



NORTH
Dakota | Water Resources
Be Legendary.

NAWS

PROJECT UPDATE

ND Department of Water Resources

APPENDIX D





NAWS

NORTHWEST AREA WATER SUPPLY

- **1 Of 2** State-Owned Regional Water Systems In ND
- Authorized By The Garrison Diversion Reformulation Act Of 1986 & The Dakota Water Resources Act Of 2000
- Construction **Began In 2002**
- Lawsuits Initiated Immediately
- Favorable Ruling By District Court In 2017
- Upheld By Appellate Court In 2019
- **Construction** Back Underway After **17 Years** Of Litigation



NAWS

NORTHWEST AREA WATER SUPPLY

- Designed To Serve A Project Area Of **81,000 People**
- NAWS Is Owned By The State Water Commission & Administered By The Department Of Water Resources (DWR)
- DWR Is Responsible For Construction & Operation Of NAWS
- Local Share For NAWS Is Provided By City Of Minot Through The **1% Sales Tax**
- Except For The Biota Water Treatment Plant Which Is A Federal Responsibility, City Of Minot Provides **35% In Cost-Share** For NAWS
- HB 1218 Changed NAWS Advisory Committee To NAWS Authority Last Session, First Meeting Held November 16th

NAWS AUTHORITY UPDATE

Aligns NAWS Authority with other water authorities in the state.
Assures representation from all entities receiving water from the project.

ADVISORY BOARD	1	City Of Minot	NAWS Authority (HB 1218)	4	City Of Minot
	1	City Other Than Minot		1	Cities Other Than Minot With Direct Water Service From NAWS
	1	County Water Resource District Representative		1	State Water Commission - Souris River Basin
	1	State Water Commission		3	North Prairie Regional Water District All Seasons Water Users District Upper Souris Water District
	1	Rural Water Distribution System Representative			
	1	At-Large		1	Garrison Diversion Conservancy District (Nonvoting)
	1	Garrison Diversion Conservancy District		1	Turtle Mountain Band Of Chippewa Indians (Nonvoting)
	1	Turtle Mountain Band Of Chippewa Indians (Nonvoting)		Total: 9 Voting; 2 Nonvoting	
	Total: 7 Voting; 1 Nonvoting				

NAWS AUTHORITY

AUTHORITY MEMBERS

City Of Minot Representatives

- Mayor Tom Ross
- Finance Director Dave Lakefield
- Utilities Director Jason Sorenson
- Former City Auditor Bob Schempp

North Prairie Regional Water Representative

- General Manager Teresa Sundsbak

All Seasons Water Users District Representative

- General Manager Dan Schafer

Upper Souris Water District

- Board President Shawn Raap

SWC Representative

- Commissioner Jason Zimmerman

Representative From Cities With Direct Connection To NAWS

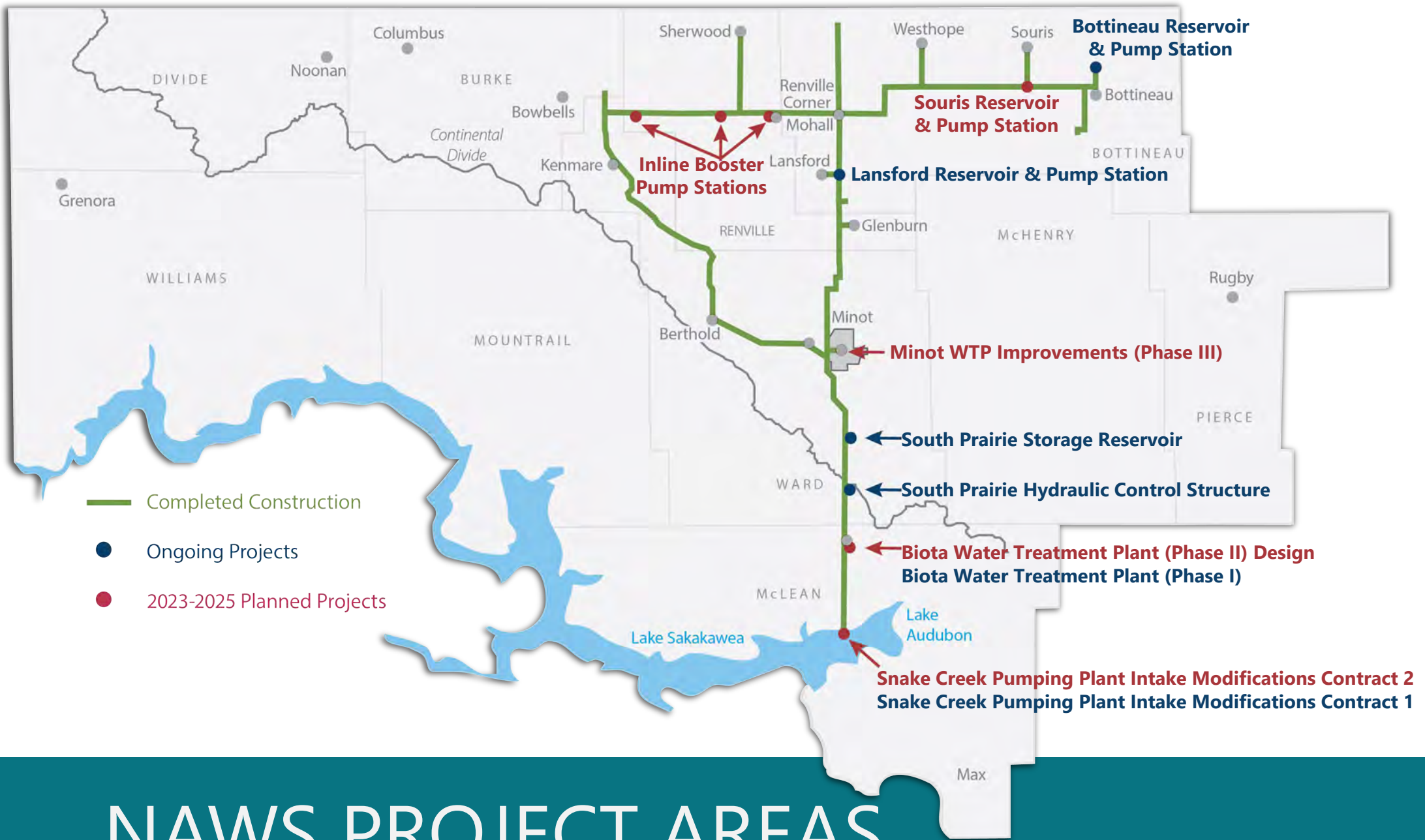
- Bottineau City Superintendent
Tony Schwalbe

