January 9, 2025



## AGENCY 84 BUDGET

House Appropriations Committee | House Bill 1020 | 69th Legislative Assembly

Dakota | Water Resources

Be Legendary.



# ABOUT DEPARTMENT OF WATER RESOURCES & STATE WATER COMMISSION



ND CENTURY CODE TITLE 61

#### Divisions Within DWR Remained The Same Including:

- Administrative Services
- Atmospheric Resources
- Planning & Education
- Regulatory
- Water Appropriation
- Water Development

#### DEPARTMENT OF WATER RESOURCES

2021 LEGISLATIVE SESSION - HB 1353 RESTRUCTURED THE AGENCY AS THE DWR, APPOINTED A DIRECTOR, & MADE THE AGENCY A MEMBER OF THE GOVERNOR'S CABINET

#### MISSION, VISION, & VALUES

5-YEAR STRATEGIC PLAN





To responsibly manage North Dakota's water needs and risks for the people's benefit.

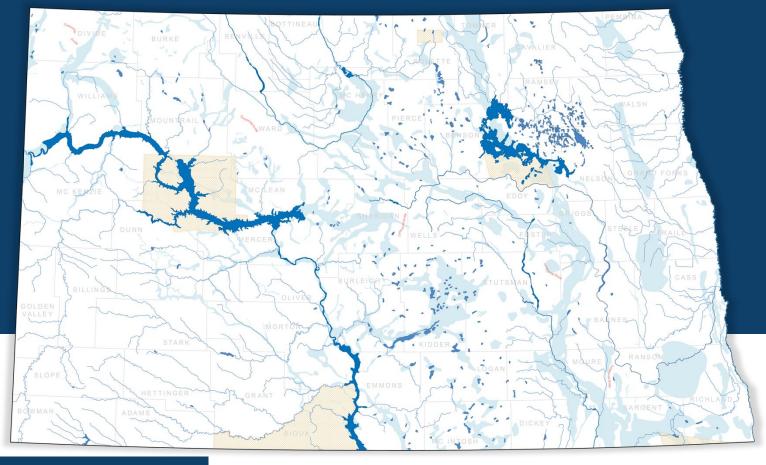


The Department of Water Resources will sustainably manage and develop North Dakota's water resources for the health, safety, and prosperity of its people, businesses, agriculture, energy, industry, recreation, and natural resources.

#### VALUES

The Department of Water Resources values fairness, objectivity, accountability, responsiveness, engagement, and credibility. We pledge to use professional and scientific methods to maintain the highest of standards in our delivery of services.

#### MANAGING NORTH DAKOTA'S WATER RESOURCES

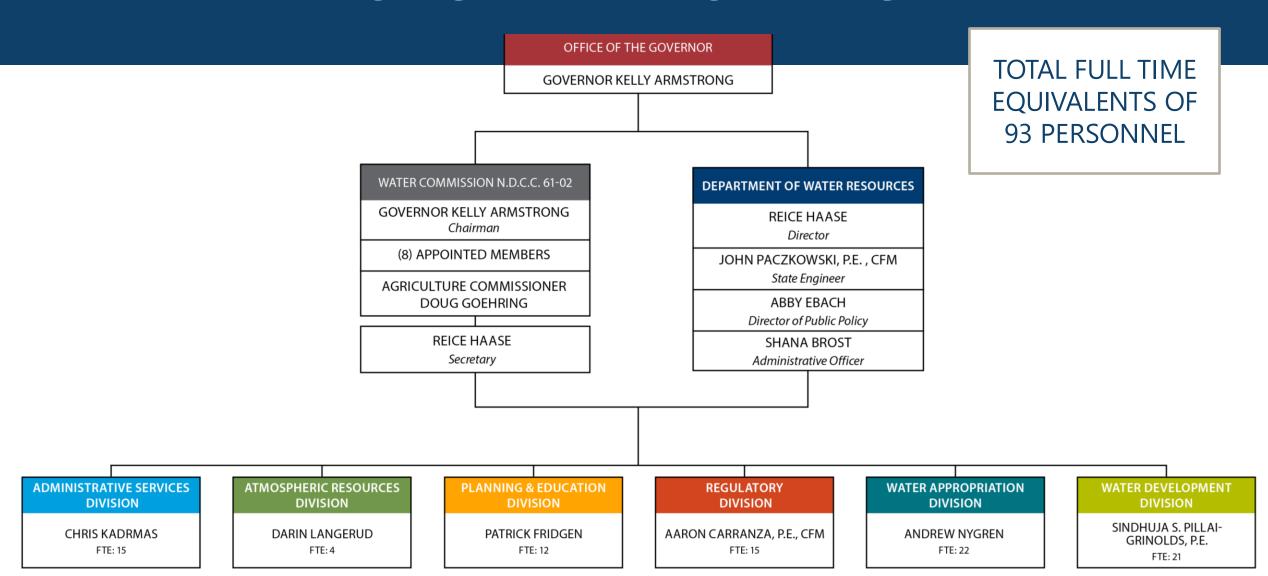


60 Million Acre-Feet Of Water Is Stored In Major Aquifers In ND

Over 7,000 River Miles Are In The State, Including Major Rivers & Tributaries

Seven Of ND's Largest Lakes & Reservoirs Cover 863,000 Acres

#### DWR ORGANIZATIONAL CHART



SWC Chair Governor Armstrong



Ag. Comm. Goehring



Secretary Reice Haase

#### WATER COMMISSION



Gene Veeder Upper Missouri River Basin



Jason Zimmerman Mouse River Basin Reappointed



Jeff Frith Devils Lake Basin



Michael Anderson Lower Red River Basin



James Odermann Little Missouri, Upper Heart, & Upper Cannonball River Basins



Jay Volk Lower Missouri River Basin



Connie Ova James River Basin



April Walker Upper Red River Basin Reappointed

#### DWR DIRECTOR & STATE ENGINEER



#### DWR DIRECTOR

Reice Haase., Director rehaase@nd.gov | 701-328-4940

The Director is appointed by the Governor, serves as a Cabinet member, provides overall leadership and decision-making, oversees the State Engineer and DWR team members, and serves as Secretary to the State Water Commission.



#### STATE ENGINEER

John Paczkowski, P.E., State Engineer jpaczkowski@nd.gov | 701-328-4940

ND's State Engineer is responsible for several regulatory functions and responsibilities, including allocation of the state's waters, dam safety, and drainage.

