC priorities through a more collaborative and structured approach to planning buildout and financing decisions. To decrease investment priority misalignment between SWA and the State, SWA and SWC would coordinate and formalize a collaborative short and long-term planning process that builds on the current ongoing collaboration between DWR, the SWA Board, and SWA staff to provide additional structure for SWA to communicate the local perspective of pressing buildout needs and the State to provide context and details about investment priority criteria and magnitude. The result of this planning process will be a clear long-term financial plan for remaining system buildout and REM, including a build out schedule with sequencing and prioritization (including limits and thresholds for uneconomical system

expansion). The financial model should include detailed revenue, cost, and funding projections, and plans for revenue and rates management, REM, capital improvements, reserve funds, and financial monitoring.

Figure 6: SWPP Option 1 Proposed Structure



In addition, SWC and SWA would implement a performance monitoring program using targeted metrics to inform decision-making, track progress against the financial plan, and monitor the impact of State funding. Additional details on performance monitoring, including potential metrics, can be found under "Common System Governance Enhancement Opportunities" at the end of this report.

Summary of Benefits and Tradeoffs

This option is a "low disruption" governance refinement that would tighten collaborative decision rules, align planning expectations, and improve performance tracking without changing who owns assets or who operates them. Option 1 can strengthen risk forecasting and mitigation and improve the transparency of buildout decision-making and when and how REM spending is approved.

The level of effort of implementing Option 1 is low to medium and the feasibility is high because it can largely be implemented through administrative rule, policy and procedure updates, rather than wholesale statutory restructuring.

The following summarizes the benefits and cost implications of Option 1:

Benefits: The primary benefits are improved clarity through collaborative decision-making (reducing ambiguity-driven delays), and better forecasting of capital needs. This restructuring would shift buildout decisions from negotiated case-by-case outcomes to a more structured and strategic approach within a repeatable decision-making framework. This approach also helps strengthen the alignment of risk with decision-making authority as it gives local stakeholders, which have repaid over 23% of total project cost to date and will be making capital repayments indefinitely, a greater say in buildout and REM decisions. The more collaborative long-range planning can reduce ad hoc capital requests, support steadier reserve behaviors, and modestly improve stakeholder affordability through fewer emergency-driven cost spikes, while keeping the underlying rate and cost-share framework largely intact.

Tradeoffs: The key tradeoffs are decreased financial flexibility and increased engagement requirements for the State. Working more collaboratively with SWA will take additional time and effort to find consensus in long-term planning efforts that balance both State and local priorities. State costs are modest and primarily administrative, including a one-time effort to define multi-year asset planning expectations, update governance and process documentation, and conduct stakeholder communications and administrative logistics.

SWPP Option 1 Implementation Roadmap and Responsibilities

The following table sets forth the key components, timeline, responsibilities, and legislative actions or other authorities required to implement SWPP Option 1:

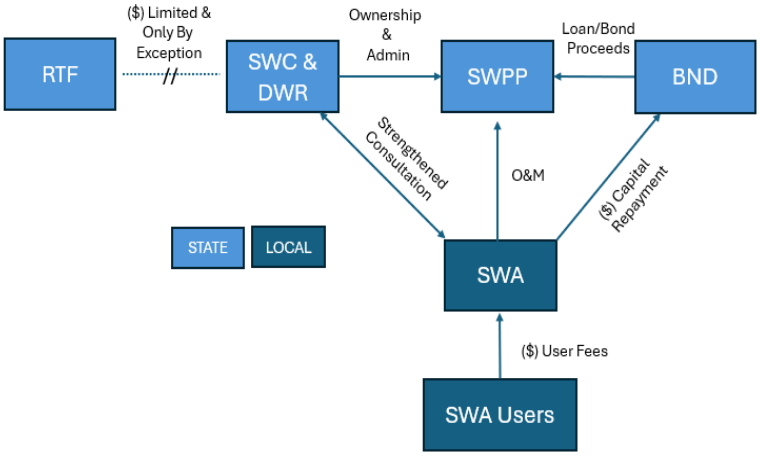
Implementation Components and Timeline	Responsible (R)	Accountable (A)	Consulted (C)	Informed (I)	Legislative/ Authority Implications
First 3 Months: Establish the joint SWC/DWR–SWA planning structure, including charter, roles, meeting cadence, and escalation protocols.	DWR, SWA Staff	SWC; SWA Board	SWC; SWA Board; Legal Counsel	SWPP Stakeholders	Can be implemented through administrative/board action, interagency protocols.
Months 4 to 6: Adopt common buildout prioritization criteria, eligibility definitions, uneconomical expansion thresholds.	DWR, SWA Staff	SWC; SWA Board	SWC, SWA Board; Legal Counsel	SWPP Stakeholders	Requires policy and procedure updates by SWC and SWA.
Months 6 to 12: Develop the integrated short and long-range buildout and financial plan and establish the performance monitoring framework and KPI definitions.	DWR; SWA Staff	SWC; SWA Board	SWC; SWA Board	Legislature; SWPP Stakeholders	Can be completed under existing authority. The main legislative implication is use of the plan to support future appropriation requests.
Annually: Conduct annual plan update and corrective-action assessment.	DWR; SWA Staff	DWR	SWC; SWA Board	SWPP Stakeholders	Can be completed under existing authority.

Option 2 — Keep State ownership and SWA operations; use capital repayment to backstop a long-term loan or bond issuance

This option keeps the current governance structure with State ownership and SWA managing O&M but changes the financing model to address short-term RTF funding challenges while strengthening the longer-term financial footing of SWPP. Under this option, the capital repayment stream (or an applicable portion of it) would be rechanneled back into SWPP and pledged to secure a long-term (i.e., 30-40 year) bond or loan, funding a significant portion of

near-term buildout. Depending on debt structure, tenor and interest rate, the loan could reduce upfront investment required from the RTF by $100-200M and cover a significant portion of the estimated SWPP funding requirements over the next 10 years. By explicitly using the capital repayment stream to support a long-term borrowing strategy, the system can accelerate capital investment and system expansion and mitigate funding risks for the project.

Figure 7: SWPP Option 2 Proposed Structure



Summary of Benefits and Tradeoffs

ant shift in how the development of SWPP is currently funded. Instead of fully-funding capital investment from the RTF, this option leverages the capital repayment stream to access debt capital that funds project development. While this approach is quite feasible, it will require a moderate to high level of effort to design, structure, and execute the loan or bond transaction and complete the necessary legislative authorizations and agreements it will require.

The following summarizes the benefits and cost implications of Option 2:

Benefits: Leveraging the capital repayment stream could reduce near-term State upfront funding pressure by $100-200M, covering a significant portion of the next decade's buildout and planned REM, which will significantly reduce SWPP's draw on the RTF and allow RTF funding to be deployed for other priority projects. This option also increases the certainty and speed of capital availability for planned projects, which directly addresses concerns shared by SWA leadership. Additional benefits include smoother funding versus waiting for RTF appropriations and potentially lower total lifecycle costs if proactive investment captures construction timing advantages. Finally, because this option does not change the capital repayment rates charged to SWPP customers, affordability remains consistent while investment accelerates.

Tradeoffs: Tradeoffs include diverting the capital repayment stream away from broader State uses for the life of the borrowing, the incurrence of an additional interest expense, and increasing administrative complexity (e.g., increased reporting and compliance requirements). State execution costs are both one-time (e.g., debt structuring, legal documentation, legislative action, and enhanced forecasting and reporting) and ongoing (e.g., debt administration and monitoring).

The main legal and institutional hurdles are debt authority and oversight considerations (terms, repayment protections, and reporting), plus ensuring SWC and SWA governance documents explicitly define cashflow priorities and decision rights in a way that remains workable under covenant-like constraints.

SWPP Option 2 Implementation Roadmap and Responsibilities

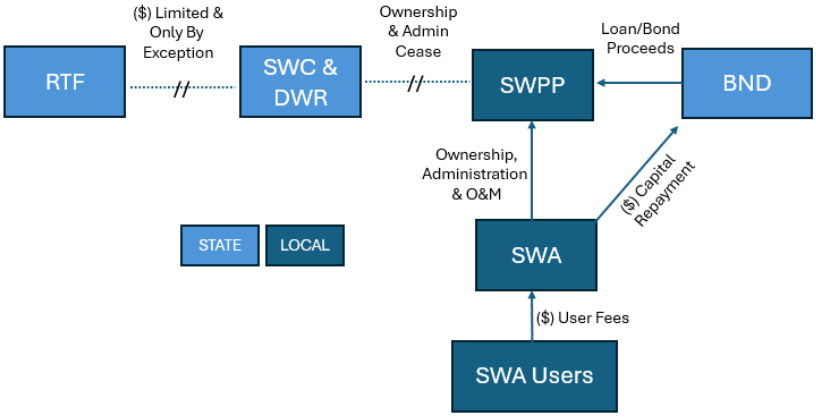
The following table sets forth the key components, timeline, responsibilities, and legislative actions or other authorities required to implement SWPP Option 2:

Implementation Components and Timeline	Responsible (R)	Accountable (A)	Consulted (C)	Informed (I)	Legislative/ Authority Implications
First 3 Months: Discussion with BND and PFA to determine financing options.	DWR	DWR	SWC; SWA Staff, SWA Board; Legal Counsel	SWPP Stakeholders	Likely can begin under existing administrative authority as a planning and diligence activity.
Months 3 to 9: Develop an integrated long-range buildout and financial plan (from Option 1).	DWR; SWA Staff	SWC, SWA Board	SWC; SWA Board	Legislature; SWPP Stakeholders	No additional authority needed to execute and will support future legislative consideration and financing approval.
Months 3 to 9: Define the proposed cashflow framework and priority of funds under a borrowing structure.	DWR; SWA Staff	SWC, SWA Board	SWC; SWA Board; BND and PFA	Legislature; SWPP Stakeholders	Century Code language allows borrowing against Capital Repayment.
Months 7 to 11: Adopt required policy changes and secure legislative authorization for the financing model.	DWR; SWA Staff; Legislature	DWR, SWA Board	SWC, SWA Board; Legal counsel	SWPP Stakeholders	This step requires legislative action including authorization to enter long-term borrowing arrangements.
Months 12 to 21: Negotiate the financing terms, assemble the approval package, and establish the ongoing administration and compliance framework.	DWR; SWA Staff	DWR; SWC	SWC; SWA Board, Legal Counsel; BND and PFA	Legislature; SWPP Stakeholders	Can proceed once enabling policy decisions and required legislative authority are in place.

Option 3 — Transfer ownership to SWA; keep capital repayment in-system and use it to backstop a long-term loan or bond issuance

This option presents the largest governance shift: SWA becomes the sole owner and operator of SWPP, assumes control of all investment and construction decisions, and uses the capital repayment stream to secure the long-term loan or bond. Following the transfer of ownership, the capital repayment fees collected by SWA would remain in SWPP and be reinvested by SWA into the development and maintenance of the system rather than transferred to the State, subject to the determination by the State and SWA that sufficient local funding has been provided for the project after taking into account the proceeds of the long-term loan or bond. This will provide a long-term stream of funding that promotes SWA's financial self-sufficiency in supporting future expansion of SWPP. By bundling ownership transfer with the updated approach to capital repayment, this option seeks to address one of the largest concerns expressed by SWA leadership - taking over ownership without long term financial certainty.

Figure 8: SWPP Option 3 Proposed Structure



Summary of Benefits and Tradeoffs

This option turns SWPP into an independent regional water system with ownership and operation managed by SWA, an authority that was created to represent the interests of local stakeholders. By consolidating ownership and operations under SWA, it better aligns the governance and decision-making for the project with the end users and enhances the accountability of SWA for system performance, long-term planning, and O&M sustainability, which are key elements of this study's Evaluation Criteria.

The level of effort of this option is high and the feasibility is medium because the transfer of State-owned infrastructure likely requires statutory authorization and detailed asset-transfer terms, due diligence, and new accountability guardrails.

The following summarizes the benefits and cost implications of Option 3:

Benefits: This option creates better alignment of incentives because, with SWA ownership, the entity making expansion decisions directly bears the long-run lifecycle, O&M, and affordability consequences, which can sharpen planning discipline, clarify accountability for performance, and potentially improve lender confidence in a single, financeable counterparty. SWA gains autonomy and the ability to move faster, but it assumes greater financial and reputational risk. Benefits to the State include shifting project management responsibility away from the State and improving governance clarity by consolidating ownership and operations. Like Option 2, borrowing against the capital repayment stream and reinvesting it in SWPP creates significantly

more certainty around funding system development and REM expenses, which addresses one of SWA's largest concerns about taking over ownership. The upfront investment required from the RTF will also be significantly reduced, enhancing its short-term funding position. It should be noted, however, that the capital repayment-backed loan will not likely cover all projected capital investments needed for SWPP to reach all potential customers, which will require SWPP to prioritize its use of funds and/or consider additional sources of funding and financing.

Tradeoffs: Given the scope and complexity of Option 3, there are some significant implementation costs. One-time State costs will be significant, including transfer legislation and contracting, intensive stakeholder management, and legal fees. While the State's direct administrative burden will decline after the transition, it should reserve a reasonable level of oversight to preserve public accountability as direct State control diminishes. For SWA, taking over ownership and management of the system development and buildout will require an expansion of both its capacity (e.g., staffing, systems, financial governance capability) and budget, ensuring they have sufficient resources to be held to a higher bar for transparency, conflict resolution, and performance reporting as owner of the water system they operate. During an anonymous survey of the SWA Board, reduced access to funding was listed as the primary cost and concern of transferring ownership to the Authority, although leveraging the capital repayment stream helps mitigate those concerns.