GD CD Representative

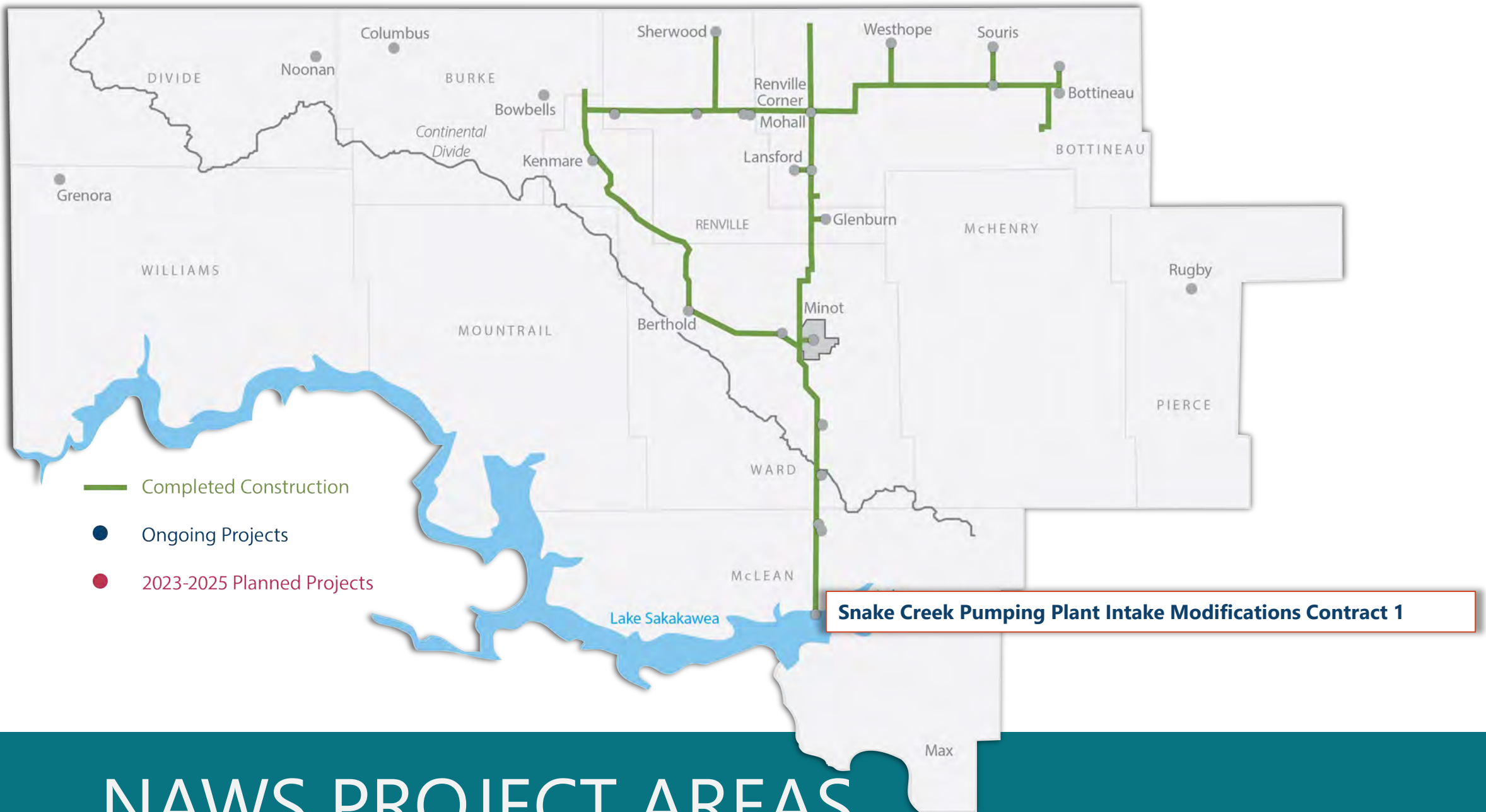
- Board Member Kenny Rodgers

Turtle Mountain Band Of Chippewa

- Appointment Pending



NAWS PROJECT AREAS



NAWS PROJECT AREAS

SNAKE CREEK PUMPING PLANT INTAKE MODIFICATIONS

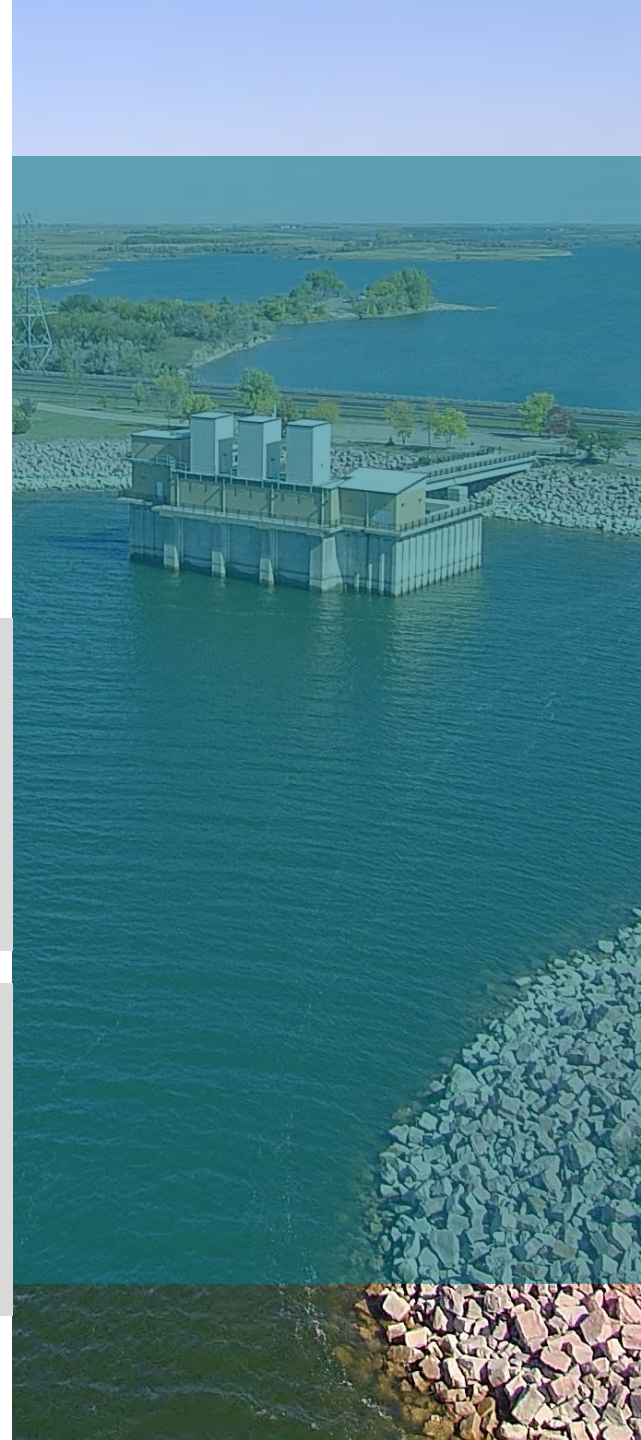
For Corps Permitting Discussion The Project
Was Categorized Into