#### DWR DIVISIONS



#### **ADMINISTRATIVE SERVICES**

Chris Kadrmas, Director ckadrmas@nd.gov | 701-328-1956

Accounting, general support, budget development, records management, human resources, State Water Commission meeting preparation, data/technology, and PRESENS.



#### **ATMOSPHERIC RESOURCES**

Darin Langerud, Director dlangerud@nd.gov | 701-328-4751

Cloud Modification Program, atmospheric research, data collection, pilot intern program, licenses and permits, and radar operations.

#### DWR DIVISIONS



#### **PLANNING & EDUCATION**

Patrick Fridgen, Director pfridgen@nd.gov | 701-328-4964

Water Development Plan, media relations, public outreach and education, Drought Livestock Water Supply Program, Environmental Reviews, Cost-Share Program, and MR&I



#### **REGULATORY**

Aaron Carranza, P.E., Director acarranza@nd.gov | 701-328-4813

Construction and drainage permits, sovereign lands, dam safety, floodplain management, water resource district support, and Silver Jackets Program.

#### DWR DIVISIONS



#### **WATER APPROPRIATION**

Andrew Nygren, Director anygren@nd.gov | 701-328-1069

Water rights permitting, ground and surface water management, subsurface exploration, data management, and water resource investigations.



#### **WATER DEVELOPMENT**

Sindhuja S.Pillai-Grinolds, Director spillai@nd.gov | 701-328-4954

Investigations and surveying, construction operations, flood response and recovery, Southwest Pipeline, Northwest Area Water Supply, Red River office, and Devils Lake outlet operations.