The primary legal and institutional hurdles are obtaining and structuring statutory authority for asset transfer, defining enforceable governance conditions that balance autonomy with public oversight, and ensuring the post-transfer model remains consistent with applicable code chapters and expectations for public accountability.

SWPP Option 3 Implementation Roadmap and Responsibilities

The following table sets forth the key components, timeline, responsibilities, and legislative actions or other authorities required to implement SWPP Option 3:

Implementation Components and Timeline	Responsible (R)	Accountable (A)	Consulted (C)	Informed (I)	Legislative/ Authority Implications
First 6 Months: Conduct a legal and operational readiness assessment for ownership transfer.	DWR; SWA Staff	SWC, SWA Board	SWC, SWA Board; Legal Counsel	Legislature; SWPP Stakeholders	No additional authority needed but should be structured to support eventual transfer legislation and formal transfer documentation.
First 6 Months: Draft the post-transfer governance and oversight framework, including the State's retained oversight rights.	DWR; SWA Staff	SWC, SWA Board	SWC, SWA Board; Legal Counsel	SWPP Stakeholders	N/A
Months 7 to 11: Secure statutory authority for asset	DWR; SWA Staff; Legislature	DWR, SWA staff	SWC, SWA Board	SWPP Stakeholders	N/A

transfer and execute the ownership transfer documentation.					
Months 12 to 24: Structure the long-term financing backed by the capital repayment stream, including State's role, if any.	SWA Staff	SWA Board; SWC	SWC; SWA Board; Legal Counsel; potential financing partners;	SWPP Stakeholders	N/A
Months 24 to 36: Implement SWA capability and internal-control upgrades needed to operate as owner.	SWA Staff	SWA Board	SWA Board; Legal Counsel	SWPP Stakeholders	Most of this can be implemented through SWA board action but some elements may need to be incorporated into transfer conditions.

Potential Additional Opportunities to Strengthen SWPP Finances

Several opportunities were already identified to strengthen the finances of SWPP in the options above, including the co-development of a long-term financial plan for remaining system buildout and REM and leveraging the capital repayment stream. In addition, under Option 3, the State could take additional action to address one of the limitations of that option. Given that SWA does not have a credit rating and if it obtains one it will likely be lower than the State's rating, the cost of borrowing against the capital repayment stream will likely be higher if ownership (and borrowing responsibility) is transferred from SWC to SWA. To address this challenge, the State could provide a guarantee to backstop the loan for SWA to allow SWA to benefit from the State's strong credit rating and reduce borrowing costs.

See the "Common System Finance Enhancement Opportunities" section at the end of this report for other actions that could be taken to improve the financial management and sustainability of SWPP and access additional sources of funding and financing for the system.

Figure 9: SWPP Impact Analysis

Evaluation Criteria	Current State	Option 1 Impact	Option 2 Impact	Option 3 Impact
Alignment of Risk Burden with Decision Making Authority	Medium	Improved	Improved	Limited Net Impact
Effectiveness of Current Governance Structure & Authority	High	Improved	Improved	Improved
Level of Stakeholder Representation, Transparency & Public Accountability	High	Limited Net Impact	Limited Net Impact	Improved
Alignment of Structure, Capacity & Capabilities with Stated Policy, Strategy & Goals	High	Improved	Improved	Improved
Feasibility to Implement/ROI of Implementing Recommendations	N/A	Feasible w/ limited ROI	Higher LOE, higher ROI	Feasible, high potential ROI
Efficient Use of State and Local Resources and Availability of Alternatives	Medium	Improved	Improved	Improved
Long Term Affordability for Stakeholders	Medium	Limited Net Impact	Limited Net Impact	Limited Net Impact
Structured to Address Future Risks and Facilitate Sustainability	Medium	Improved	Improved	Improved
Ability to Attract Federal, State and Local Investment	Medium	Limited Net Impact	Improved	Improved

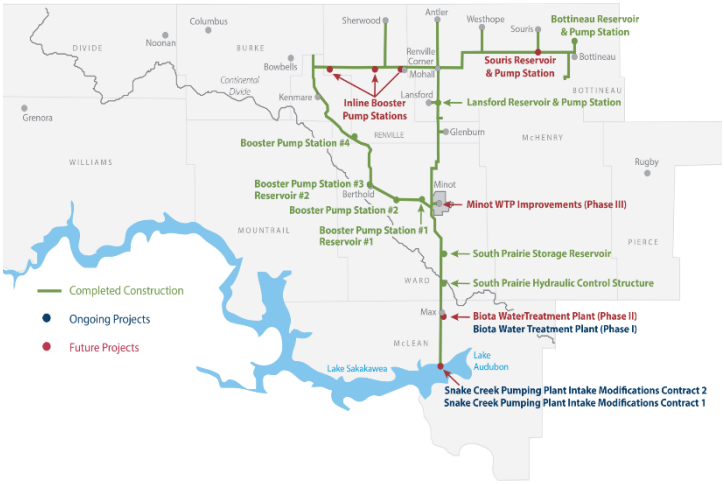
Table 5: Summary of Recommended Options for SWPP

	Option 1: Keep Current Model with Improvements	Option 2: Keep Current Governance and Leverage Capital Repayment	Option 3: SWA Ownership and Leverage Capital Repayment
Option Summary	State retains ownership of the pipeline and SWA retains operational responsibility and authority with several improvements to the current approach, including: • Establishing a collaborative short- and long-term planning process where SWC and SWA set forth a plan to address buildout and financing; • Co-developing a clear financial plan for remaining system buildout and REM, including setting limits/ thresholds for uneconomical system expansion; and • Implementing a performance monitoring program using targeted metrics to inform decision-making and track impact of State funding.	• State retains ownership of the pipeline and SWA retains operational responsibility and authority while implementing many of the improvements from Option 1. • Capital repayment will be reinvested back into SWPP by servicing a loan or bond to fund a significant portion of the required investment in the near term. • Under this approach, the capital repayment stream (or a large % thereof) will no longer go to the RTF but will be pledged as collateral to backstop a 30- to 40-year loan to cover SWPP buildout and planned REM costs. • Depending on loan structure, tenor and interest rate, the loan could reduce upfront investment required from the State by $100-200M, covering a significant portion of the buildout and planned REM over the next 10 years. • Additional investments beyond the projected amount of the loan proceeds would require RTF funding or alternative sources of capital.	• State transfers ownership of the pipeline to SWA making SWA solely responsible for the ownership, construction, operation, and maintenance of SWPP. • The Capital Repayment will be fully reinvested back into SWPP and, following transfer of ownership, will no longer go to the State. • Additional investments beyond the projected amount of capital repayment-backed loan proceeds would require further SWA borrowing, RTF funding or other alternative sources of capital.
Benefits	• State retains capital repayment stream in perpetuity; provides clarity around financial requirements and responsibility for pipeline expansion and REM; relatively easy to implement; reduces risk of unfunded REM.	• Upfront State investment in SWPP is lowered and reduces the short-term shortfall in the RTF; increased clarity; provides more certainty to SWA on availability of funding.	• SWA is fully incentivized to make efficient pipeline expansion decisions; upfront State investment in SWPP is significantly lowered and reduces the shortfall in the RTF; increased clarity; provides more certainty to SWA on availability of funding.
Tradeoffs	• State remains responsible for full upfront cost of buildout and REM; doesn't address incentives for SWA on buildout positioning.	• Capital repayment stream does not flow to RTF during loan repayment; still requires a capital outlay from the RTF (i.e., loan doesn't cover the full cost); relatively complex to implement with Bank of North Dakota (BND) or other lender involvement and a different loan structure; adds interest expense (amount dependent on terms of loan).	• Will require further expansion of capacity and budget of SWA; capital repayment stream no longer flows to RTF; will still require additional financing to complete full buildout; relatively complex to implement with BND involvement and a different loan structure.

Northwest Area Water Supply Project

Project Development History and Current Status

Figure 10: NAWS Map



The Northwest Area Water Supply project is a wholesale regional water system designed to deliver high-quality Missouri River water to local water utilities and communities to address persistent water quality and quantity challenges in north central North Dakota. The project intends to serve roughly 81,000 people across 11 contract customers in the area and provide a solution to the issues presented by reliance on local groundwater. Initially authorized under the Garrison Diversion Reformulation Act of 1986 and the Dakota Water Resources Act of 2000, SWC was given authority to construct the pipeline in 1991 by the North Dakota State Legislature. Project development began in the early 2000s with construction starting in April 2002. Numerous lawsuits filed after construction started delayed the project's progress for 17 years until a district court ruled in favor of the project in 2017. The litigation concluded in 2019, enabling construction to resume toward completion. NAWS infrastructure includes major distribution and treatment components, including 45 miles of pipeline connecting Lake Sakakawea to Minot and 242 miles of treated-water pipeline.

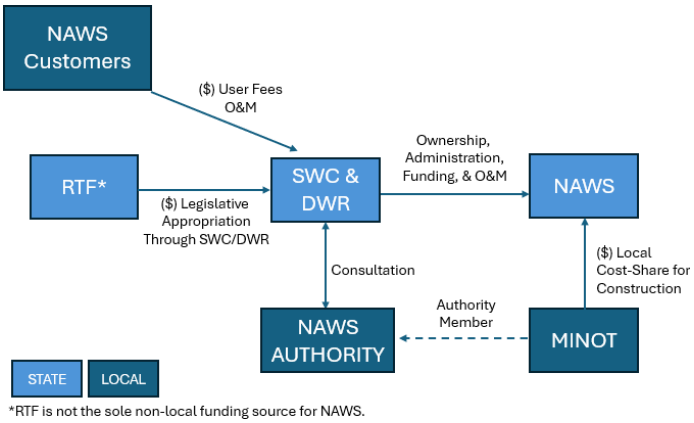
The 1991 State law that authorized the NAWS project also created the NAWS Advisory Committee. In 2023, the 68th Legislative Assembly enacted HB 1218, transitioning the long-standing NAWS Advisory Committee to the NAWS Authority, effective August 1, 2023, to align NAWS governance with other regional water systems and strengthen local oversight as the program advances toward completion. Per N.D.C.C. ch. 61-24.6, the NAWS Authority includes 11 representatives, including four representatives from the City of Minot, one representative from a city other than Minot receiving direct service from the system, one representative from the North Prairie Regional Water District, one representative from the All Seasons Water Users District, one representative from the Upper Souris Water District, one representative of SWC who resides in the Souris River basin, one non-voting representative from GDCD, and one non-voting representative from the Turtle Mountain Band of Chippewa Indians.

Today, infrastructure needed for NAWS to deliver water from the Missouri River is still under construction, but NAWS is delivering water from the Minot and Sundre aquifers to its customers as an interim solution. If progress continues as expected, NAWS will be using Missouri River water by the end of 2026. The remaining infrastructure planned for NAWS is expected to be completed by 2032.

Current Governance and Financing Structures

NAWS operates under a layered governance framework in which SWC retains the core statutory role for developing, managing, and operating the project, while NAWS Authority provides structured local input and oversight. Legal statute requires SWC to consult with NAWS Authority on key responsibilities (including matters such as accepting funds and managing the project), embedding a consultative decision model that combines centralized project accountability with local water user representation.

Figure 11: NAWS Current Structure



NAWS is financed through a multi-source structure combining federal, State, and local streams. The estimated total project cost is approximately $523.7M. The financing was originally structured as 65% federal Municipal, Rural, and Industrial (MR&I) funding and 35% local funding, but when the legal challenges stalled the project and exacerbated challenges in federal funding, the State continued to advance the project without federal funds. With the absence of revenue, the 35% local cost-share funding has been covered exclusively by Minot's 1% sales tax, totaling $104.3M, as of late 2025. Over the same time, the State provided $125.9M from the RTF and federal funding has been $184.5M. Estimates included with the 2025 Water Development plan identify approximately $109.5M in remaining investment needs, underscoring ongoing appropriations and cash-flow sensitivity as NAWS proceeds through late-stage delivery.

Figure 12: NAWS Current State

Evaluation Criteria	Status
Alignment of Risk Burden with Decision Making Authority	Medium
Effectiveness of Current Governance Structure & Authority	Medium
Level of Stakeholder Representation, Transparency & Public Accountability	Low
Alignment of Structure, Capacity & Capabilities with Stated Policy, Strategy & Goals	Low
Efficient Use of State and Local Resources and Availability of Alternatives	Medium
Long Term Affordability for Stakeholders	Medium
Structured to Address Future Risks and Facilitate Sustainability	Low
Ability to Attract Federal, State and Local Investment	Medium

Key Governance and Financing Challenges

The NAWS SWOC Analysis, which is summarized in **Table 6**, surfaced a few key governance and finance challenges to be addressed. NAWS's governance and financing challenges are largely a byproduct of the project transitioning from a drawn out, litigation-constrained capital program into a dynamic regional wholesale water system that now needs clear decision rights and processes, durable operating capacity, and a sustainable long-term funding model. NAWS Authority, which was created in its current form in August 2023 to represent the interests of local stakeholders, has limited involvement and

influence over the development and management of NAWS and therefore its role continues to be unclear. NAWS Authority also has extremely limited capacity with no staff to support the Authority operations and effectively serve as an engaged partner to SWC and DWR in the development and management of NAWS. NAWS also does not have a performance monitoring system with clear KPIs to track project development and management and the cost-effectiveness of the use of State resources over time.