CONTRACT 1

Is For Work Inside The Existing Facility
(No Section 408 Permit Required)

CONTRACT 2

Is For External Work
(Section 408 Permit Is Required)



CONTRACT 1

SNAKE CREEK PUMPING PLANT INTAKE MODIFICATIONS



- In September 2022 Bids Were Opened - Included Materials With **Long Lead Times** In Contract 2 Category (Pipeline, Permanent Intake Screen, Valves, Fittings, Etc)
- Included Cost Escalation Language In Contract To **Secure Better Bids**
- Bid Came In **250% Higher Than Estimate**

CONTRACT 1

SNAKE CREEK PUMPING PLANT INTAKE MODIFICATIONS



Readvertised Contract 1 Split Into **Three Contracts**

Contract 6-1A Procurement Contracts

- Include Equipment With Long Lead Times
- Contracts Awarded At **December 2022** SWC Meeting

Contract 6-1A Demolition Contracts

- Removal Of Existing Pump Unit No. 1 & Construction Of Bulkhead In The Discharge Structure On Lake Audubon
- Contract Awarded At **December 2022** SWC Meeting

Contract 6-1A Construction Contract

- Awarded At **February 2023** SWC Meeting

CONTRACT 1

SNAKE CREEK PUMPING PLANT INTAKE MODIFICATIONS



Procurement Contracts

- Equipment Submittal Review & Approval Ongoing
- Potential Delay With Delivery Of Equipment

Demolition Contracts

- Extensive Review & Approval Needed From Bureau Of Reclamation
- Contract Completion Delayed
- Discussions Ongoing With Contractor Regarding Recovery Schedule

Construction Contract

- Delayed
- Schedule Will Be Coordinated With Demolition Contract

CONTRACT 2

SNAKE CREEK PUMPING PLANT INTAKE MODIFICATIONS



- Completeness Review Completed By USACE **July 2022**
- SWC Executed **1156 Agreement** With The USACE To Fund The Section 408 Review
- Temporary Construction License Received In **June 2023**

CONTRACT 2

SNAKE CREEK PUMPING PLANT INTAKE MODIFICATIONS



Contract 2 Divided Into **Two Construction Contracts**

Contract 2-1E

- Include Discharge Pipeline Which Is Necessary To **Move Water** To Biota Water Treatment Plant (Located At Max)
- Awarded At **June 2023** SWC Meeting
- Completion Expected - **Summer 2024**

Contract 1-1A

- Will Include The Intake Pipe & Permanent Intake Structure
- Completion Expected - **1-2 Years After Bidding** (Bidding Expected 2024 Or 2025)
- Permitting, Funding, Construction Difficulties, Supply Chain Issues Are All Potential Variables
- Continue To Work With Federal Partners On The Best Path Forward

SNAKE CREEK PUMPING PLANT INTAKE

MODIFICATIONS IMPLEMENTATION



Components Necessary To Move Water To Biota WTP

Contract 2-1E

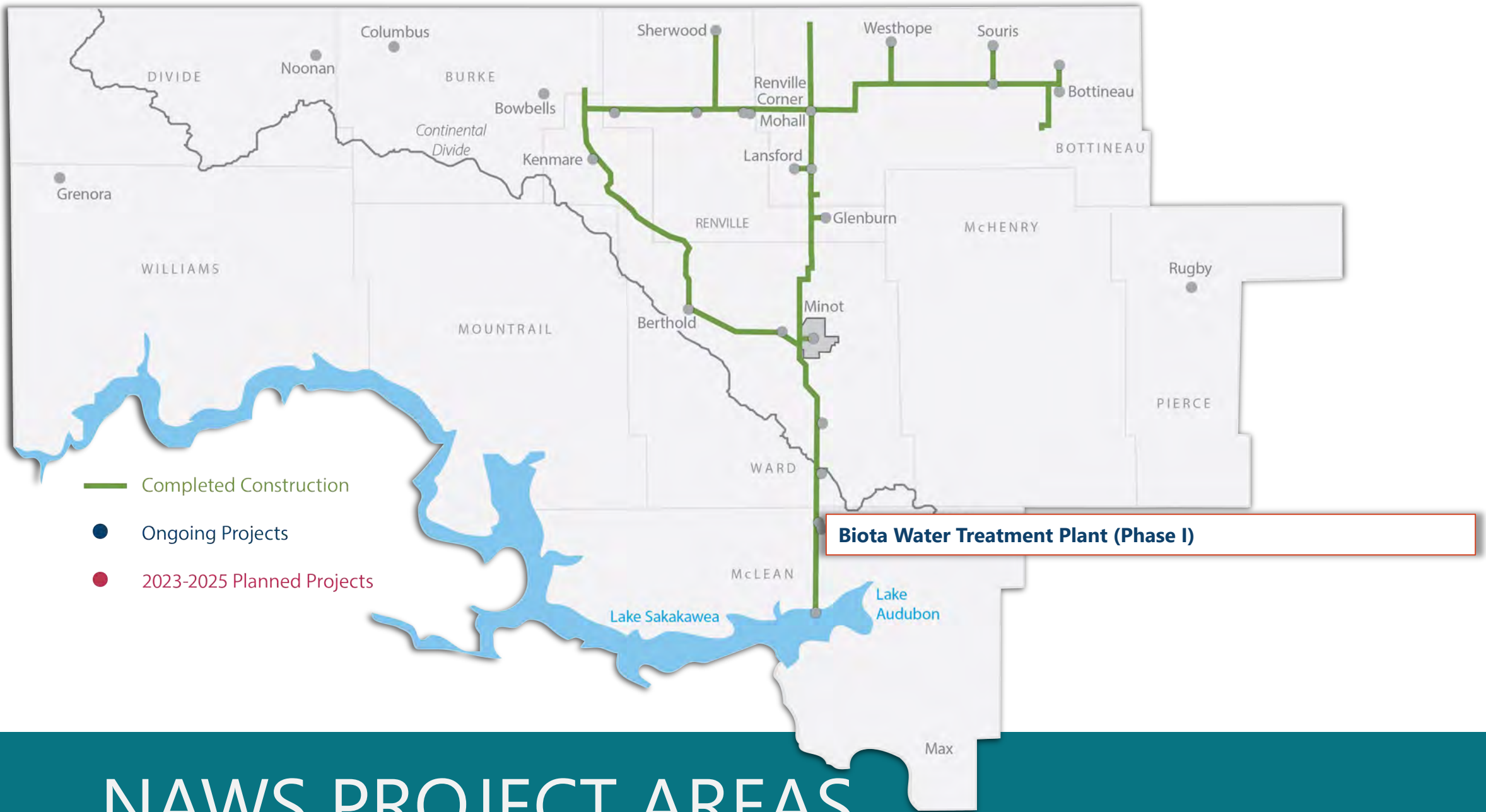
- Discharge Pipeline - Connects SCPP To NAWWS Raw Water Pipeline
- Completion Date In Contract - **Summer 2024**