#### DWR FUNCTIONS & RESPONSIBILITIES

Allocation Of The State's Waters

**Cost-Share Funding** 

Dam Safety

**Drainage & Construction Permits** 

**Drone Initiatives** 

Drought Livestock Program

Floodplain Management

Investigations & Surveys

**LiDAR Collections** 

Map Services

North Dakota Cloud Modification Project

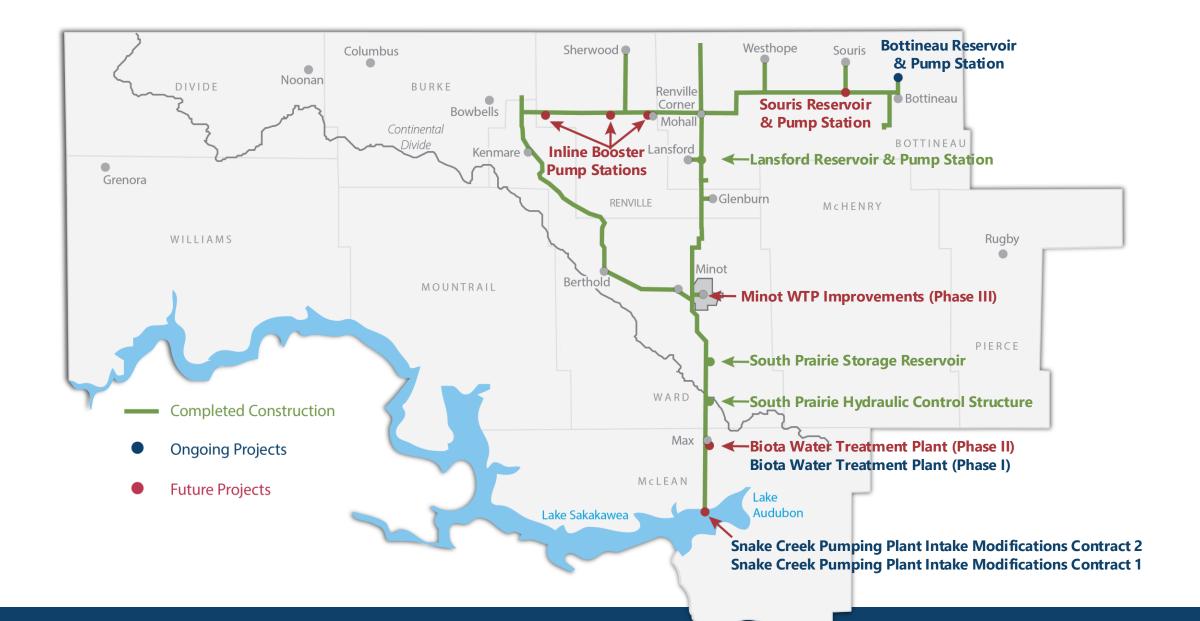
**PRESENS** 

Sovereign Land Management

Water Project Development



## STATE-OWNED PROJECTS



#### NAWS PROJECTS

#### **NAWS**

For The 1st Year Of The 23-25 Biennium, NAWS Received

\$6.9M

From City Of Minot

\$12.6M

From Federal Funds

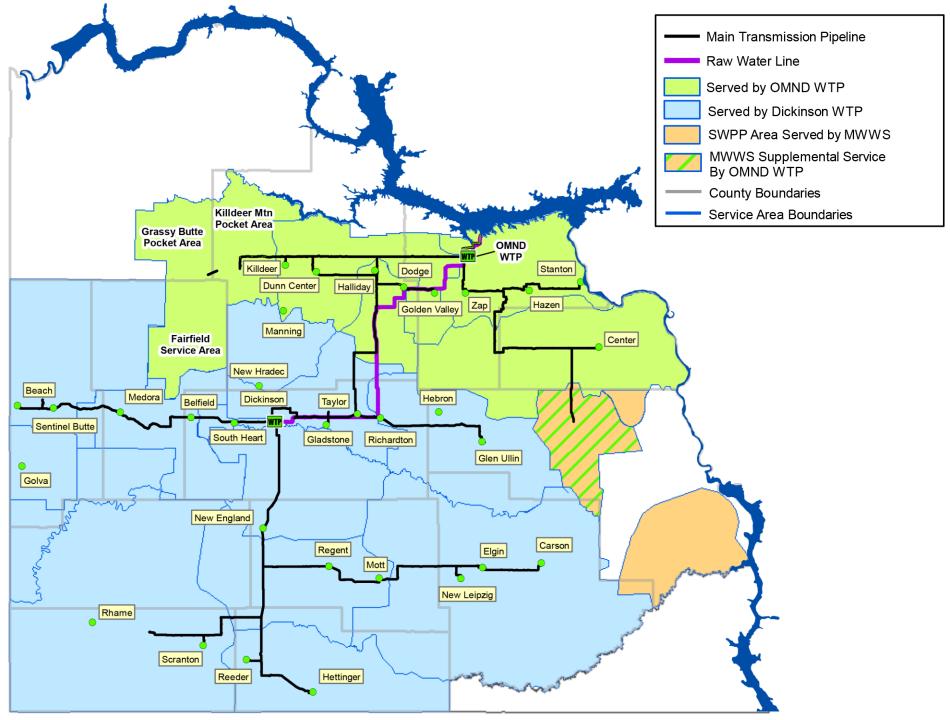
\$9.5M

From Resources Trust Fund

- Completion Of The South Prairie Reservoir, Flow Control Facility, Hydraulic Control Structure, & Minot Water Treatment Plant Phase II
- Ongoing Construction
  - Snake Creek Pumping Plant For The Intake
  - Discharge Pipeline Connecting The Snake Creek
     Pumping Plant To The Transmission Pipeline
  - Biota Water Treatment Plant Phase I
  - Bottineau Reservoir & Pump Station
- Lake Sakakawea Water Expected Delivery In 2025
- Design Ongoing For The Permanent Intake Pipeline
   & Screen Structure; Section 408 Application
   Submitted To The USACE

#### SOUTHWEST PIPELINE PROJECT UPDATES





#### SWPP - CONSTRUCTION UPDATES



- Metallic Pipeline Replacement Project Near City Of Taylor Complete
- Multi-Service Area Hydraulic Improvements Project
- Total Expenditures From July 2023 Through June 2024 = \$8.7M
- Supplementary Intake Continuing In Mediation Process
- Transmission West Zone Construction Anticipated Summer 2025
- Hydraulic Improvements North New England Area Moving Forward With Final Design
- Burt Hebron Expansion Moving Forward With Final Design
- SW Water Treatment Plant Expansion
  - Funding Approved At The December 2024 SWC Meeting
  - Will Treat 12 Million Gallons Per Day & Replace The 70-Year-Old Dickinson WTP
  - Expected 36 Month Construction Project

#### DEVILS LAKE

2024 DISCHARGE - 113,100 ACRE FEET





#### Operations Ended October 18



Operations Ended October 22

#### DEVILS LAKE OUTLET PROJECTS



#### **OUTLETS | PUMPS | STRUCTURE**

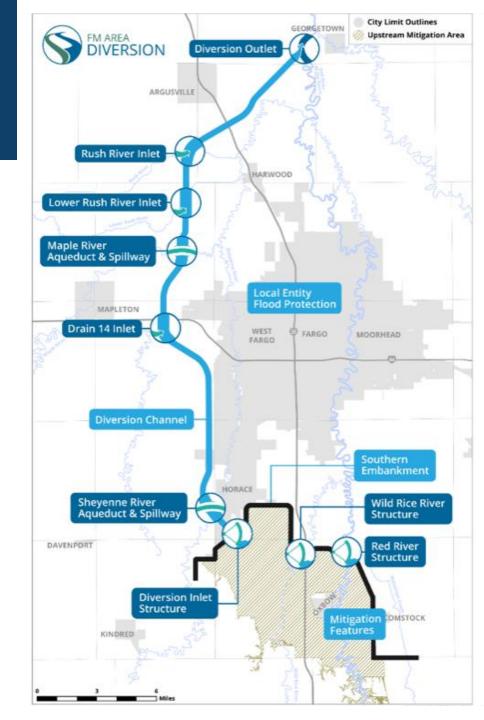
- Completed Flow Meter Replacements
- Completing Preventative Maintenance
- Inspecting Pumps & Motors
- Intake Sediment Removal (Spring 2025)



## FARGO-MOORHEAD DIVERSION PROJECT

### FM AREA DIVERSION PROJECT

- Will Provide 100-Year Protection
- Total Cost = \$3B+
  - Federal = \$750M
  - North Dakota = \$850M(2021 Session, HB 1431 Bonding Bill)
  - Minnesota = **\$86M**
  - Local = \$1.5B
- Includes 30-Mile Diversion Channel, 22-Mile Earthen
   Embankment, 3 Railroad Crossings, 2 Interstate Crossings,
   2 Aqueducts (Maple & Sheyenne Rivers), & More
- Estimated Operational 2027
- First P3 Project Delivery By US Army Corps
- DWR Has Permitting Oversight Over The Diversion, Embankment, & In-Town Levee Works