The project also lacks long-term strategic and financial plans, which creates increased exposure to two structural financial risks for the project. First, NAWS has relied on City of Minot's 1% sales tax to fund the local share, creating concentration risk (a single source of funding for the local share), long-term political exposure if that revenue stream is constrained or reprioritized, and potential future conflict if that funding burden is not shared across the system. Second, non-uniform rates across communities have the potential for creating conflict within the NAWS territory, although this is largely a result of the wholesale nature of the project (i.e., the rates are set by the rural water systems who are responsible for retail delivery to some communities).

Table 6: NAWS SWOC Analysis

Strengths	Weaknesses
• Generally established pipeline footprint and construction is nearing completion • Clear understanding of project scope and purpose • Authority composition appears to proportionately reflect stakeholders based on system use	• NAWS Authority has not yet defined its scope and desired impact • Lack of definition of NAWS Authority's role to play in decision-making processes • NAWS Authority currently has no staff to manage long-term planning and operations • Long-term financial strategy and plan not yet developed • No clear KPIs or performance measurements for tracking cost effectiveness of O&M or detecting system issues before major impact
Opportunities	**Challenges**
• Exploring alternative operations and delivery models to address current challenges • Potential opportunity to collaborate with rural systems through partnership agreements	• Location of system along northern border and inter-basin water transfers create potential for cross-border conflict • Expansion is limited and construction was delayed due to lawsuits and injunctions from Manitoba Province and the State of Missouri • Long term political and financial challenges to Minot's 1% sales tax • A study of the REM fund and rate structure is needed to determine long term fund sustainability. • Declining expected oil extraction tax revenues invested in the RTF could make future funding less certain • With the ceiling on the currently authorized federal MR&I funding reached, funding for the expansion of the Biota Water Treatment Plant, which is a federal responsibility, may have to rely on upfront State funding

Recommended Options to Improve Governance and Finance Models

After analyzing the current governance and finance model for NAWS and assessing potential solutions to the identified major weaknesses and challenges of the project using the Evaluation Criteria, the Study has identified three potential options for improving the governance and

finance model of NAWS:

- Option 1: Keep State ownership and O&M; formalize and strengthen NAWS Authority consultation, strategy, staffing, and performance tracking.
- Option 2: Keep structure through substantial completion of construction; build NAWS Authority capacity to assume O&M after completion or when ready.
- Option 3: Keep structure through completion of construction; outsource O&M to third party contractor with NAWS Authority engagement.

Table 7: NAWS Peer Project Spotlight

Massachusetts Water Resources Authority (MWRA) – Lessons NAWS Can Learn from a Successful Regional Water Authority
Massachusetts Water Resources Authority (MWRA) is a wholesale water and sewage authority serving 3.1 million people and 5,500 large industrial customers across 61 communities in eastern and central Massachusetts. Established in 1984, MWRA has faced many of the same core issues NAWS is trying to solve during its path to maturity including establishing credible regional governance, achieving stable rates, building strong credit, and delivering transparent accountability at scale. MWRA successfully built both governance and engineering capacity by designing its Board of Directors and Advisory Board to be compromised of experienced experts across critical domains. MWRA has invested deeply in workforce and advisory capabilities through training, leadership development, subject-specific learning opportunities, and increased collaboration with partner organizations, and by doing so has built credibility as a borrower and operator.

Option 1 — Keep State ownership and O&M; formalize and strengthen NAWS Authority consultation, strategy, staffing, and performance tracking

Under Option 1, the State retains ownership of the NAWS project and O&M responsibilities with NAWS Authority playing a more active role as a consultative body, including the following improvements to the current approach:

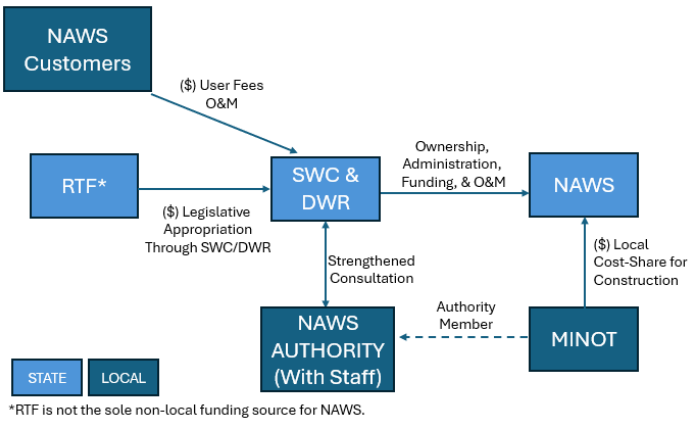
- Strengthening NAWS Authority's involvement in strategy, planning, contracting, and financing processes, and building capacity for NAWS Authority representatives to play a larger role in advising on certain decisions;
- Developing a clear vision and long-term strategic plan for NAWS Authority;
- Hiring a NAWS Authority administrative officer or general manager to coordinate NAWS Authority activities, manage board meetings and communication with DWR, and respond to administrative requirements;
- Developing a clear long-term financial model and plan for the system; and
- Implementing a performance monitoring program using targeted metrics to inform decision-making and track impact of State funding.

Summary of Benefits and Tradeoffs

This option improves governance maturity without changing the underlying statutory allocation of powers. It builds NAWS Authority's capacity and responsibility while keeping ownership and operations with the State, which helps define roles, strengthen oversight and accountability, and improve transparency and public engagement.

The level of effort of implementing Option 1 is low–medium and the feasibility is high because aside from the statutory changes needed to allow NAWS Authority to hire staff, the rest of the change is primarily organizational and procedural. By adding a clearer scope and strategy, a financial model with long-term forecasts, a full-time administrative officer or general manager, and a performance tracking framework, governance and operations could be significantly improved without shifting core statutory powers or operational responsibility.

Figure 13: NAWS Option 1 Proposed Structure



The following summarizes the benefits and tradeoffs of Option 1:

Benefits: The key benefits from this option are improved governance as well as speed and practicality of implementation. Option 1 is the fastest path to a more functional governance model. It will improve the quality of consultation with NAWS Authority, support more consistent decision-making, and advance local stakeholder representation without destabilizing current operations. Adding a staff resource for NAWS Authority both increases the capacity of NAWS Authority and provides SWC and DWR with a more engaged and proactive partner to involve in project governance. More robust financial and strategic planning and performance monitoring will allow for better forecasting, reduce reactive O&M, improve risk mitigation, and raise reliability. NAWS Authority and participating communities gain transparency, predictability, and a more meaningful voice in planning and rate discussions, with only a modest additional administrative lift.

Tradeoffs: The primary tradeoffs are modest. One-time costs for the State include performance framework design and governance process updates. Recurring costs include the cost of the NAWS Authority administrative officer or general manager, increased spending on analytics and reporting, and more structured and time-intensive consultation and reporting activities.

NAWS Option 1 Implementation Roadmap and Responsibilities

The following table sets forth the key components, timeline, responsibilities, and legislative actions or other authorities required to implement NAWS Option 1:

Implementation Components and Timeline	Responsible (R)	Accountable (A)	Consulted (C)	Informed (I)	Legislative/ Authority Implications
First 3 Months: Define the NAWS Authority operating model and specifics of consultation process.	DWR; NAWS Authority	SWC; NAWS Authority	SWC; NAWS Authority	NAWS Stakeholders	This step can be accomplished through administrative and operating action.
Months 4 to 6: Launch a NAWS Authority board capacity-building plan.	NAWS Authority; DWR	SWC; NAWS Authority	SWC; NAWS Authority	NAWS Stakeholders	This step can be accomplished through administrative and operating action.
Months 7 to 11: Secure statutory approvals for expanding NAWS Authority's capability including hiring staff.	DWR; NAWS Authority; Legislature	SWC; NAWS Authority	SWC, NAWS Authority	NAWS Stakeholders	Hiring NAWS staff will require rate payer funding and an update to the current legal framework to support independent staffing.
Months 12 to 14: Hire a full-time NAWS Authority administrative officer or general manager.	DWR; NAWS Authority	NAWS Authority	DWR; NAWS Authority	NAWS Stakeholders	N/A
Months 16 to 20: Develop a clear long-range strategic plan and collaborative financial model, including a performance monitoring program.	DWR; NAWS Authority Staff	SWC; NAWS Authority	SWC; NAWS Authority	NAWS Stakeholders	N/A
Months 20 to 24: Formalize a consultation process between NAWS Authority and SWC.	DWR; NAWS Authority Staff	SWC; NAWS Authority	DWR, SWC; NAWS Authority	NAWS Stakeholders	N/A

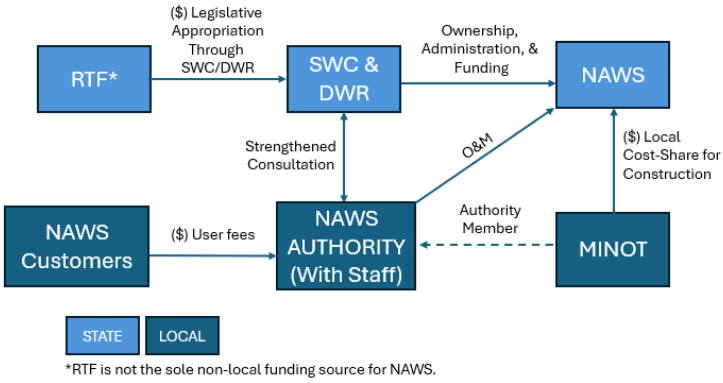
Option 2 — Keep existing structure through completion of construction; build NAWS Authority capacity to assume O&M after completion or when ready

Under Option 2, the project will retain its current governance structure through construction (including some improvements recommended in Option #1) with the goal of shifting O&M to NAWS Authority when the construction phase is complete, or shortly thereafter. NAWS Authority will continue as a consultative body with increased engagement through the construction phase. Prior to transfer of the O&M responsibility to NAWS Authority, the State and NAWS Authority will prioritize investing in building NAWS Authority capacity, including identifying and training multiple full-time employees (FTEs) to manage the O&M, with a goal of becoming an independent operator like SWA.

Summary of Benefits and Tradeoffs

This option represents a sizeable shift in how the project is currently managed with NAWS Authority taking on a substantial role in the management of the project post-construction. However, the current capacity of NAWS Authority is extremely limited, which means that significant investment of time and resources will need to be made between now and completion of construction to enable NAWS Authority to take on that role.

Figure 14: NAWS Option 2 Proposed Structure



The level of effort of this option is high and the feasibility is medium because it requires running a multi-year transition program that includes capability building, governance design, and change management, while maintaining service reliability and clear accountability during the ramp-up.

The following summarizes the benefits and tradeoffs of Option 2:

Benefits: The main upside of transitioning O&M responsibility from DWR to NAWS Authority is better long-term alignment of risk, authority, and stakeholder representation. Moving operational control and performance accountability closer to the communities and ratepayers who are impacted by O&M decisions while preserving the consultative framework with the State during the transition period can maximize resource efficiency for both parties. Long-run affordability can improve if the newly dedicated operator tightens lifecycle cost control and practices reserve discipline.

Tradeoffs: The tradeoffs presented by Option 2 are largely concentrated in the near term and in execution risk. State costs center on one-time transition planning that requires resources to help NAWS Authority build fit-for-purpose capabilities (operations, maintenance, regulatory compliance, procurement, finance, and treasury). Over the longer term, the State's direct O&M role and staffing burden can decline post-transition, but the State will still need to perform an oversight function to ensure stewardship and public accountability. Taking on this role will also require NAWS Authority to invest its own resources in its development.

The key institutional and legal hurdles are ensuring NAWS Authority's statutory powers, funding tools, and staffing model are sufficient for O&M stewardship and that the transition timeline, interim decision rights, and rate reserve responsibilities are unambiguous.