Contract 6-1A Demolition, Procurement, Construction

- All Contract Components Except Backup Generator Will Need To Be Operational
- Completion Dependent Upon Delivery Schedules For Electrical Components
- 6-1A Construction Includes A Temporary Intake Screen

Contract 1-1A Permanent Intake

- Will Mitigate Water Quality & Capacity Impacts From Low Lake Levels
- Not Necessary To Move Water To Minot



NAWS PROJECT AREAS

BIOTA WATER TREATMENT PLANT

PHASE I - FUNDING



- Biota WTP Is For Boundary Waters Treaty Act Compliance & Therefore A Federal Responsibility Per Dakota Water Resources Act
- Garrison Diversion Unit MR&I Program Is Reclamation's Only Funding For Water Development In North Dakota
- All Costs Incurred For Phase I Of The Biota WTP Have Been Reimbursed With MR&I Funds, Sufficient MR&I Funding Has Been Approved For Phase I Construction
- The Line Of Credit (LOC) Was Needed To Award The Phase I Contracts But Funding From LOC Has Not Been Accessed

BIOTA WATER TREATMENT PLANT

BOR, CITY OF MINOT

Memorandum Of Agreement Laying Out Roles & Responsibilities Between BOR, City of Minot, SWC Finalized & Partially Executed

A Cooperative Agreement With BOR For Funding The Operations Of BWTP Will Be Developed Soon

An Agreement Between City Of Minot & SWC Is Under Development



PHASE I

BIOTA WATER TREATMENT PLANT

Features

- The Treatment Process Includes Clarification Through Flocculation & Dissolved Air Flotation, Dual Media Filtration, UV Disinfection, & Chemical Disinfection Through Chlorine Converted To Chloramine
- Freeze-Thaw Lagoons Will Be Used For Solids Residual Handling (Sludge From The Clarification Process)
- Includes A Shop Building For Storing Equipment For Building & Grounds Maintenance As Well As Staging Delivered Process Equipment During Construction Of Phase I & Phase II