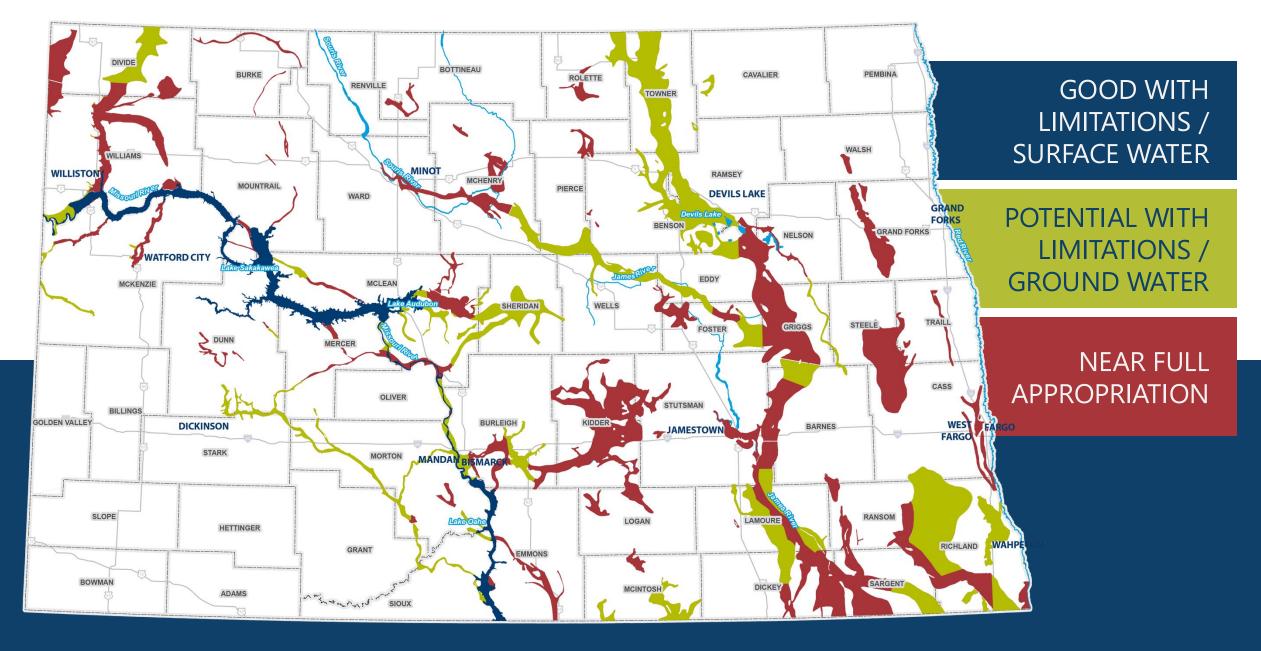




## MANAGING ND'S WATER RESOURCES

#### **REGULATORY ACTIONS 2024**



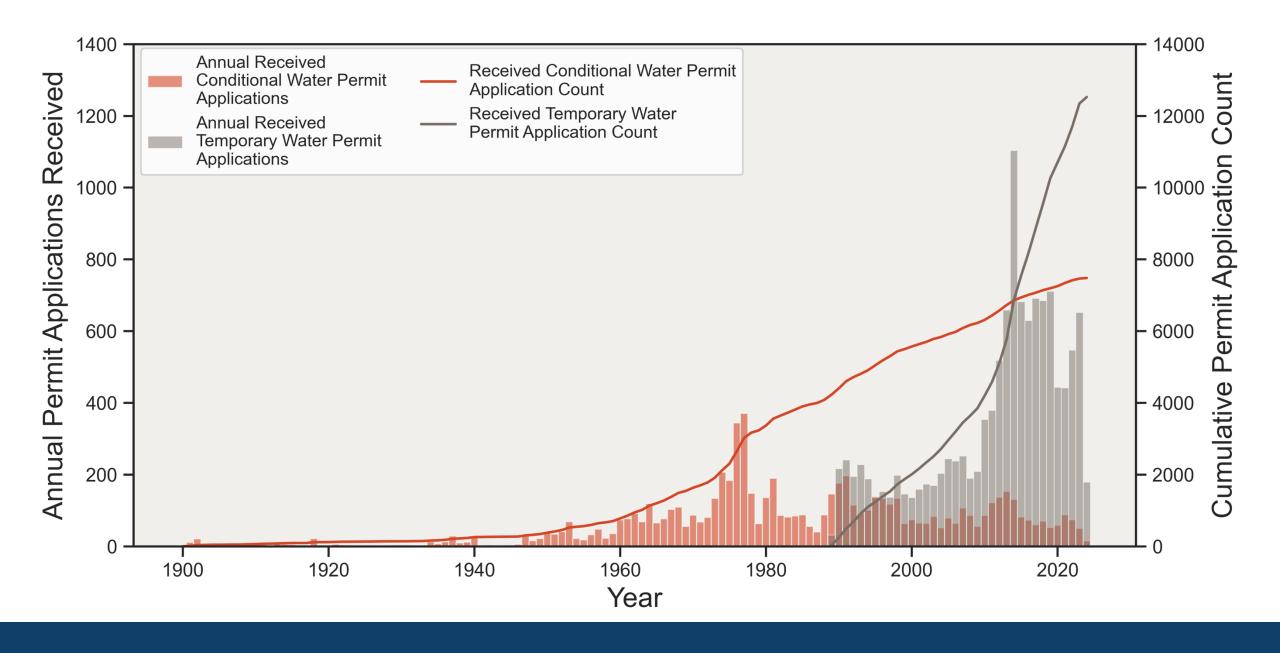


WATER AVAILABILITY POTENTIAL FOR ECONOMIC DEVELOPMENT

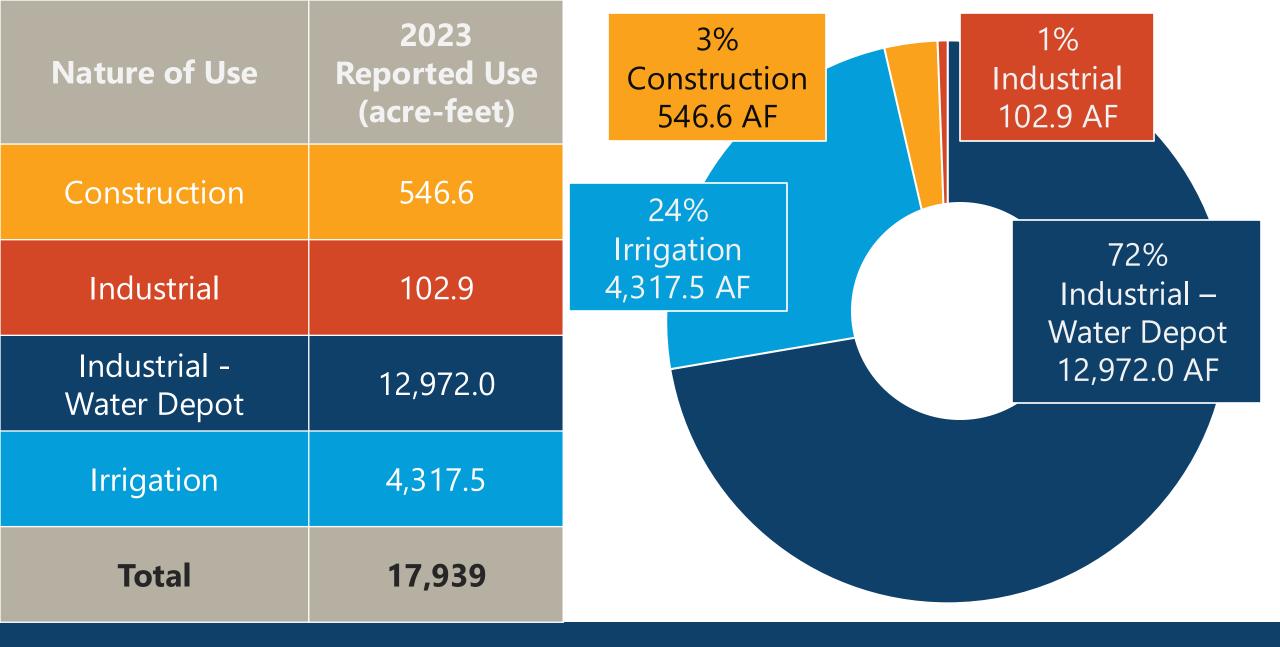
#### MAR STATEWIDE ASSESSMENT

North Dakota Glacial Drift Aquifers More Info Managed Aquifer Recharge (MAR) Potential + Layers 1.Excellent Streams and Rivers 2.Very good Streamflow (mean, cfs) 3.Good 0 - 25 į. 4.Fair 25 - 50 RANK △ 50 - 100 **100 - 1000** (Must activate layer) **1000 - 20100** TDS\_median: 228.00 - 4760.00 ☐ Water Permits ☐ Glacial Drift Aquifers Interactive MapServices MAR\_Ranking 1.Excellent Check it out! 2.Very good 3.Good 4.Fair 5.Poor ☐ Aquifer\_TDS 0 - 500 500 - 650 800 - 1100 1100 - 4760