NAWS Option 2 Implementation Roadmap and Responsibilities

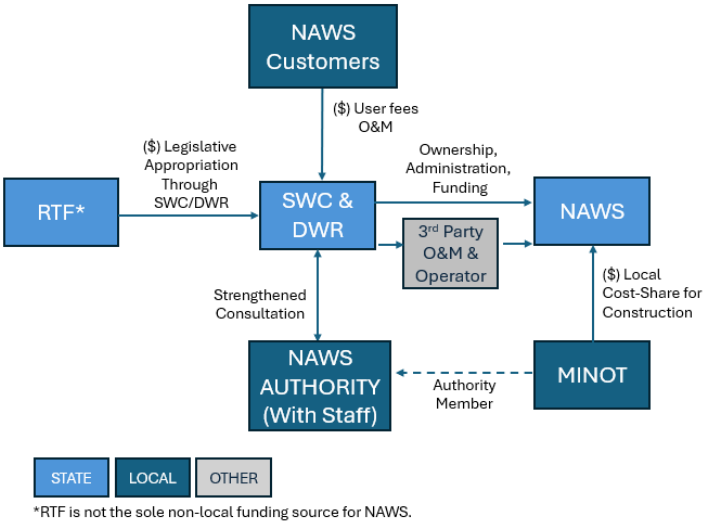
The following table sets forth the key components, timeline, responsibilities, and legislative actions or other authorities required to implement NAWS Option 2:

Implementation Components and Timeline	Responsible (R)	Accountable (A)	Consulted (C)	Informed (I)	Legislative/ Authority Implications
First 6 Months: Incorporate consultation, planning, staffing, and performance-tracking improvements to current model.	DWR; NAWS Authority	SWC; NAWS Authority	DWR, NAWS Authority	NAWS Stakeholders	This step can be accomplished through administrative and operating action.
First 6 Months: Define the target NAWS Authority operating model and oversight relationship with the State after transition.	DWR; NAWS Authority	SWC	DWR; NAWS Authority	NAWS Stakeholders	N/A
Months 7 to 11: Secure statutory approvals for expanding NAWS Authority's capability including hiring staff.	DWR; NAWS Authority; Legislature	SWC; NAWS Authority	SWC, NAWS Authority	NAWS Stakeholders	Hiring NAWS staff will require rate payer funding and an update to the current legal framework to support independent staffing.
Months 12 to 14: Hire a full-time NAWS Authority administrative officer or general manager.	DWR; NAWS Authority	NAWS Authority	DWR; NAWS Authority	NAWS Stakeholders	N/A
Months 14 to 20: Develop a multi-year staffing and capability-building plan for NAWS Authority	NAWS Authority Staff, NAWS Authority; DWR	NAWS Authority	SWC; NAWS Authority	NAWS Stakeholders	N/A
Months 20 to 26: Develop the core operating processes and procedures needed for independent O&M.	NAWS Authority Staff; DWR	NAWS Authority	SWC; contractors; consultants	NAWS Stakeholders	This may not require major statutory change, but it does have budget and implementation implications.
Months 20 to 26: Establish formal transition readiness criteria and a handoff governance process, including KPI tracking.	DWR; NAWS Authority Staff	SWC; NAWS Authority	SWC; NAWS Authority	NAWS Stakeholders	N/A
When Ready: Execute the formal transfer of O&M responsibility to NAWS Authority upon substantial completion.	DWR; NAWS Authority Staff	SWC; NAWS Authority	SWC; NAWS Authority	NAWS Stakeholders	The most significant legal and institutional hurdle is transitioning the O&M responsibility to NAWS Authority and clarify the State's residual ownership.

Option 3 — Keep existing structure through completion of construction; outsource O&M to third party contractor with NAWS Authority engagement

Option 3 retains the current governance structure through substantial completion, while building capacity within NAWS Authority to contribute more meaningfully to the consultation process (aligned with the suggested changes in Option 1). Upon substantial completion, SWC would outsource O&M to a contractor (e.g., City of Minot, which operates the largest water utility in the region, or a private sector firm) with contracting and supervising activities performed by DWR staff and significant involvement and support from the NAWS Authority FTE as appropriate. Under this option, SWC would implement a strategic performance monitoring program using targeted metrics to track the costs and benefits of outsourcing O&M versus building capacity for NAWS Authority to take over that responsibility.

Figure 15: NAWS Option 3 Proposed Structure



While it is a stand-alone option, Option 3 could also effectively serve as a bridge solution for Option 2 above if it is determined that the timeline would not allow for NAWS Authority to build sufficient capacity to manage O&M by substantial completion of construction. The agreement with the third-party contractor could also include a capacity building component for the contractor to train NAWS Authority staff and position NAWS Authority to take over O&M at the completion of the contract. An additional benefit of building capacity within NAWS Authority is potentially creating a long-term opportunity to transfer ownership of the system to NAWS Authority, similar to Option 3 for SWPP. However, based on NAWS Authority's current resource and capacity constraints, transferring ownership is not recommended as a consideration at this time.

Summary of Benefits and Tradeoffs

Option 3 is designed to ease the administrative and managerial burden from DWR managing the O&M of NAWS while still maintaining control over the project. The main governance implication is a shift in control with day-to-day operational decisions moving to the vendor, while public accountability remains with NAWS Authority and the State, increasing the need for clear oversight, transparent reporting, and enforceable service-level metrics.

The level of effort of Option 3 is medium–high and the feasibility is medium–high because it avoids the need to expand DWR's O&M workforce (helpful given geographic dispersion and constrained labor and contractor markets), but it requires disciplined procurement practices and a strong contract-management capability. If Option 3 is used as a bridge to transition O&M

responsibility to NAWS Authority, it will increase the short-term costs and complexity of the effort but would reduce costs for the State over the medium and long term.

The following summarizes the benefits and tradeoffs of Option 3:

Benefits: State benefits include potential near-term pricing predictability versus ad hoc staffing, access to specialized expertise without a full staffing build, and the ability to combine KPIs and enforcement into a performance-based agreement, provided the contract is designed with measurable outcomes, audit rights, and clear remedies. This option also reduces the administrative and managerial burden of NAWS O&M on DWR. By shifting O&M to a professional provider with local resources that can access economies of scale to provide services, there may be an opportunity to reduce costs as well. Factoring in the Option 1 actions that would also be incorporated in this option, it would result in a more engaged and productive NAWS Authority and improved representation of local stakeholder interests in NAWS decision-making. When coupled with training provided by NAWS Authority by the contractor, this option greatly improves the readiness of NAWS Authority to take over O&M in the future.

Tradeoffs: Financing and affordability impacts can be experienced if vendor pricing, escalation clauses, or change orders outpace assumptions, unless NAWS Authority proactively governs rate structures and cost-share arrangements and communicates a credible long-term cost path. One-time State costs include procurement, contracting, mobilization and transition, and ongoing expenses can include vendor fees, contract administration, performance monitoring, and the risk of change orders if scope and performance terms are weak. Ratepayers may experience quality service, but they also bear affordability risk if vendor costs escalate or if transparency and reporting is insufficient to support rate decisions and public trust. Operational outcomes can be strong if the contracted vendor(s) brings mature processes and scale, but they vary widely with contract quality and the DWR's capacity to manage vendor risk, compliance, and performance monitoring.

NAWS Option 3 Implementation Roadmap and Responsibilities

The following table sets forth the key components, timeline, responsibilities, and legislative actions or other authorities required to implement NAWS Option 3:

Implementation Components and Timeline	Responsible (R)	Accountable (A)	Consulted (C)	Informed (I)	Legislative/ Authority Implications
First 4 Months: Implement the consultation, planning, staffing, and performance-tracking improvements to current model.	DWR; NAWS Authority	SWC; NAWS Authority	SWC; NAWS Authority	NAWS Stakeholders	No new authority required but could be reinforced through statute, session law, or budget language.

Months 4 to 9: Define the outsourcing strategy and scope for post-construction O&M, and service-level requirements, tracking across strategic KPIs.	DWR; NAWS Authority	SWC; NAWS Authority	SWC; NAWS Authority; external procurement/ utility advisors	NAWS Stakeholders	This step is administrative but legal review is needed to confirm procurement authority, scope boundaries, and any statutory constraints. Contract authority and oversight roles should be clearly documented.
Months 9 to 12: Procure an O&M provider and execute a performance-based contract with incentives, penalties, and KPI-linked reporting requirements.	DWR	SWC; NAWS Authority	SWC; NAWS Authority; external procurement advisors; legal Counsel	NAWS Stakeholders	This can occur under existing procurement authority if DWR and SWC can already contract for these services.
Months 13 to 22: Transition O&M to contractor with DWR supervision and NAWS Authority support, including KPI monitoring.	DWR; O&M contractor	SWC; NAWS Authority	SWC; NAWS Authority Board	NAWS Stakeholders	This step can be handled administratively, but stronger legislative or budget support may be useful if the State wants to formalize oversight.
When Ready: Build NAWS Authority capacity to help manage contractor(s) and assume a larger future O&M role if desired.	DWR; NAWS Authority	SWC; NAWS Authority	SWC; NAWS Authority	NAWS Stakeholders	If this option is used as a bridge to a future Authority-led model, statutory clarification is needed.

Potential Additional Opportunities to Strengthen NAWS Finances

The State and NAWS Authority can take additional actions to strengthen the long-term financial sustainability and management of NAWS, including:

- Long-Term Financial Plan: DWR and NAWS Authority can develop a clear long-term financial model and plan for the remaining system buildout and funding future REM needs, including plans for revenue and rates management, REM, capital improvements, reserve funds, O&M, and financial monitoring.
- Moving Beyond the 1% Sales Tax: To date, the local cost-share for the development of the NAWS project has been funded from the 1% sales tax by the City of Minot. Going forward, the State could consider building a system development fee into user rates for the beneficiaries of the NAWS system to help fund any remaining build out costs, build the capacity of NAWS Authority (including hiring one or more staff members) and fund future REM needs. These fees could be phased in over time to reduce the short-term burden on users.

See the "Common System Finance Enhancement Opportunities" section at the end of this report for other actions that could be taken to improve the financial management and sustainability of NAWS and access additional sources of funding and financing for the system.

Figure 16: NAWS Impact Analysis

Evaluation Criteria	Current State	Option 1 Impact	Option 2 Impact	Option 3 Impact
Alignment of Risk Burden with Decision Making Authority	Medium	Improved	Improved	Improved
Effectiveness of Current Governance Structure & Authority	Medium	Limited Net Impact	Improved	Improved
Level of Stakeholder Representation, Transparency & Public Accountability	Low	Limited Net Impact	Improved	Improved
Alignment of Structure, Capacity & Capabilities with Stated Policy, Strategy & Goals	Low	Improved	Limited Net Impact	Improved
Feasibility to Implement/ROI of Implementing Recommendations	N/A	Feasible w/ limited ROI	Feasible, high LOE, high ROI	Feasible, high potential ROI
Efficient Use of State and Local Resources and Availability of Alternatives	Medium	Improved	Improved	Improved
Long Term Affordability for Stakeholders	Medium	Limited Net Impact	Limited Net Impact	Limited Net Impact
Structured to Address Future Risks and Facilitate Sustainability	Low	Improved	Improved	Improved
Ability to Attract Federal, State and Local Investment	Medium	Limited Net Impact	Limited Net Impact	Limited Net Impact

Table 8: Summary of Recommended Options for NAWS

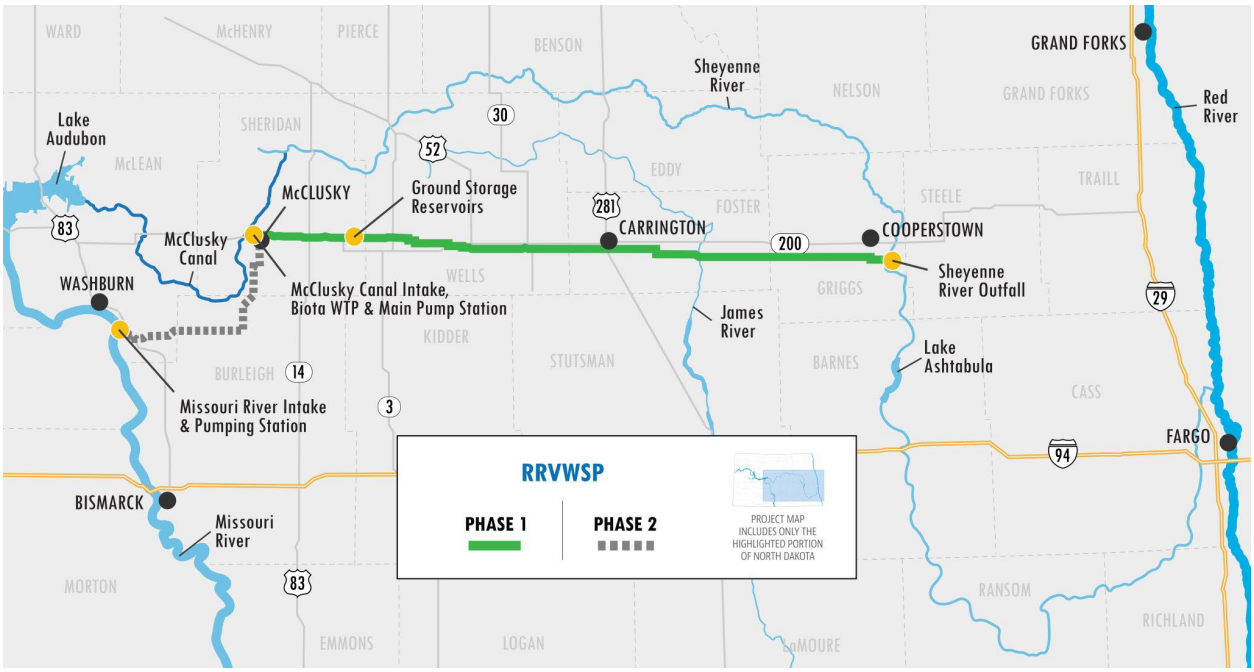
	Option 1: Keep Current Model with Improvements	Option 2: Build Capacity for NAWS Authority to Take Over O&M	Option 3: Engage NAWS Authority but Outsource O&M
Option Summary	State retains ownership of the NAWS project and O&M responsibilities with NAWS Authority playing a more active role as a consultative body, including the following improvements to the current approach: • Strengthening NAWS Authority's involvement in decision-making processes and building capacity for NAWS Authority members to play a larger role in advising on important decisions; • Developing a clear vision and long-term strategy for NAWS Authority; • Hiring a NAWS Authority administrative officer or general manager to coordinate NAWS Authority activities, manage board meetings and communication with DWR, and respond to administrative circumstances; • Developing a clear long-term financial plan; and • Implementing a performance monitoring program using targeted metrics to inform decision-making and track impact of State funding.	• Retain current consultative governance structure through construction (with some improvements from Option #1) with the goal of shifting O&M to NAWS Authority when (or shortly after) the construction phase is complete. • NAWS Authority continues as consultative body through development. • State and NAWS Authority will prioritize investing in building capacity in preparation for NAWS Authority's role to increase at completion including identifying and training multiple FTEs to run operations and maintenance, with a goal of becoming an independent operator like SWA.	• Retain current governance structure through substantial completion, while building capacity within NAWS Authority to contribute more meaningfully to consultation process (aligned with the suggested changes in Option 1). • Upon substantial completion, outsource O&M to a third-party contractor with contracting and supervising activities performed by DWR with engagement and support from NAWS Authority FTE as needed. Contractor paid by NAWS user fees. • Implement a strategic performance monitoring program using targeted metrics to track cost/benefit of outsourcing O&M vs. building capacity for NAWS Authority to do O&M.
Benefits	• More engaged and productive NAWS Authority; improved representation of local stakeholder interests in NAWS decision-making; more clarity on value and vision for NAWS Authority; enhanced organizational capacity.	• More engaged and productive NAWS Authority; improved representation of local stakeholder interests in NAWS decision-making; shifts O&M closer to end users (and better aligns with risk) with oversight from the State; reduces burden on DWR staff.	• More engaged and productive NAWS Authority; improved representation of local stakeholder interests in NAWS decision-making; shifts O&M to professional organization with local resources; reduces burden on DWR staff.
Tradeoffs	• More involved decision-making process; salary cost of NAWS Authority administrative officer; requires time and engagement of NAWS Authority board, which is limited.	• Time and financial investment to build NAWS Authority capacity; reduces direct control of DWR on project.	• Significant time and financial investment to build NAWS Authority capacity; reduces direct control of DWR on project; outsourcing could lead to increase in O&M costs and user fees depending on economies of scale.