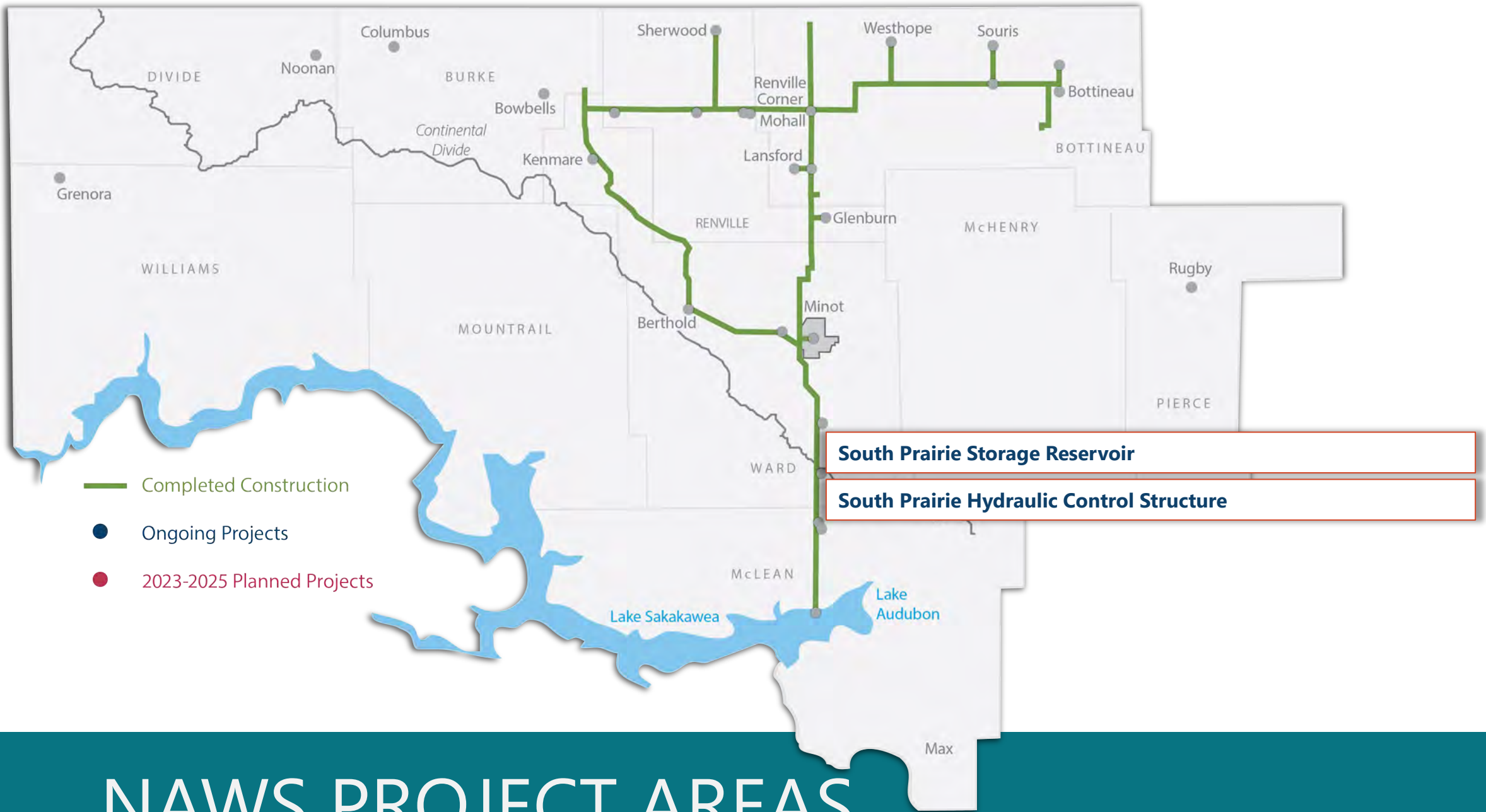


PHASE I

BIOTA WATER TREATMENT PLANT



- Shop Building Complete
- Plant Building Structurally and Architecturally Complete
- Working On Process Piping, Coatings, Wiring, HVAC, Equipment Installation, Etc.
- **Substantial Completion** Date On The Contract - **February 2024**
- **Facility** Completion Expected - **April 2024**
- Startup Dependent On SCPP Modifications & Discharge Pipeline Completion - Expected **Fall 2024**



NAWS PROJECT AREAS

SOUTH PRAIRIE RESERVOIR & HYDRAULIC CONTROL STRUCTURE



- 10.5 Million Gallon Reservoir, Flow Control Facility, & Hydraulic Control Structure
- Hydraulic Control Structure & Flow Control Facility Cast Are Nearing Substantial Completion
- Reservoir Is Currently Being Filled For Leak Testing
- Contract Cost - **\$15 Million** (2021-2023 Funding)
- Completion Date On Contract - **December 2023 For Substantial Completion**
- **November 2024** For Final Completion

SOUTH PRAIRIE HYDRAULIC CONTROL STRUCTURE

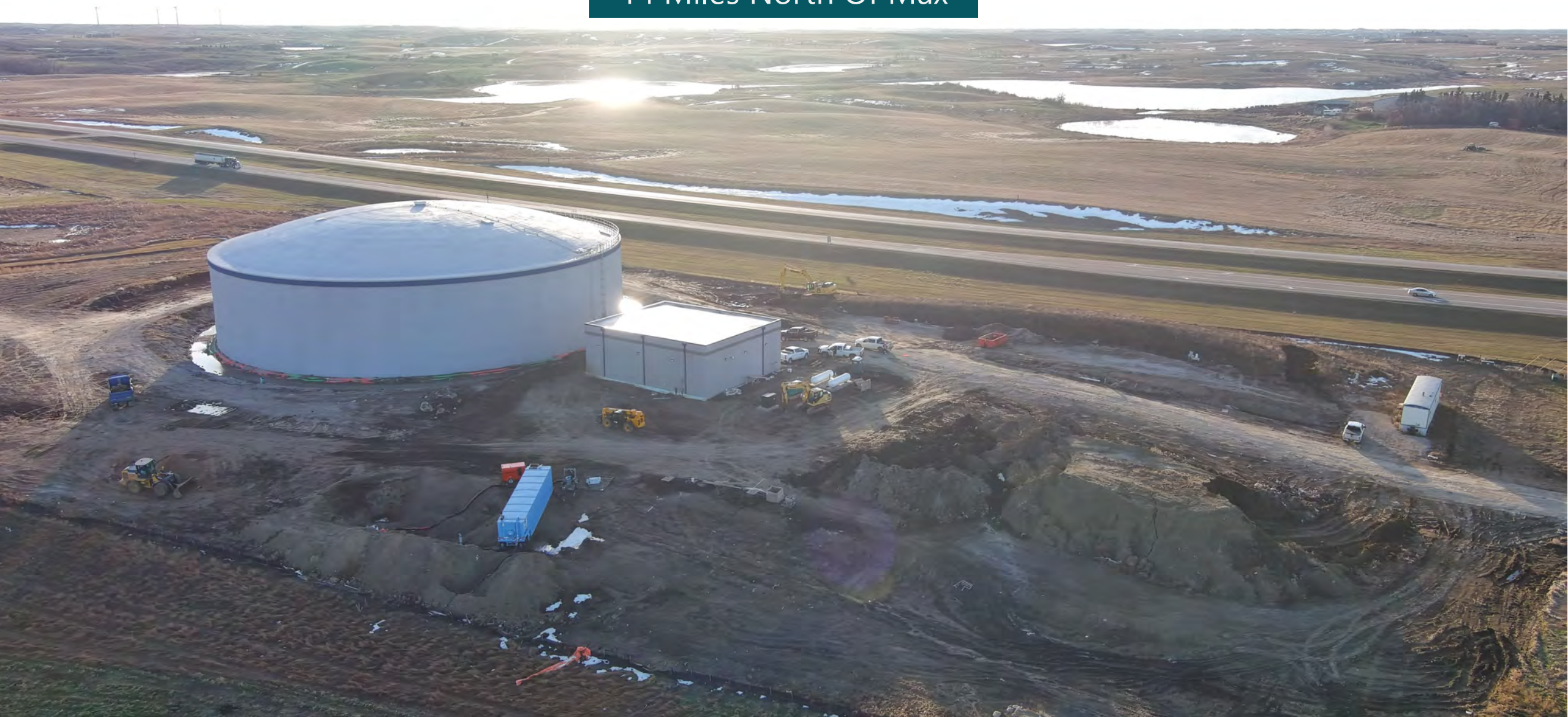


Located 8 Miles North Of Max At Continental Divide

The Hydraulic Control Structure Protects The Pipeline By Eliminating Pressure Spikes