MAR Report · NDDWR Home · NDDWR Mapservice · QGIS · ggis2web · Leaflet



#### WATER APPROPRIATION PERMIT APPLICATIONS RECEIVED



#### TEMPORARY WATER PERMIT SUMMARY

#### 2023 CONSUMPTIVE WATER USE

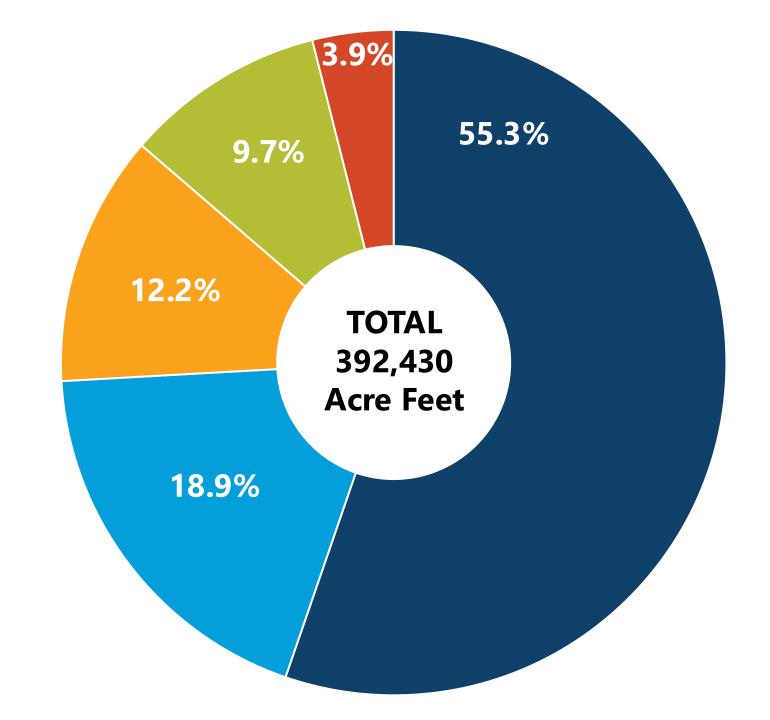
Irrigation

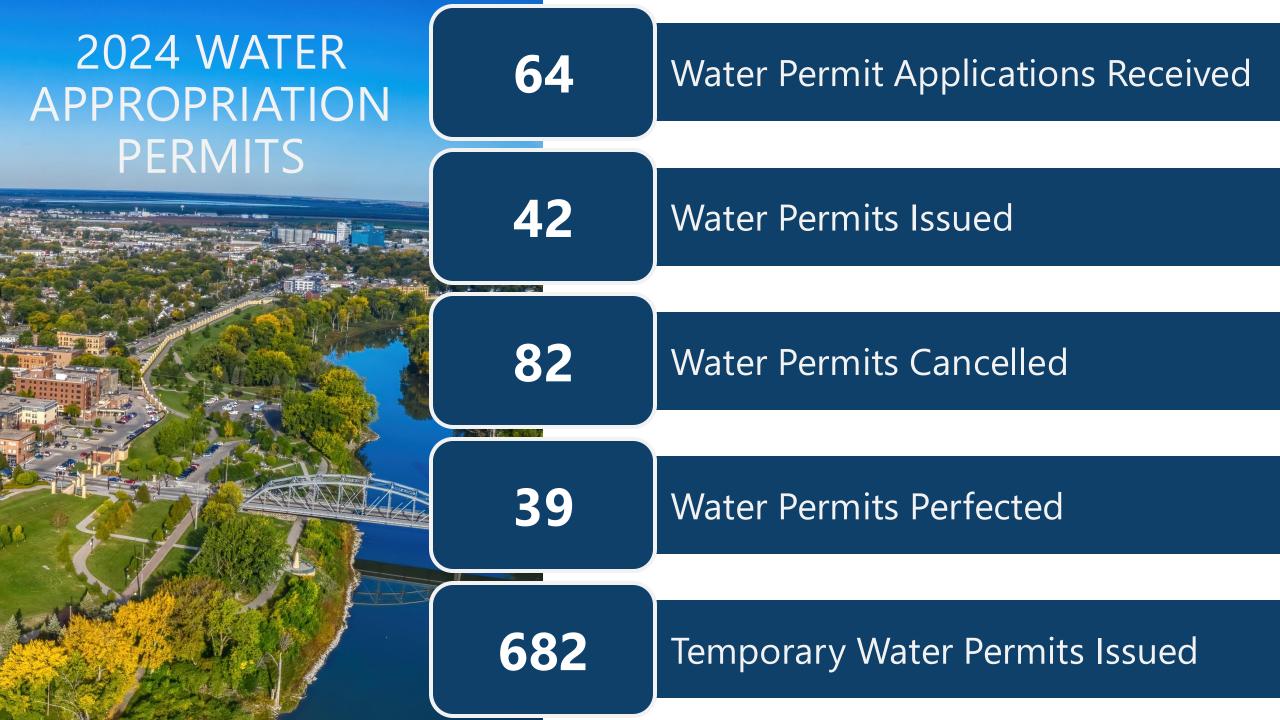
Municipal

Industrial (Non-Water Depot), Power Generation, Multi-Use

Industrial (Water Depot)

Rural Water





4000+	Measured Sites In 2024
66	Added (62 Observation Wells & 4 Testholes)
550+	Real Time Ground Water Sites
80+	Real Time Surface Water Sites
USGS	Gage Cooperative Agreement
Expand	Include Precipitation & Soil Moisture Real Time Sites

- Collecting Real-Time Valuable Water
   Resource Data Publicly Accessible On
   Agency's Map Services
- Collect Water Levels, Precipitation, Soil Moisture, Soil Temperature, Barometric Pressure, Air Temperature
- **600+ Units** Operated In 2024
  - Surface Water Units Are Removed In Winter To Prevent Damage
- 53 Units Have Rain Gage & Soil Moisture Sensors
- Over 28 Million Data Points Collected In 2024