Red River Valley Water Supply Project

Project Development History and Current Status

RRVWSP is a large regional infrastructure development initiative intended to provide a reliable, high-quality supplemental water supply to central and eastern North Dakota to enable the maintenance of service during extreme drought conditions. The Red River Valley is home to over 300,000 people (~40% of the State's population), including the State's two largest cities (Fargo and Grand Forks), and multiple studies show another severe and devastating drought is likely to occur by 2050 with a potential economic impact exceeding $33 billion.

Figure 17: RRVWSP Map



The project was initially conceived in 2000 as a federal project to bring Missouri River water from the McClusky Canal to the Sheyenne River, but the development model has evolved, and RRVWSP is now being developed as a State and local project. The project consists of an intake at the McClusky Canal, a 125-mile, 72-inch diameter pipeline that brings water across the continental Laurentian Divide, pumping stations, a biota water treatment plant, a discharge structure to deliver the water to the Sheyenne River, and other related facilities. The project is expected to cost an estimated $1.4B with 75% or $1.05B of support committed from the State, and it is expected to be completed in the early to mid-2030s.

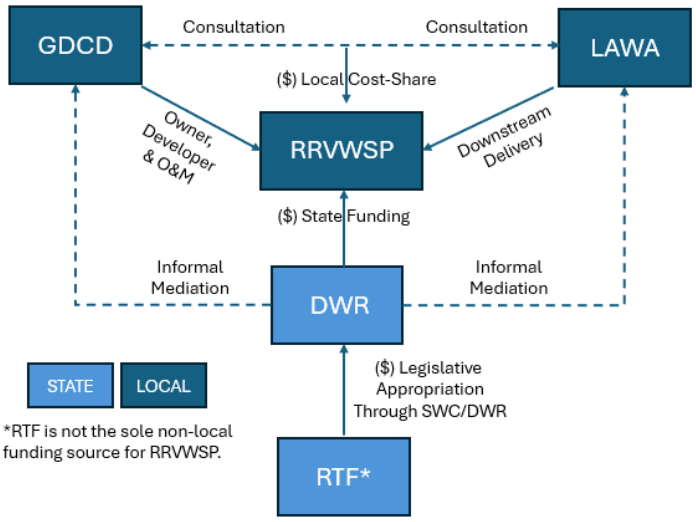
Current Governance and Financing Structures

RRVWSP is being developed through the collaboration of two entities: GDCD and LAWA. GDCD is a political subdivision created by the State in 1955 to develop the Garrison Diversion Unit project and encompasses representation of 28 counties of North Dakota. Pursuant to N.D.C.C. § 61-39-01, the legislature has provided that GDCD has the authority to "acquire, construct, and improve the Red River valley water supply project." GDCD currently owns the project and is leading all construction and development efforts. LAWA is a political subdivision created by the

North Dakota Legislature in 2003 that represents 13 counties in eastern North Dakota. LAWA serves as a cooperating authority representing local water users' interests and coordinating delivery of RRVWSP water downstream from Lake Ashtabula.

In May 2020, GDCD and LAWA entered into a Cooperation Agreement to outline the roles and responsibilities of the parties for the project. The Cooperation Agreement states that GDCD will "finance, design, build, construct, own, maintain, and operate" the project and LAWA and its members will "provide project water to all users within the LAWA members' current service territories." Under the Cooperation Agreement, GDCD must "consult with, inform and receive input from LAWA on issues involving Project status, budgets and work plans, among other things," but ultimately all decision-making authority resides with GDCD.

Figure 18: RRVWSP Current Structure



RRVWSP is being funded using a 75% State/25% local cost-share split. To date, the cities of Fargo and Grand Forks have covered the local share ($154.3M as of late 2025) on behalf of the LAWA members through low-interest, long-term loans to the project from BND through the State's Water Infrastructure Revolving Loan Fund (WIRLF). The state legislature has committed to providing $1.07B in funding for the project. Program-level funding composition for 2025–2027 is $273M total, comprising $205M from the State and $63M from local users in the form of loan from WIRLF.

Key Governance and Financing Challenges

A number of important governance and finance challenges emerged from the RRVWSP SWOC Analysis, which is summarized in **Table 9**. While GDCD and LAWA are both invested in the success of RRVWSP, there has been significant conflict between the two bodies due to disagreements over financing, authority, and representation, among other matters. While some of the conflict derives from trust issues that have grown over time, the disputes between the parties can be tied to several weaknesses in the project's governance and finance models. First, the decision-making authority for the project is not well-aligned with the risk. GDCD effectively has full decision-making authority under the Cooperation Agreement but nearly all the funding for the project comes from the State (which has very little involvement in the governance of the project) and the cities of Fargo and Grand Forks, as representatives of LAWA. As a result, the State and the cities of Fargo and Grand Forks bear the risk of any budget increases and other financial implications of project development decisions without any ability to limit critical spending and scope decisions made around the project.

Second, the Cooperation Agreement does not provide adequate clarity around the scope of the project and the parties' roles and responsibilities, leaving significant opportunities for misalignment and disagreement. This dynamic has led to confusion around the purpose and intent of the project – LAWA has been focused on the core project purpose of delivery of supplemental water to the Sheyenne River, while GDCD has adopted a more expansive view of the project with branch pipelines and water use for economic development. While the parties appear to have recently aligned around a "split-delivery model" whereby GDCD would be responsible for delivery of water to the Sheyenne River and LAWA would be responsible for downstream distribution to end users, the Cooperation Agreement does not adequately reflect that arrangement. In addition, the decision-making protocol in the Cooperation Agreement does not sufficiently support bringing the parties to consensus with GDCD having ultimate authority for all decisions.

Third, there are critical elements of the project governance and structure that still need to be developed. The project lacks a fully developed business plan that will inform the project development and ensure that the project is financially sustainable and affordable for end users for the long term. GDCD and LAWA have also not come to terms on a Water Supply Agreement that will codify the operating model for the project and govern the terms of their relationship when the project is complete. In addition, the State has yet to fully align with the U.S. Army Corps of Engineers (USACE) on management of water delivered to the Lake Ashtabula from RRVWSP. The absence of these components of the project governance creates significant uncertainty and opportunities for misalignment between the parties.

Figure 19: RRVWSP Current State

Evaluation Criteria	Status
Alignment of Risk Burden with Decision Making Authority	Low
Effectiveness of Current Governance Structure & Authority	Low
Level of Stakeholder Representation, Transparency & Public Accountability	Medium
Alignment of Structure, Capacity & Capabilities with Stated Policy, Strategy & Goals	Low
Efficient Use of State and Local Resources and Availability of Alternatives	Medium
Long Term Affordability for Stakeholders	Medium
Structured to Address Future Risks and Facilitate Sustainability	Low
Ability to Attract Federal, State and Local Investment	Medium

Table 9: RRVWSP SWOC Analysis

Strengths	Weaknesses
• Leverages existing federal and GDCD infrastructure and capabilities • GDCD is well-resourced and experienced in the logistics of water development • Significant financial commitment from State • Engaged anchor cities that are covering the local share	• Significant development and cost remaining before project can produce revenue • Complete business plan and revenue analysis to determine purpose and sustainability has not been done • Cooperation Agreement is vague and creates opportunities for dispute, and parties are not fully abiding by terms of the agreement • Lack of trust between GDCD and LAWA leadership due to conflicting priorities • Certain agreements are not in place/documented (e.g., USACE, Water Supply Agreement) • Risk and decision-making authority not well aligned • No clear KPIs or performance measurements for tracking cost effectiveness of project development
Opportunities	**Challenges**
• Exploring alternative operations and delivery models to address current challenges • Have generated significant interest in projects from other communities in Red River basin • Potential for federal funding to mitigate project cost • Excess capacity from pipeline could be used to strengthen water supply in eastern North Dakota	• Lack of full alignment on scope of project • Uncertain federal funding landscape • Disputes over how to best deliver water to smaller communities • Risk for potential future lawsuits • Customers being asked to pay for pipeline with no current benefit (i.e., only in case of drought), unclear messaging and related political challenges • Declining expected oil extraction tax revenues into the RTF could make future funding less certain

Recommended Options to Improve Governance and Finance Models

After analyzing the current governance and finance model for RRVWSP and assessing potential solutions to the major weaknesses and challenges for the governance of the project using the Evaluation Criteria, the study has identified three potential options for improving the governance and finance model of RRVWSP:

- Option 1: Maintaining the current governance structure with improvements to address the weaknesses of the current model and reduce conflict, including increased informal engagement and mediation by DWR;
- Option 2: Integrating SWC into a formal oversight and leadership role for the project; and
- Option 3: Transferring ownership and authority of project development from GDCD to SWC.

These options each have benefits and tradeoffs, as well as implementation considerations, which will need to be weighed by the State. The options are discussed in more depth below.

Table 10: RRVWSP Peer Project Spotlight

Lake Powell Pipeline (Utah) - A Cautionary Comparator for RRVWSP
The Lake Powell Pipeline (LPP) is a proposed 140-mile project to deliver Colorado River water from Lake Powell to fast-growing communities in southern Utah with a high profile like RRVWSP. The project permitting process has remained paused amid interstate opposition, unresolved water-rights questions, supplemental environmental review, and broader uncertainty around certain aspects of the project. The project illustrates how large water-supply projects can lose momentum when governance is fragmented, costs rise, and the case for need and affordability is not regularly revalidated. For RRVWSP, the key implication is to strengthen governance through clear decision rights, annual refreshes of demand and phasing assumptions, and explicit approval gates for major scope and sequencing decisions to continue to demonstrate the value of the project and maintain credibility as conditions evolve.

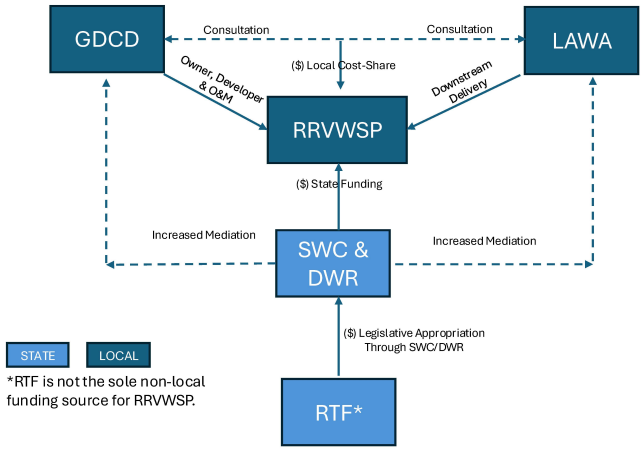
Option 1 — Maintaining the current governance structure with improvements to address the weaknesses of the current model and reduce conflict, including increased informal engagement and mediation by DWR

Option 1 focuses on maintaining the current governance model and split-delivery approach but addresses the uncertainty and conflict surrounding the project. The following actions can be taken to address the weaknesses of the current model, better align the parties, and reduce conflict:

- Engaging DWR in a regular mediation and facilitation role to align the parties;
- Amending the Cooperation Agreement and finalizing the terms of the Water Supply Agreement between GDCD and LAWA to clearly delineate responsibilities and better align decision-making with risk, including providing LAWA increased influence over decisions that significantly increase its members' financial risks;
- Finalizing other critical arrangements for the project (e.g., with USACE);

- Developing a business plan and financial analysis to facilitate long term sustainability of the project; and
- Implementing a performance metrics program to inform decision-making and track impact of State dollars.