SOUTH PRAIRIE RESERVOIR & FLOW CONTROL FACILITY

14 Miles North Of Max





Delivery Of Lake Water To Minot Expected **Fall Of 2024**

- Intake Contract 1 Completion - **Fall 2024**
- Contract 2 - Discharge Pipeline - **Anticipated Completion Summer/Fall 2024**

Delays In Construction May Delay Delivery

- Supply Chain Issues
- Pandemic Disruptions
- Timely Permitting
- Funding Limitations
- Operational Conflicts With Minot WTP/Peak Usage

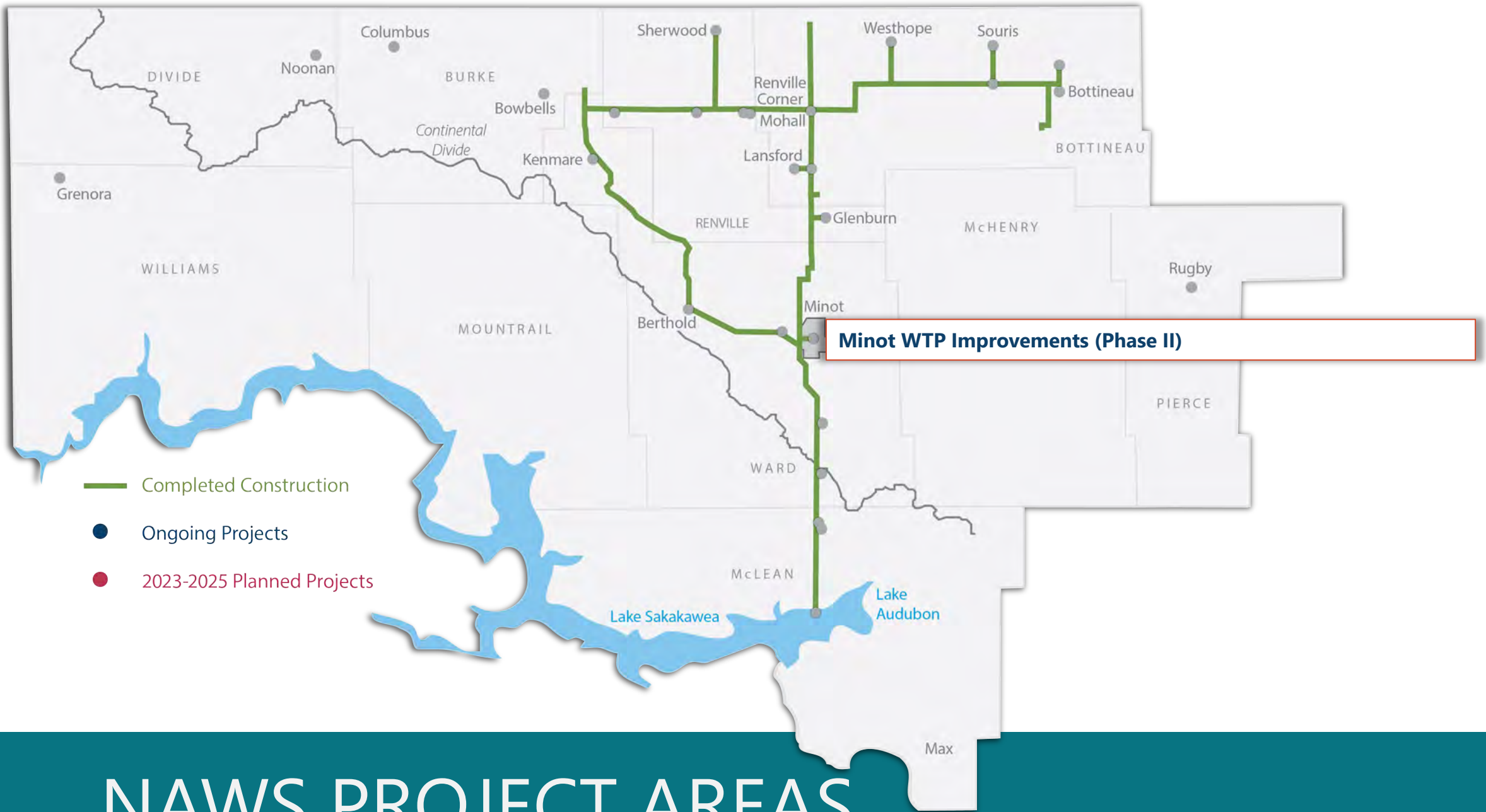
TIMELINE FOR LAKE WATER TO MINOT

MINOT INTERIM WATER SUPPLY

- Raw Water Supply For NAWS From Ground Water Until The Intake For NAWS Is Complete
- Summer Of 2021 & 2022 - Ground Water Wells Had Some Operational Issues
- Issues Resolved & City of Minot Has Signed An Amendment to The Interim Water Supply Agreement

**Total Raw Water Capacity From
Ground Water -17 MGD**





NAWS PROJECT AREAS

MINOT WATER TREATMENT PLANT



Minot WTP Capacity Is **18 Million Gallons** Per Day - Built In 1950s & 1960s

Phase I Construction Completed In 2013
Replaced The Filtration Units, Controls

Phase II Bid In 2018 Added Softening Basins, Laboratory, And Replaced Chemical Feed Systems