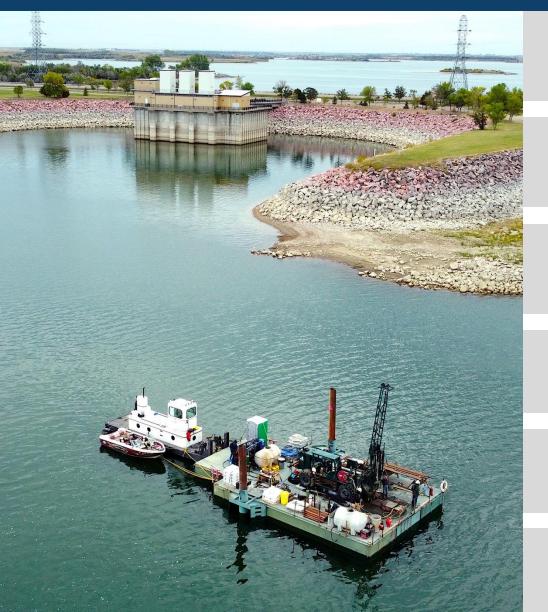
**Goal - Continue Expanding The PRESENS Network** 

#### PUSHING REMOTE SENSORS (PRESENS)

### EMERGING ECONOMIC DEVELOPMENT OPPORTUNITIES



#### ONGOING FEDERAL ISSUES OF INTEREST



USFS Dakota Grasslands Travel Management Plan

BLM Resource Management Plan

**USACE** Water Resources Development Act

Baldhill Dam Operation Plan

Snake Creek Embankment

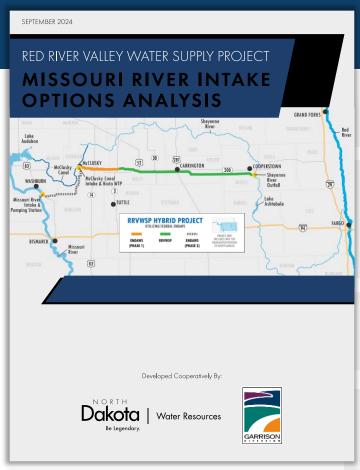
Dakota Water Resources Act Of 2024



## OTHER ONGOING EFFORTS









#### **STUDIES**

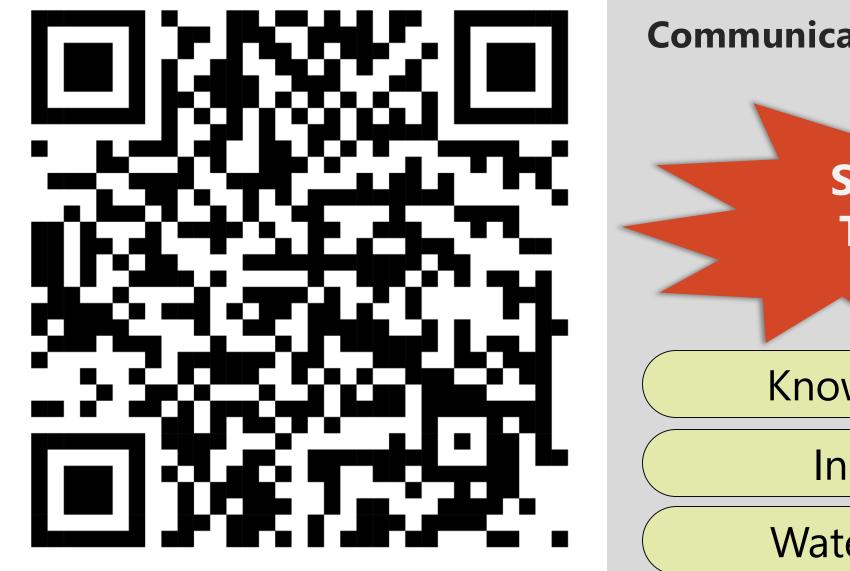
Missouri River Intakes

RRVWSP Missouri River Intake Options Report

Statewide Irrigation Feasibility

Western States Water Collection Survey

Multi-State Survey
Of Surface Water
Management Practices



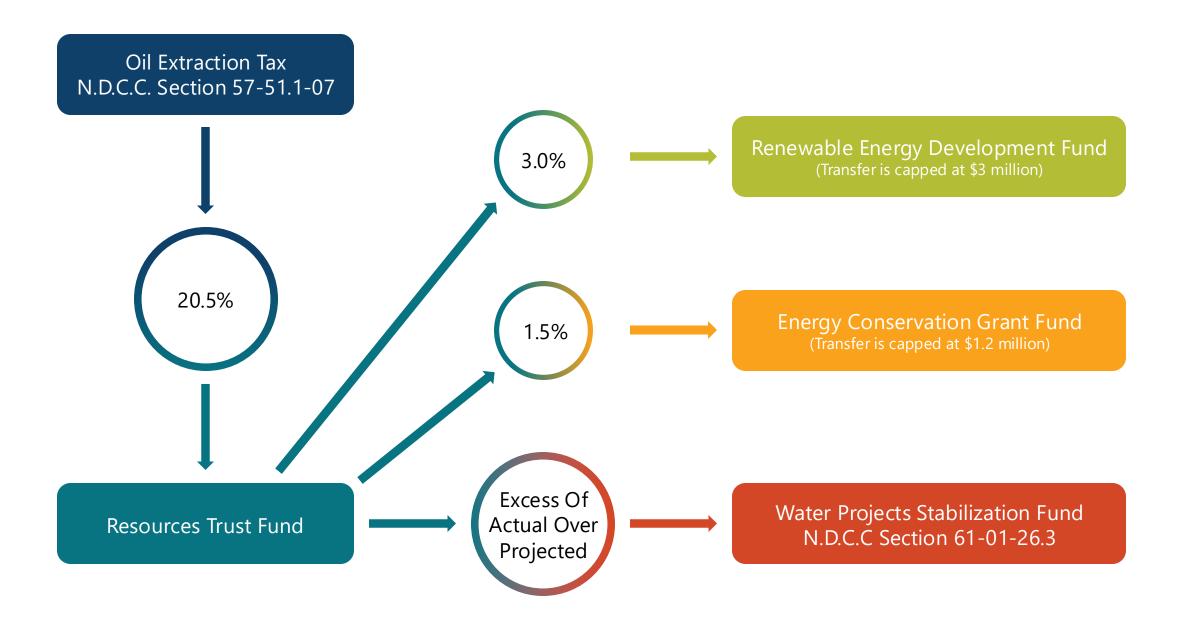


#### EDUCATIONAL CAMPAIGNS

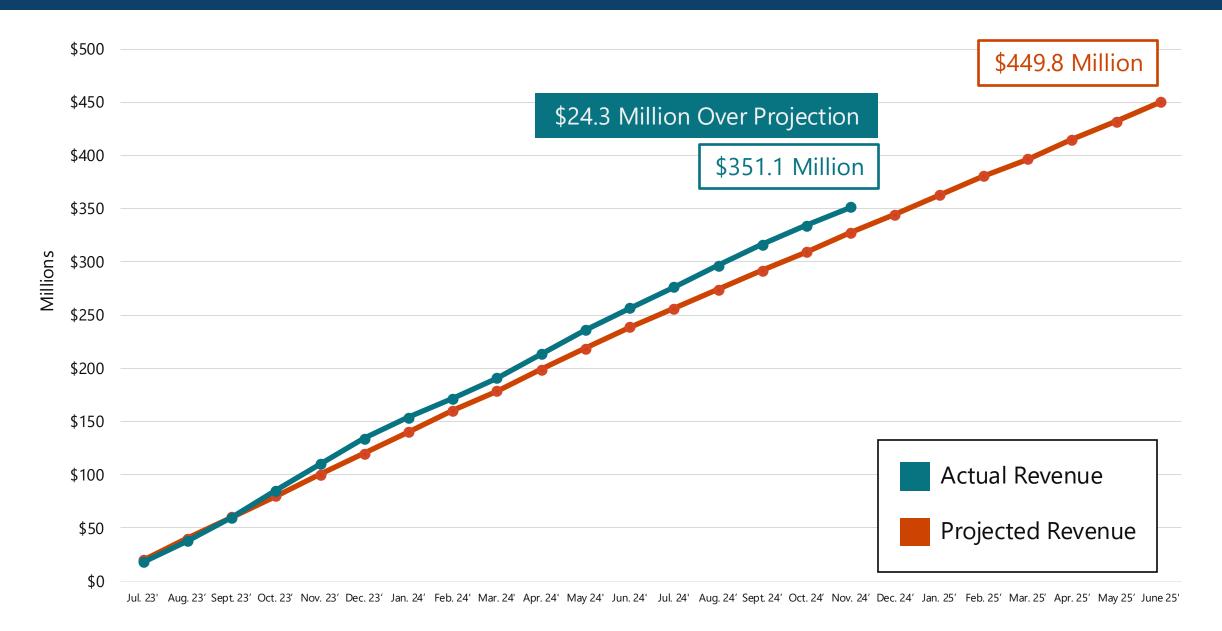


# WATER DEVELOPMENT PLANNING

### RESOURCES TRUST FUND REVENUE

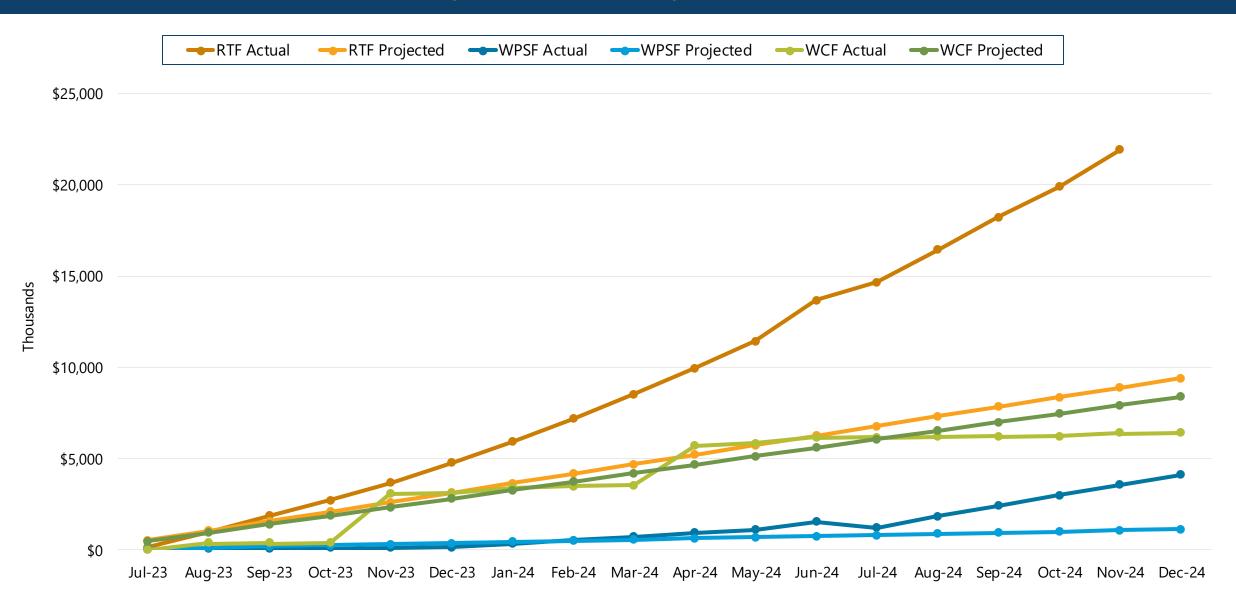