Figure 20: RRVWSP Option 1 Proposed Structure



Summary of Benefits and Tradeoffs

This option is pragmatic and highly feasible because it can be implemented without major statutory rework, assuming GDCD and LAWA demonstrate a willingness to engage and work together in good faith to resolve their differences and develop a shared vision, business plan, and operating and contractual framework to take the project forward. Without that commitment of the parties, the benefits of this option will be significantly reduced.

The level of effort required for this option is moderate as it will require significant additional engagement by DWR staff and investment of time and resources by GDCD and LAWA in the development, negotiation, and execution of key project documents and agreements and the financial analysis and plan.

The following summarizes the benefits and tradeoffs of Option 1:

Benefits: The actions in Option 1 will significantly improve alignment, clarity, planning, and accountability for the project. Clearer decision-making processes with increased LAWA engagement and influence in decisions that impact LAWA stakeholders will result in better alignment between risk and decision-making authority. Similarly, increased engagement by DWR staff, even in an informal facilitation role, will permit the State, who is funding the bulk of the project, to have more involvement in how decisions are being made for the project, in addition to providing valuable conflict mediation between the parties. Bringing the parties together to align around a shared vision for the project, amending or completing contracts that remove ambiguity, and developing a long-term financial and business plan for the project will reduce conflict, support long-term planning, strengthen the project's ability to access financing by lowering execution risk, and improve engagement with community and end user beneficiaries of the project. Implementing a performance metrics program will increase transparency and accountability around project development, inform project decision-making, and allow the State to track the effectiveness and efficiency of the use of State investment.

Tradeoffs: This option will require additional investment of DWR staff time and resources, including engagement by senior DWR leadership. This investment could be significant, particularly in the short term as the parties work to resolve differences and align around a shared vision. The current lack of trust between GDCD and LAWA leadership and history of disagreements may result in a prolonged negotiation process with the potential for additional

disagreements to arise, which could result in increased demands on staff time and resources of GDCD and LAWA board members (potentially necessitating the addition of professional staff for LAWA) and increased legal costs.

RRVWSP Option 1 Implementation Roadmap and Responsibilities

The following table sets forth the key components, timeline, responsibilities, and legislative actions or other authorities required to implement RRVWSP Option 1:

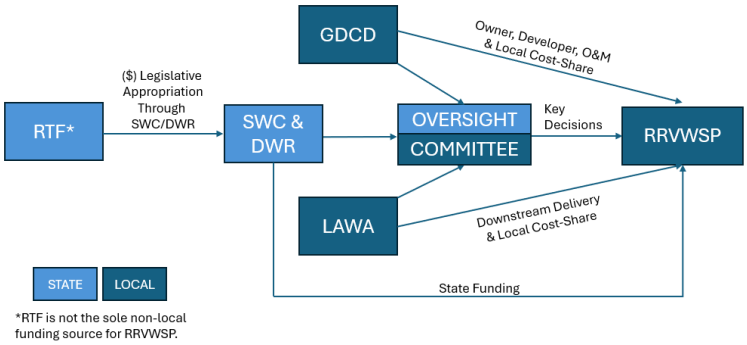
Implementation Components and Timeline	Responsible (R)	Accountable (A)	Consulted (C)	Informed (I)	Legislative/ Authority Implications
First Month: Establish a formal DWR-led facilitation cadence so the State can play a regular mediation role.	DWR, GDCD, LAWA	LAWA Board, GDCD Board	LAWA Board, GDCD Board	Project Stakeholders	Implementable administratively.
Months 2 to 6: Amend the Cooperation Agreement to clarify responsibilities, decision rights, and dispute resolution processes.	DWR; GDCD; LAWA	GDCD Board; LAWA Board	DWR; Legal Counsel	Project Stakeholders	This governance action can be accomplished contractually.
Months 2 to 6: Implement a performance metrics program to track the effectiveness and efficiency of State investment, and a 10-year financial plan.	GDCD; LAWA	DWR		Project Stakeholders	This can be implemented administratively, though accountability could be reinforced through budget language.
Months 6 to 12: Prioritize closure of key external agreements with federal counterparties.	DWR	DWR, USACE	Legal Counsel	GDCD; LAWA; Project Stakeholders	This is an agreement between State and Federal Government.

Option 2 —Integrating SWC into a formal oversight and leadership role for the project

Option 2 formally integrates SWC into the management and oversight of the project to drive collaboration and better manage the State's interests and risks. Under this model, the project would maintain current ownership, construction, and O&M responsibilities consistent with the split delivery model, but with SWC assuming a formal oversight role for the project, including:

- Adding SWC as a formal party to RRVWSP decision-making processes (e.g., development, financing, etc.) to represent the State's interest, serve as tie-breaker on divisive issues, and help overcome conflict, when required;

Figure 21: RRVWSP Option 2 Proposed Structure



- Creating a RRVWSP Oversight Committee with a representative from GDCD, LAWA, and SWC to oversee the project, align parties, and approve specific decisions;
- Amending or replacing the Cooperation Agreement to further clarify responsibilities and decision-making, create the Oversight Committee, and define what decisions require Oversight Committee approval; and
- Implementing other changes included in Option 1 to strengthen the project (i.e., finalizing other critical arrangements, developing a financial analysis and plan, and implementing a performance metrics program).

Summary of Benefits and Tradeoffs

While this option is quite feasible, it represents a significant shift in how the project is currently managed. Despite the current ownership, construction, and O&M responsibilities remaining with the current parties consistent with the split delivery model, SWC and the State will have a much larger role in the decision-making and management of the project.

The level of effort to make the governance changes required by this shift, including amending governance agreements, expanding any statutory authorities, and deepening SWC and DWR involvement, is moderate to high, but could result in a more efficient project development and execution approach going forward.

The following summarizes the benefits and tradeoffs of Option 2:

Benefits: This option helps alleviate two of the fundamental weaknesses of the current RRVWSP governance structure by better aligning decision-making with risk and encouraging collaboration and accountability. By giving SWC a formal oversight and leadership role, SWC can ensure the strong stewardship of State resources and better represent the State's interests for critical decisions. By elevating important decisions to the three-person Oversight Committee, it will allow cleaner decision-making, reduce "two-sponsor deadlock," help push the parties towards consensus, and strengthen delivery discipline. Reducing conflict between the parties also has a positive impact on the perceived governance risk and execution risk of the project for prospective financiers, making the project more attractive for financing. Several benefits of Option 1 would also accrue here, including stronger long-term planning, increased transparency and accountability around project development, and enhanced ability for the State to track the effectiveness and efficiency of the use of the State's investment.

Tradeoffs: The creation of the Oversight Committee, including negotiating the scope of its authority and decision rights and amending the governance documents of the project to formalize the committee and its processes and procedures, will require moderately high short-term investment of time and resources of SWC, GDCD, and LAWA. This option will also require ongoing investment of time and resources by DWR and its staff to more actively engage with the project and conduct the analysis and decision-making required in its Oversight Committee role. Adding an additional layer of governance through the Oversight Committee may create some delays due to procedural compliance and additional engagement of the parties around key decisions, making it critical to tightly scope what decisions require Oversight Committee approval (i.e., avoiding "over-escalation" in the governance design).

RRVWSP Option 2 Implementation Roadmap and Responsibilities

The following table sets forth the key components, timeline, responsibilities, and legislative actions or other authorities required to implement RRVWSP Option 2:

Implementation Components and Timeline	Responsible (R)	Accountable (A)	Consulted (C)	Informed (I)	Legislative/ Authority Implications
First 4 Months: Define SWC oversight operating model and specifics of SWC involvement.	DWR	SWC	GDCD Board, LAWA Board, Legal Counsel	Project Stakeholders	N/A
Months 7 to 11: Secure statutory approvals for adding SWC as a formal party to RRVWSP decision making.	DWR; Legislature	SWC	SWC, GDCD Board, LAWA Board	Project Stakeholders	N/A
Months 12 to 15: Create a RRVWSP Oversight Committee composed of representatives from GDCD, LAWA, and SWC.	DWR; GDCD; LAWA	SWC; GDCD Board; LAWA Board	SWC, GDCD Board, LAWA Board; Legal Counsel	Project Stakeholders	Requires formal creation through amended governance documents.

Months 16 to 21: Amend or replace the Cooperation Agreement to embed Oversight Committee authority and specify which decisions require Oversight Committee approval.	DWR; GDCD; LAWA	SWC; GDCD Board; LAWA Board	SWC, GDCD Board, LAWA Board; Legal Counsel	Project Stakeholders	N/A
Months 22 to 26: Implement other strengthening measures included in Option 1, a performance metrics program, and a 10-year financial plan.	DWR; GDCD; LAWA	SWC; GDCD Board; LAWA Board	SWC, GDCD Board, LAWA Board	Project Stakeholders	N/A

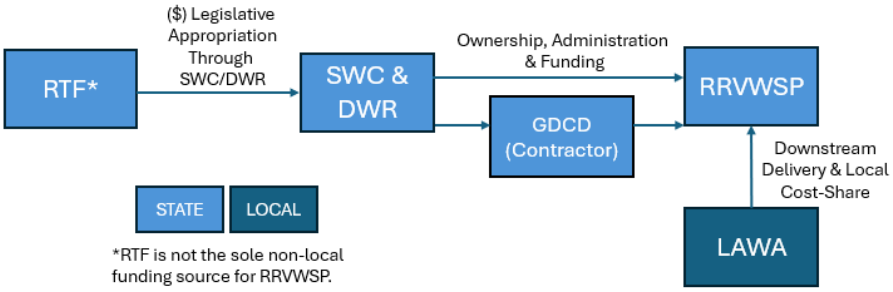
Option 3 — State Ownership and SWC Operational Authority

This option provides the most disruptive but most decisive governance change. Under Option 3, ownership and authority over both pipeline construction and O&M would be transferred from GDCD to the State, with SWC assuming a formal leadership and oversight role for the project. To effect this change, several actions would be required:

- Amending statutory authorities to codify the shift in project ownership and management;
- Redrafting or replacing the Cooperation Agreement to define LAWA's role related to water delivery upon substantial completion and formal consultation throughout the construction process, in line with the split-delivery model;
- Developing and executing a management transition plan to effectively transfer project management capabilities from GDCD to SWC and DWR and maintain continuity with GDCD staff and contractors with substantial roles on RRVWSP planning and operations;
- Transferring project contracts (e.g., construction contracts) from GDCD to SWC, as needed; and
- Implementing other changes included in Option 1 to strengthen the project (i.e., finalizing other critical arrangements, developing a financial analysis and plan, and implementing a performance metrics program).

One less disruptive variation would be to transfer ownership and oversight of the project from GDCD to SWC, while having SWC contract with GDCD to manage construction and, after construction, O&M of the project. This approach would give SWC decision-making authority while leveraging the capabilities and staff of GDCD to manage the day-to-day activities of the project and may simplify the legal and contractual changes.

Figure 22: RRVWSP Option 3 Proposed Structure



Over time, LAWA may develop the resources and capabilities to become a candidate for ownership of the system. By building capacity within LAWA and developing a strong relationship between LAWA and the State, there may be a longer-term opportunity to transfer ownership of the system to LAWA, similar to Option 3 for SWPP. However, based on LAWA's current resource and capacity constraints and the need for significant State intervention in the project to drive progress, transferring ownership is not recommended at this time.

Summary of Benefits and Tradeoffs

Option 3 requires a major legal and contractual reset, a significant State capacity build and investment, and careful political and stakeholder management.

The level of effort to both implement the required actions and for the State to own and manage the project going forward is high. However, the benefits of this investment could be significant with the State being able to more effectively manage its significant funding risk and reduce friction and deadlock.

The following summarizes the benefits and tradeoffs of Option 3:

Benefits: This option provides the State with direct oversight and responsibility for the project, reflecting the enormous investment the State is making in the project and aligning decision rights with the party bearing the largest risk burden. It also allows SWC and DWR to leverage their experience and capabilities in owning and overseeing SWPP and NAWS. By transitioning ownership from GDCD to SWC, the shift should lead to a significant reduction of bureaucratic friction and conflict, which will reduce delays in project development and provide a more stable project development environment. Given the relatively limited State oversight of GDCD in the current model, this option would increase the accountability for cost growth, schedule slippage, and long-run O&M performance. Several benefits of Option 1 would also accrue here, including stronger long-term planning, increased transparency and accountability around project development, and enhanced ability for the State to track the effectiveness and efficiency of the use of State investment.

Tradeoffs: The tradeoffs of implementing this option are significant. Legislative action will be required to authorize this realignment. The transition will also create one-time costs for major legal and contract restructuring, transitioning of construction management and O&M

responsibilities, building staffing and capacity of SWC and DWR to own and manage the project, and potential claims if contracts are reset or roles are terminated. Going forward, the State will assume more direct performance, cost, and schedule risk, and carry a higher administrative footprint for governance, reporting, and operational oversight. Given the major shifts required by this option, it will be very difficult to avoid some transition disruption and project delays. Some of these costs could be mitigated if SWC contracts GDCD to continue to manage construction and O&M, although it would likely increase the ongoing administrative costs of the project.