Phase III Expansion To 27 Million Gallon Per Day - Planned Bid Spring 2025

MINOT WATER TREATMENT PLANT

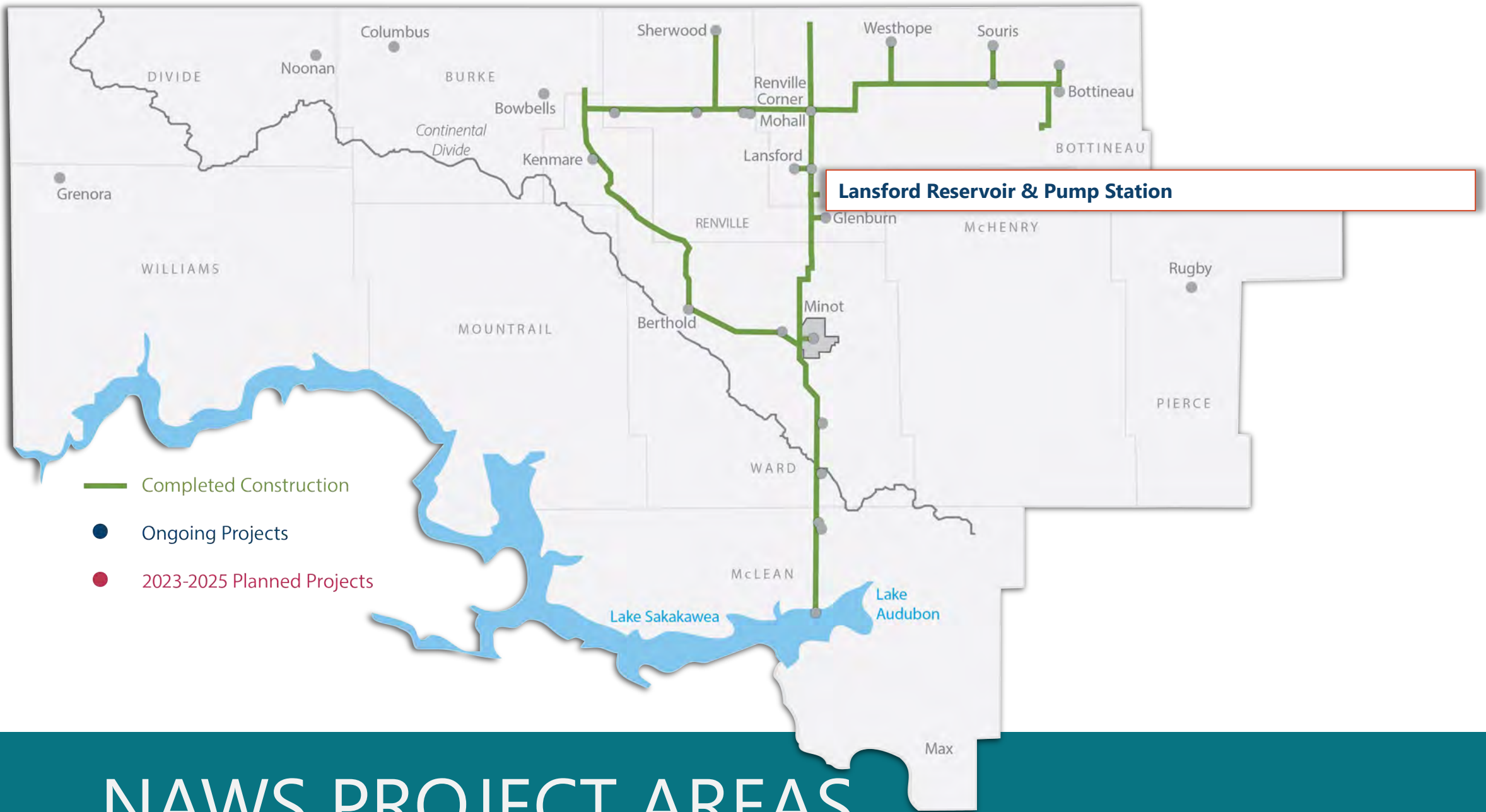


PHASE II

MINOT WATER TREATMENT PLANT

- Currently Working Through Finishing Details
- Both Basins Operational
- Substantially Complete, A Few Weather-Dependent Items & Replacement Items With Long Lead Times Remain
- Currently Working With Contractor On Contract Close-Out





NAWS PROJECT AREAS

LANSFORD

LANSFORD RESERVOIR & PUMP STATION

Reservoir

4.5 Million Gallons

Pump Station & Operation Center

2500 GPM Capacity

Operational Since October 2022



LANSFORD RESERVOIR & PUMP STATION



ADDITIONAL CUSTOMERS

An aerial photograph of a rural landscape. A paved road with yellow lane markings runs diagonally from the bottom left towards the top right. To the right of the road is a large green field, and further right is a yellow field. In the distance, there are some buildings and more fields under a clear sky.