### RESOURCES TRUST FUND REVENUE



### OTHER REVENUES

2023-2025 (CUMULATIVE) DECEMBER 2024



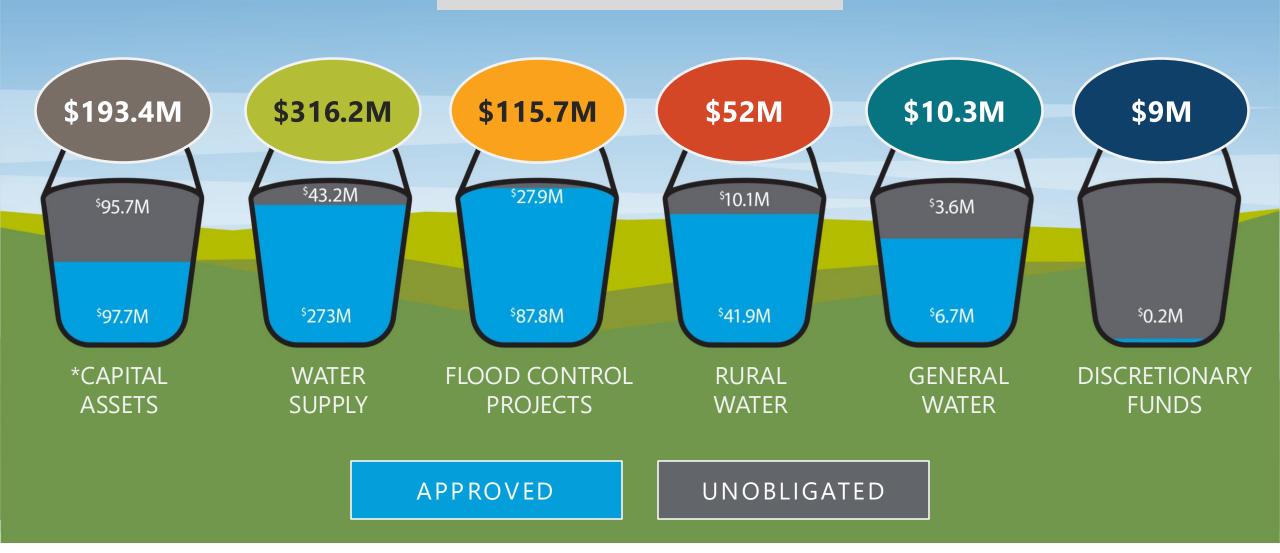
### WATER PROJECTS STABILIZATION FUND



- Created By SB 2345 During 2021 Special Session
- SB 2020 (2023) Included \$150M
  - \$120M Red River Valley Water Supply Project
  - \$30M Western Area Water Supply Project (Loan Payoff)
- SB 2020 (2023) Provided For Transfers Of Revenues In Excess Of The March 2023 Legislative Revenue Forecast Be Deposited In The WPSF
- \$24.3M Transferred To The WPSF Through December 2024

### 2023-2025 PURPOSE FUNDING

JULY 2023 - DECEMBER 2024



\*Capital Assets bucket includes \$100M line of credit.

### 2023-2025 COST-SHARE APPROVALS

**REGIONAL WATER SUPPLY** 

**RURAL WATER SUPPLY** 

MUNICIPAL WATER SUPPLY

**CONVEYANCE** 

FLOOD CONTROL

GENERAL WATER **MANAGEMENT** 



### TRIBAL NATIONS COST-SHARE PARTNERING



- 2023 Legislature Passed HB 1385
- Tribal Nations Eligible To Enter Into Cost-Share Agreements With SWC
- 2023-2025 Approvals