RRVWSP Option 3 Implementation Roadmap and Responsibilities

The following table sets forth the key components, timeline, responsibilities, and legislative actions or other authorities required to implement RRVWSP Option 3:

Implementation Components and Timeline	Responsible (R)	Accountable (A)	Consulted (C)	Informed (I)	Legislative/ Authority Implications
First 6 Months: Conduct a legal and operational readiness assessment for ownership transfer.	DWR	SWC	SWC; GDCD; LAWA; Legal Counsel	Legislature	No additional authority needed but should be structured to support eventual transfer legislation and formal transfer documentation.
First 6 Months: Assess the post-transfer governance, staffing needs, and draft contracts necessary for the transfer and delegated management of the project (if desired)	DWR; GDCD Staff	SWC, GDCD Board	SWC, GDCD Board, LAWA Board; Legal Counsel		N/A
Months 7 to 11: Amend statutory authorities to formalize the shift in project ownership, management, and operational authority to the State.	DWR; GDCD; LAWA; Legislature	SWC; GDCD Board, LAWA Board	SWC, GDCD Board, LAWA Board; Legal Counsel	Project Stakeholders	This is a prerequisite for implementation. Without statutory change, the State-led ownership and management model cannot be fully operationalized.
Months 12 to 24: Amend or replace the Cooperation Agreement	DWR; LAWA	SWC; LAWA Board	SWC; GDCD; LAWA Board; Legal Counsel	Project Stakeholders	N/A

Months 24 to 36: Transfer applicable project contracts, such as construction contracts, from GDCD to SWC as needed.	DWR; GDCD	SWC; GDCD Board	SWC; GDCD; LAWA Board; Legal Counsel	Project Stakeholders	Contract negotiation, assignment, or re-procurement may be required. This creates risk of claims, delay, and additional transaction costs if existing contracts must be restructured or terminated.

Potential Additional Opportunities to Strengthen RRVWSP Finances

In addition to the three broader options outlined above, there are additional potential opportunities to strengthen the financing of RRVWSP. The following actions can augment, extend, or add to the approaches in a selected option to improve the cost effectiveness, access to finance, and financial sustainability of RRVWSP. These options are focused on two main objectives: (1) strengthening the financial management and sustainability RRVWSP and (2) identifying potential additional sources and approaches for financing RRVWSP.

Financial Management and Sustainability Enhancement Opportunities for RRVWSP

Given the immense scale and cost of RRVWSP, it is critical that the project is developed in a manner that ensures its financial viability and sustainability over the long-term. This can be done by taking one or more of the following actions:

- Beneficiary User Fees: Although RRVWSP is still in development and construction, the project could develop a plan to start collecting fees from users of beneficiary water systems to help fund project development costs and the staffing of LAWA. These fees could be phased in over time to reduce the short-term burden on users but would provide an important source of funding to expand the capacity of LAWA (including hiring full-time staff) and support the long-term development and maintenance of the project.
- Broadening Revenue Sources: While the initial and primary purpose of RRVWSP is to deliver supplemental water to the Red River Valley for drought prevention and economic development, the State could consider a broader business model for the project that permits water from the pipeline to be distributed via branch pipelines for agricultural, industrial, and domestic purposes that would generate additional revenue from the project. These uses would be secondary to its supplemental water delivery mandate but could potentially improve project economics, despite the significant additional investment that would be required. As mentioned earlier, the scope of this study does not extend to alternative models of the project, so additional analysis would be required to assess the feasibility of this model and develop a business strategy and financial plan to take it forward. GDCD has already done some analysis of this expanded business model, which can help inform the development of the business strategy and financial plan.
- State Funding Ceiling: The State could institute the existing funding ceiling for RRVWSP equal to $773M beginning with the 25-27 biennium. This ceiling would control

forecasted costs for large projects and aligns with the legislative intent provided for in HB 1020 (2025).

Alternative Sources and Approaches for Funding and Financing for RRVWSP

To reduce the demand on the RTF, the State could explore alternative sources and approaches for funding and financing to draw additional capital into RRVWSP. In addition to the alternative financing sources and approaches that could be available to all of RRVWSP, SWPP, and NAWS outlined in the "Common System Finance Enhancement Opportunities" below, RRVWSP could benefit from the following sources and approaches that more specifically align to the scope and purpose of RRVWSP:

- Legacy Fund-Backed Bond: The State could issue $568M (the remaining funding commitment of the State) in bonds backed by available earnings from the Legacy Fund, to be obligated beginning in the 2027–2029 biennium.
- Resilience-Focused Finance and Resilience Bonds: There is a growing market for innovative resilience-focused financing instruments, such as resilience bonds, which are used to fund projects that mitigate the risks and impacts of catastrophic weather events such as drought and flooding. RRVWSP's drought-mitigation purpose could be well-aligned with accessing resilience-focused financing and funding. Potential resilience-focused financing approaches include:
    - Resilience Use-of-Proceeds Bonds: The State could issue the Legacy Fund-backed bond mentioned above as a "resilience use-of-proceeds bond" to help finance RRVWSP. At its core, it is a traditional state bond backed by earnings from the Legacy Fund, but because the proceeds of the bond will be used to fund infrastructure that will greatly enhance the State of North Dakota's resilience to catastrophic weather events like floods and drought, it could be positioned in a way that makes it appealing to investors that are also looking to generate positive impacts from their investments. The primary benefit is one of marketing – it widens the pool of investors that may be willing to invest.
    - Resilience Bonds: A traditional resilience bond can be used to help fund a drought mitigation project like RRVWSP by tying part of the project's financing cost to measurable reductions in drought-related risk and cost and then using those quantified benefits to (a) create a dedicated repayment stream, (b) justify lower-cost capital, and/or (c) unlock partner funding (insurers and large customers). While complex to develop, a resilience bond effectively monetizes and captures the drought-resilience benefits of the project such as avoided crop losses and protection against significant business interruption for industry.
    - FEMA BRIC Funding: The FEMA Building Resilient Infrastructure and Communities (BRIC) grant program makes federal funds available to states, U.S. territories, federally recognized tribal governments, and local governments for hazard mitigation activities, including drought. While small in relation to the overall project size, RRVWSP could seek BRIC funding to cover a small component of the project. However, the State would have to weigh the benefits

of this grant funding against the risk of additional lawsuits and construction delays that could result from the project becoming subject to the requirements of the National Environmental Policy Act (NEPA).

Figure 23: RRVWSP Impact Analysis

Evaluation Criteria	Current State	Option 1 Impact	Option 2 Impact	Option 3 Impact
Alignment of Risk Burden with Decision Making Authority	Low	Improved	Improved	Improved
Effectiveness of Current Governance Structure & Authority	Low	Improved	Improved	Improved
Level of Stakeholder Representation, Transparency & Public Accountability	Medium	Limited Net Impact	Limited Net Impact	Limited Net Impact
Alignment of Structure, Capacity & Capabilities with Stated Policy, Strategy & Goals	Low	Improved	Improved	Limited Net Impact
Feasibility to Implement/ROI of Implementing Recommendations	N/A	Feasible w/ limited ROI	Higher LOE, higher ROI	Feasible, high potential ROI
Efficient Use of State and Local Resources and Availability of Alternatives	Medium	Improved	Improved	Improved
Long Term Affordability for Stakeholders	Medium	Limited Net Impact	Limited Net Impact	Limited Net Impact
Structured to Address Future Risks and Facilitate Sustainability	Low	Improved	Improved	Improved
Ability to Attract Federal, State and Local Investment	Medium	Improved	Improved	Limited Net Impact

Table 11: Summary of Recommended Options for RRVWSP

	Option 1: Keep Current Model with Improvements	Option 2: SWC Provides Oversight and Leadership to Project	Option 3: Transfer of Ownership and O&M to SWC
Option Summary	Continue pursuing split-delivery model where GDCD owns (and will eventually operate) the pipeline and is responsible for getting water to Lake Ashtabula and LAWA is responsible for organizing downstream delivery, but addressing the uncertainty and conflict surrounding the project, including: • Engaging DWR in a regular mediation and facilitation role to align parties; • Amending the Cooperation Agreement or finalizing the terms of the Water Supply Agreement to clearly delineate responsibilities and better align decision-making with risk; • Negotiating and finalizing outstanding project arrangements (e.g., USACE); • Developing a business plan and financial analysis to facilitate long term sustainability of the project; and • Implementing a performance metrics program to inform decision-making and track impact of State dollars.	Maintain current ownership, construction, and O&M responsibilities consistent with the split delivery model, but with SWC assuming a formal oversight role for the project, including: • Adding SWC as a formal party to RRVWSP decision-making processes (e.g., development, financing, etc.) to represent the State's interest, serve as tiebreaker on divisive issues and help overcome conflict where required; • Creating a RRVWSP Oversight Committee with a representative from GDCD, LAWA, and SWC to oversee the project, align parties, and approve certain decisions; • Amending or replacing the Cooperation Agreement to further clarify responsibilities and decision-making, create Oversight Committee, and define what decisions require Oversight Committee approval; and • Implementing other changes included in Option 1 to strengthen the project.	Transfer ownership of the project from GDCD to the State, with SWC assuming a formal leadership and oversight role for the project, and DWR becoming the administrator and project sponsor, including: • Amending statutory authorities to codify the shift in project ownership and management; • Redrafting or replacing the cooperation agreement with LAWA; • Developing and executing a transition plan to effectively transfer project management capabilities from GDCD to SWC and DWR while maintaining continuity with GDCD staff and contractors in substantial roles on RRVWSP planning and operations, including potentially contracting with GDCD for ongoing project support; • Transferring project contracts (e.g., construction contracts) from GDCD to SWC, as needed; and • Implementing other changes included in Option 1 to strengthen the project.
Benefits	• Clearer and better-aligned decision-making processes with LAWA engaged in decisions that impact LAWA stakeholders; State's interests are better represented within project governance; more efficient conflict resolution.	• Clearer and better-aligned decision-making processes with a broader set of interests represented (State, LAWA members, etc.); comprehensive state-wide interests are better represented within project governance; more efficient conflict resolution.	• Clearer and more risk-aligned decision-making; State's interests better represented within project governance, financing, and O&M; Significant reduction of bureaucratic friction for costly and important project.
Tradeoffs	• Increased investment of DWR staff time and resources; will require time and effort to make required governance changes and contract amendments; potential for additional short-term disagreements.	• Increased investment of time and resources by DWR; will require time and effort to make required governance changes and contract amendments; increased processes for RRVWSP project decisions; increased political scrutiny of SWC.	• Significantly increased investment of time and resources by DWR and staff; will require time and effort to make required governance changes and rewrite agreements; potential for political pressure against transfer.

Common System Governance Enhancement Opportunities

Based on the review of the three regional water systems and peer systems across the country, there are three cross-cutting strategic opportunities to strengthen the oversight and management of these systems: (1) Performance Monitoring, (2) Strategic & Financial Planning Development, and (3) Process Documentation and Decision Tree Mapping.

Performance Metrics and Monitoring Indicators

Performance monitoring for water systems ensures public health protection, operational efficiency, financial accountability, and resource sustainability. Performance monitoring is best understood as an ongoing, time-based assessment of service quality and outputs (or outcomes). This differs from a one-time analysis, which typically evaluates discrete decision-making, accountability, and oversight processes.

A disciplined metrics program turns "inputs" into accountability for outcomes, supporting operational reliability, financial transparency, and public trust. It enables trend detection, earlier intervention, and clearer decision tradeoffs. Performance indicators should be reported and evaluated at least quarterly to facilitate impactful measurement and analysis. **Table 12** provides a set of representative quantifiable metrics tied to efficient use of State dollars, governance effectiveness, delivery timeliness, and decision transparency. The choice of metrics to track should be tailored to the specific needs, development status, and challenges of the project and its stakeholders to maximize their value for decision-making and transparency.

Long-Term Strategic Planning

All three systems would benefit from clear long-term strategies and financial plans that provide a transparent "single source of truth" for scenario testing, including cost escalation, phasing, demand growth, and lifecycle needs. This also enables milestone-based funding, which ties decision checkpoints to readiness, milestones, and performance that can improve transparency and risk management.

Process Documentation and Decision Tree Mapping

Making "how decisions get made" explicit improves repeatability, speed, and auditability, especially during high-stakes events. Clear process maps reduce reliance on institutional knowledge, clarify roles and handoffs, and reveal bottlenecks. Decision trees support consistent escalation and faster resolution for issues like supply allocation, emergency response, and major spending approvals.