Began Water Service
To Bottineau

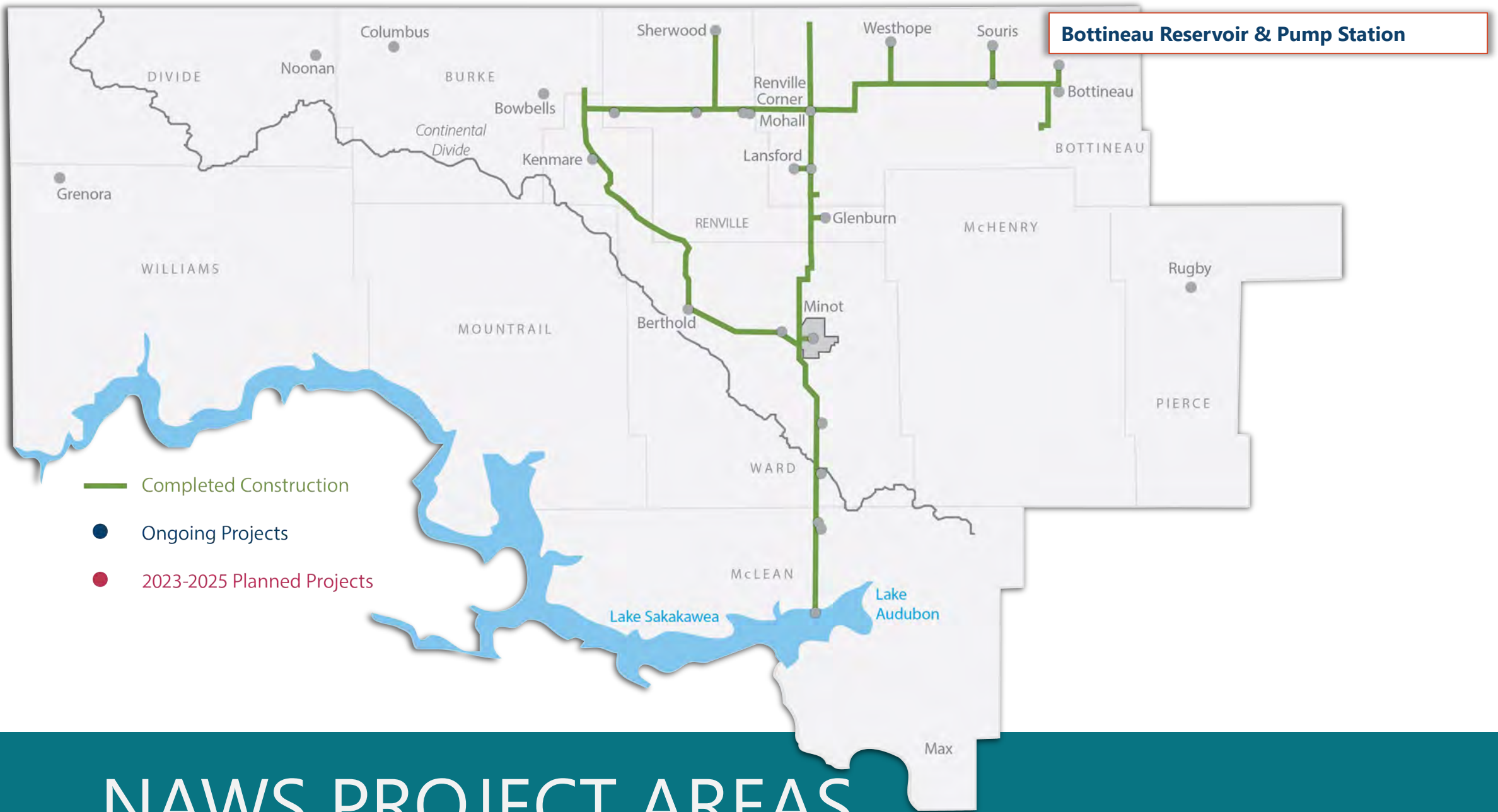
October 19, 2022

Began Additional Water Service
To Upper Souris Water District

February 15, 2023

Began Water Service To
Westhope

October 24, 2023



NAWS PROJECT AREAS

BOTTINEAU

BOTTINEAU RESERVOIR & PUMP STATION

Reservoir

3 Million Gallons

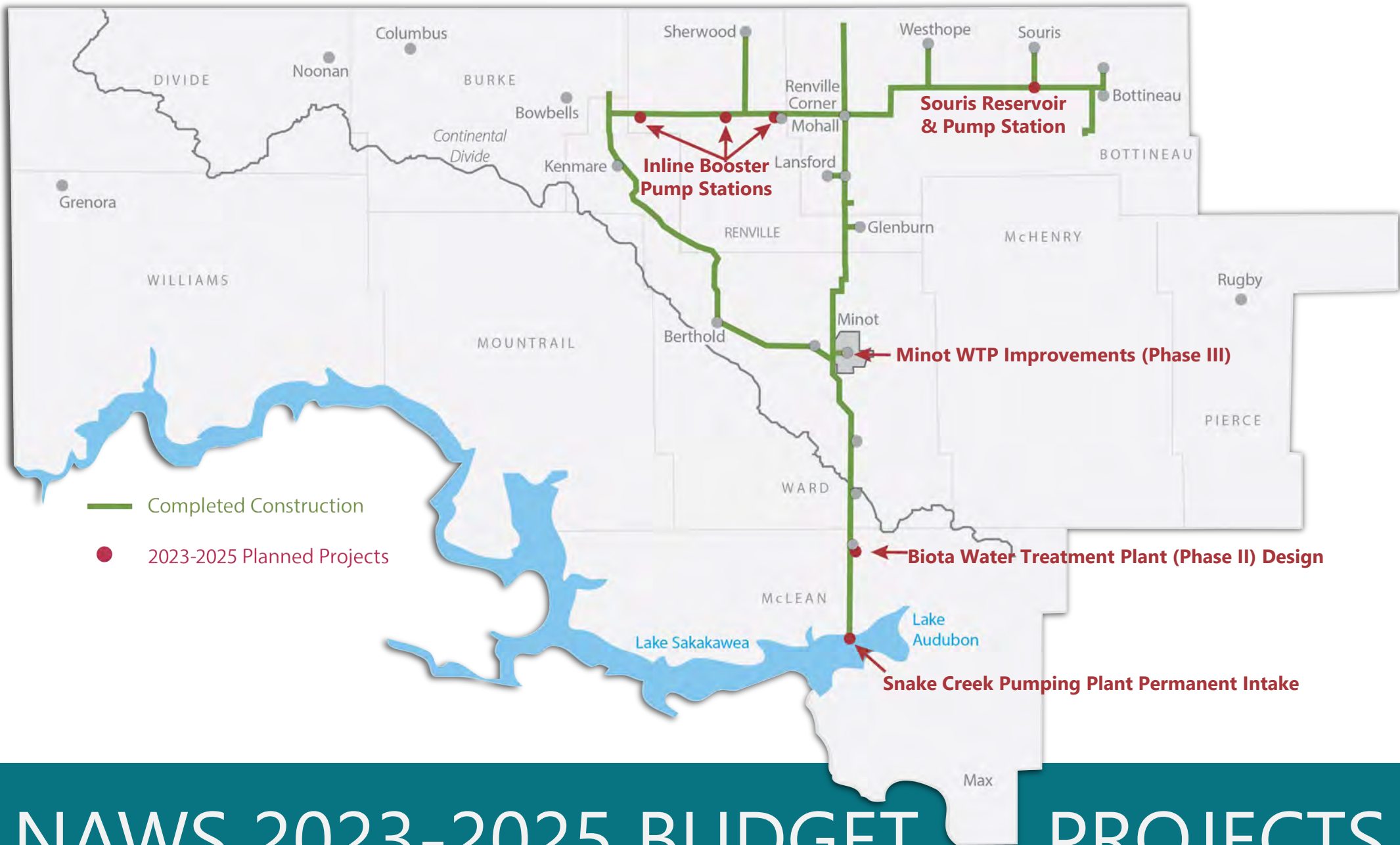
Pump Station

1400 GPM Capacity

Completion Date

November 2024





NAWS 2023-2025 BUDGET PROJECTS



REMAINING PROJECTS

Biota WTP Phase II Construction

Expansion To **24.5 Million Gallons Per Day**

Planned For **2025-2027 Biennium**

Expected Operational **Timeframe 2029**

NEXT STEPS

Continue To Work With Contractors To Coordinate Completion & Startup Of Intake & Biota WTP & Initialization & Startup Of Raw Water Line

Continue To Work With Reclamation, Minot, & NDDEQ On Operations Of The Biota WTP

Continue To Work With Federal Partners On Permanent Intake

Work On Design Of Minot WTP Phase III (Bid Late This Biennium) & Biota WTP Phase II





THANK YOU

 ND Department of Water Resources

 701.328.2750

 dwr@nd.gov

 dwr.nd.gov

 www.facebook.com/NDWaterResources



NORTH
Dakota
Be Legendary.

| Water Resources