Table 12: Performance Monitoring Indicators

Monitoring Topic	Name of Indicator	Description	Relevance and Impact	Phase (Construct. Or Oper.)	Target Values	Data Needed	LOE of Data Generation
a) State Funding Resource Use Efficiency	1. Burn Rate: Budget Spent vs. Allocated (%)	How effectively funds are disbursed compared to what was planned.	Quick financial health check and ensures State funds are utilized.	Both	90–110%	Actual expenditures vs. approved budget.	High: Standard accounting output.
	2. Appropriation Deployment (Burn Rate)	Planned vs. actual cashflow by quarter.	Ensures capital is moving through the project pipeline as intended.	Construction	Consistent with quarterly forecast	Quarterly cash flow Statements and milestone billing.	Medium: Requires finance and project team sync.
	3. Operating Ratio (%)	Operating expenses as a percentage of operating revenue.	Core measure of financial sustainability and revenue sufficiency.	Operations	> 100%	Income Statement data (Total OpEx and Revenue).	High: Basic financial reporting.
b) Governance Structures Effectiveness	4. Performance Against Targets	Use of annual/quarterly targets with regular review of actual vs. planned.	Provides clear accountability for leadership and governance boards.	Both	70–95%	Pre-defined KPIs and recorded quarterly results.	Low: Requires defining structured KPI framework.
	5. Decision Cycle Time	Median days to approve scope/cost changes or SWA requests.	Reflects the agility and efficiency of the governing authority.	Both	Defined by SLA (e.g., < 30 days)	Log of request dates vs. final approval dates.	Medium: Requires administrative tracking.
	6. Owner-Operator Maturity	Preventive maintenance compliance and asset condition assessments.	Evaluates the long-term stewardship and technical oversight of the system.	Operations	High compliance %	Asset registry, inspection logs, and PM records.	Low: Requires a functioning CMMS/Asset system.
c) Project Delivery Timeliness and Accountability	7. Project Delivery Timeliness (%)	Tracks project progress against original milestone schedules.	Critical for program management and meeting water delivery dates.	Construction	80–90%	Baseline project schedules vs. actual completion.	Medium: Requires project management software.
	8. CIP Execution (SPI/CPI)	Schedule and Cost Performance Index + change-order rates.	Protects loan-funded outcomes by monitoring cost/schedule variances.	Construction	SPI/CPI near 1.0	Earned value metrics (Budgeted vs. Actual cost of work).	Medium: Standard for large capital projects.
	9. Readiness Score	Percent of roles filled, SOPs completed, and easements acquired.	Mitigates risk during the transition from construction to active service.	Construction	100% before commissioning	Checklists from HR, Legal, and Operations.	Medium: Requires cross-departmental coordination.
d) Decision-Making and Budget Use Transparency	10. Public Access to Reports	Timeliness of publishing meeting minutes, budgets, and expenditures.	Ensures transparency and maintains public/stakeholder trust.	Both	100% Target	Publication dates on website vs. meeting dates.	High: Simple audit of public-facing sites.
	11. Budget Reporting Timeliness	How quickly financial data is published after fiscal year-end.	Key for regulatory compliance and transparent financial management.	Both	Within 3–6 months	Official date of audit or financial report release.	High: Binary tracking of deadlines.
	12. Consultation Effectiveness	Documented changes driven by Authority or stakeholder input.	Measures if governance bodies are actually listening to participants.	Both	Evidence of input-driven changes	Meeting minutes and revised project/rate docs.	Low: Requires qualitative analysis of records.
e) Other Water System Governance & Financing Topics	13. Non-Revenue Water (NRW %)	Water produced that is lost through leaks or theft.	The "gold standard" indicator for operational and infrastructure efficiency.	Operations	<10-20%	Production meter data vs. billed consumption.	Medium: Requires accurate system-wide metering.
	14. Reserve Adequacy/Compliance	Percent of months meeting required minimum reserve funding levels.	Ensures the system can handle emergency repairs or revenue shortfalls.	Operations	100% compliance	Monthly balance sheets vs. policy requirements.	High: Standard financial audit data.
	15. Reliability Outcomes	Break rate, outage hours, and incident response/restoration times.	Validates that the chosen policies are resulting in dependable service.	Operations	Meeting SLA response targets	Incident logs and SCADA operational data.	Medium: Requires active operational logging.

Common System Finance Enhancement Opportunities

With over $2.6B in total estimated cost for the development of these three regional water systems, financing these systems has been, and continues to be, a significant challenge for the State. In addition to the system-specific options presented above, the study team, in collaboration with the team conducting the parallel study of the State's cost-share program, has identified several opportunities that could be leveraged by any or all of the three systems to strengthen the financial management and sustainability of the systems and/or provide additional sources of funding and financing for the systems.

Financial Management and Sustainability Enhancement Opportunities for All Three Systems

Enhancing the financial management and project economics of the three systems will ensure that the impact of State funding is maximized and the systems are positioned for long-term financial stability. The following actions could improve the financial management and sustainability of the three systems:

- Long-Term Financial Planning: As part of the long-term strategic planning efforts referenced in the previous section, all three systems would benefit from the development of clear, detailed, long-term financial plans to inform development, construction, buildout, and O&M decisions, including plans for financing, revenue and rates management, REM, capital improvements, reserve funds, and financial monitoring.
- Accountability Mechanisms: State financing decisions could be integrated with key timeline milestones and performance metrics. Financing works best when paired with clear readiness criteria, milestones, and ongoing performance monitoring to protect public value.
- Cross-Subsidizing Rate Structures: To improve affordability for household customers of the regional water systems, the systems could impose special fees or surcharges on large water users like data centers, agricultural, and industrial users to offset project buildout and other capital costs.

Alternative Sources and Approaches for Funding and Financing for All Three Systems

Given the scale and cost of the three regional water systems, there is likely not one alternative financing solution that is going to address all or even a signification portion of the financing needs of the projects. Rather, it may take several different sources and approaches that are layered into a "capital stack" that appropriately balances affordability, financial sustainability, and State resource use efficiency considerations. Potential alternative sources and approaches for funding and financing include:

- Fully Obligate Lines of Credit: To address the forecasted aggregate RTF shortfall over the next 14 years, the State could fully obligate the $260M in available lines of credit for water projects and delay reimbursing these lines of credit from the RTF until after 2031, once sufficient funds are available to repay these outstanding amounts.
- Utilize Federally Funded Drinking Water Revolving Fund: In FY25, North Dakota's Drinking Water Revolving Loan Fund (DWRLF) was allocated more than $43M in federal funding. While the WIRLF has been utilized for some funding for the regional water

systems, the projects could also seek inclusion in the State's Intended Use Plan for the DWRLF to access those funds. Because many of the communities serviced by the three systems may meet the requirements of "disadvantaged communities" under governing legislation, the DWRLF funding could be structured in a way that makes it eligible for "principal forgiveness," which effectively converts the loan, fully or in part, into grants funded through federal funds. The State would have to balance the benefits of this approach with the needs of smaller water projects and communities that rely on DWRLF for affordable financing.

- Expand Capacity of WIRLF: Given the anticipated local funding needs of the projects, particularly RRVWSP, the State could consider expanding the WIRLF to make more long-term and low-cost funding available to local sponsors of the regional water systems. As an alternative to funding the expansion using additional resources out of the RTF, the State could consider using blended finance approaches (discussed further below) to draw private capital into the WIRLF.
- Utilize Infrastructure Revolving Loan Fund for Water Projects: BND manages the Infrastructure Revolving Loan Fund (IRLF), that provides low-cost loans to political subdivisions, GDCD, and LAWA for repair, replacement, and new infrastructure projects, including roads, bridges, airports, communications, and water. IRLF financing could be used to address the funding needs for the local share of costs of the three systems.
- Access Additional Federal Funding: While some federal funding has already been leveraged for the SWPP and NAWS projects, the State could seek to attract additional federal funding for the projects. This funding could include Congress-directed earmarks and grant funding or finance from USDA Rural Development, EPA, FEMA, Bureau of Reclamation, or other programs. For example, in November 2025, EPA announced the availability of $6.5B in loans and guarantees under its Water Infrastructure Finance and Innovation Act (WIFIA) program, which provides long-term, low-cost, supplemental credit assistance under customized terms to creditworthy water infrastructure projects of national and regional significance. However, the State would have to weigh the benefits of accessing federal funding against the risk of additional lawsuits and construction delays that could result from the projects becoming subject to the requirements of NEPA.
- Guarantees and Blended Financing: The State can use its flexible RTF funding and strong credit rating for blended finance approaches that draw more private capital into the regional water system projects by mitigating risk and enhancing returns for private investors. This can take several forms, including:
    - providing guarantees to the local regional water system sponsors (e.g., LAWA, NAWS Authority, and SWA) to access finance for buildout and REM needs at a lower cost;
    - providing a guarantee or "first loss" funding to WIRLF or a similar fund to mitigate risk for private investors and draw outside capital into the fund;
    - providing interest subsidies to bridge the gap between the interest rate required by private investors to finance the regional water systems and the affordable interest rates charged by BND to borrowers under WIRLF or similar funds.

The State could also seek to partner with large corporate water users that benefit from the regional water systems and water-focused private foundations to attract other flexible funding that could be used as catalytic capital within blended finance structures.

Conclusion

North Dakota's regional water systems are critical long-term public investments, and their success will depend not only on continued capital support, but on governance and financing models that are clear, sustainable, and accountable. While SWPP, NAWS and RRVWSP each face distinct circumstances, the same underlying priorities apply across all three systems: aligning decision-making with risk and responsibility, strengthening long-range financial planning, improving transparency, and building the operational capacity needed to support reliable service over time. Advancing these priorities by implementing one or more of the options outlined in this report will help the State and local partners better manage costs, reduce delivery risk, improve public confidence, and position the systems to meet future water needs.

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Figure Descriptions

Figure 3: SWPP Map: The image shows a map of North Dakota's Southwest Pipeline Project including the project's location within the state and major pipeline and infrastructure components.

Figure 4: SWPP Current Structure: The diagram uses boxes and arrows to visualize the existing ownership, operations, and financing structures of the Southwest Pipeline Project, as more fully described in the text of the study.

Figure 5: SWPP Current State: The table is an evaluation of the Southwest Pipeline Project's current state across the study's nine evaluation criteria. As noted in the table, red indicates low performance, yellow indicates medium performance, and green indicates high performance.

Figure 6: SWPP Option 1 Proposed Structure: The diagram uses boxes and arrows to visualize the proposed ownership, operations, and financing structures of Option 1 for the Southwest Pipeline Project, as more fully described in the text of the study.

Figure 7: SWPP Option 2 Proposed Structure: The diagram uses boxes and arrows to visualize the proposed ownership, operations, and financing structures of Option 2 for the Southwest Pipeline Project, as more fully described in the text of the study.

Figure 8: SWPP Option 3 Proposed Structure: The diagram uses boxes and arrows to visualize the proposed ownership, operations, and financing structures of Option 3 for the Southwest Pipeline Project, as more fully described in the text of the study**.**

Figure 9: SWPP Impact Analysis: The table is an evaluation of the Southwest Pipeline Project's current state across the study's nine Evaluation Criteria. Additionally, the impact of each of the recommended options on the current state is evaluated across each Evaluation Criteria.

Figure 10: NAWS Map: The image shows a map of North Dakota's Northwest Area Water Supply Project including the project's location within the state and major pipeline and infrastructure components.

Figure 11: NAWS Current Structure: The diagram uses boxes and arrows to visualize the existing ownership, operations, and financing structures of the Northwest Area Water Supply Project, as more fully described in the text of the study.

Figure 12: NAWS Current State: The table is an evaluation of the Northwest Area Water Supply Project's current state across the study's nine Evaluation Criteria. As noted in the table, red indicates low performance, yellow indicates medium performance, and green indicates high performance.

Figure 13: NAWS Option 1 Proposed Structure: The diagram uses boxes and arrows to visualize the proposed ownership, operations, and financing structures of Option 1 for the Northwest Area Water Supply Project, as more fully described in the text of the study.

Figure 14: NAWS Option 2 Proposed Structure: The diagram uses boxes and arrows to visualize the proposed ownership, operations, and financing structures of Option 2 for the Northwest Area Water Supply Project, as more fully described in the text of the study.

Figure 15: NAWS Option 3 Proposed Structure: The diagram uses boxes and arrows to visualize the proposed ownership, operations, and financing structures of Option 3 for the Northwest Area Water Supply Project, as more fully described in the text of the study.

Figure 16: NAWS Impact Analysis: The table is an evaluation of the Northwest Area Water Supply Project's current state across the study's nine Evaluation Criteria. Additionally, the impact of each of the recommended options on the current state is evaluated across each Evaluation Criteria.

Figure 17: RRVWSP Map: The image shows a map of North Dakota's Red River Valley Water Supply Project including the project's location within the state and major pipeline and infrastructure components.

Figure 18: RRVWSP Current Structure: The diagram uses boxes and arrows to visualize the existing ownership, operations, and financing structures of the Red River Valley Water Supply Project, as more fully described in the text of the study.

Figure 19: RRVWSP Current State: The table is an evaluation of the Red River Valley Water Supply Project's current state across the study's nine Evaluation Criteria. As noted in the table, red indicates low performance, yellow indicates medium performance, and green indicates high performance.

Figure 20: RRVWSP Option 1 Proposed Structure: The diagram uses boxes and arrows to visualize the proposed ownership, operations, and financing structures of Option 1 for the Red River Valley Water Supply Project, as more fully described in the text of the study.

Figure 21: RRVWSP Option 2 Proposed Structure: The diagram uses boxes and arrows to visualize the proposed ownership, operations, and financing structures of Option 2 for the Red River Valley Water Supply Project, as more fully described in the text of the study.

Figure 22: RRVWSP Option 3 Proposed Structure: The diagram uses boxes and arrows to visualize the proposed ownership, operations, and financing structures of Option 3 for the Red River Valley Water Supply Project, as more fully described in the text of the study.

Figure 23: RRVWSP Impact Analysis: The table is an evaluation of the Red River Valley Water Supply Project's current state across the study's nine Evaluation Criteria. Additionally, the impact of each of the recommended options on the current state is evaluated across each Evaluation Criteria.