  - Ft Berthold Rural Water, Four Bears WTP, Intake & Raw Water Line Precon. = \$1.3M
  - Ft Berthold Rural Water, Parshall To White
     Shield Regionalization Precon. = \$341K
  - Turtle Mountain Band Of Chippewa,
     Hwy 43 Corridor Construction = \$4M
  - Turtle Mountain Band Of Chippewa,
     Hwy 3 Area = \$3.1M

### COST-SHARE PROGRAM UPDATES

EFFECTIVE 2024

### WEBGRANTS CERTIFICATION

Accurate Information,
Follows Applicable Laws,
& Consequences
(NDCC 12.1-11-02)

### PRE-APPLICATION POLICY

Compliance With Applicable Laws & Total Project Cost Disclosure

## APPLICATION DOCUMENTATION

Sponsor-Signed Letter & Meeting Minutes

BAIA & CIP With Water Supply Construction Applications

### **AGREEMENTS**

Compliance With Applicable Laws

# OPERATION & MAINTENANCE (O&M)

Added Operation To O&M Definition

Meter Replacement Considered O&M - Ineligible

### PROGRAM VIOLATIONS

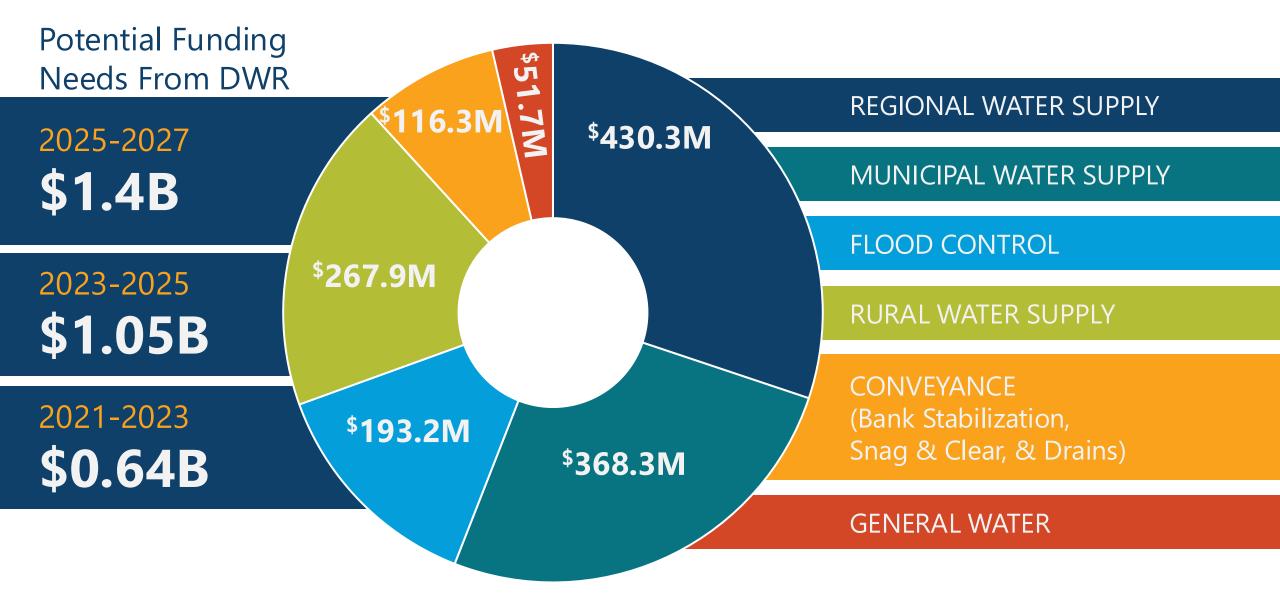
No Participation 24

Months

Return Funding

Professional Reporting

& Legal Referrals



### 2025 WATER DEVELOPMENT PLAN INVENTORY

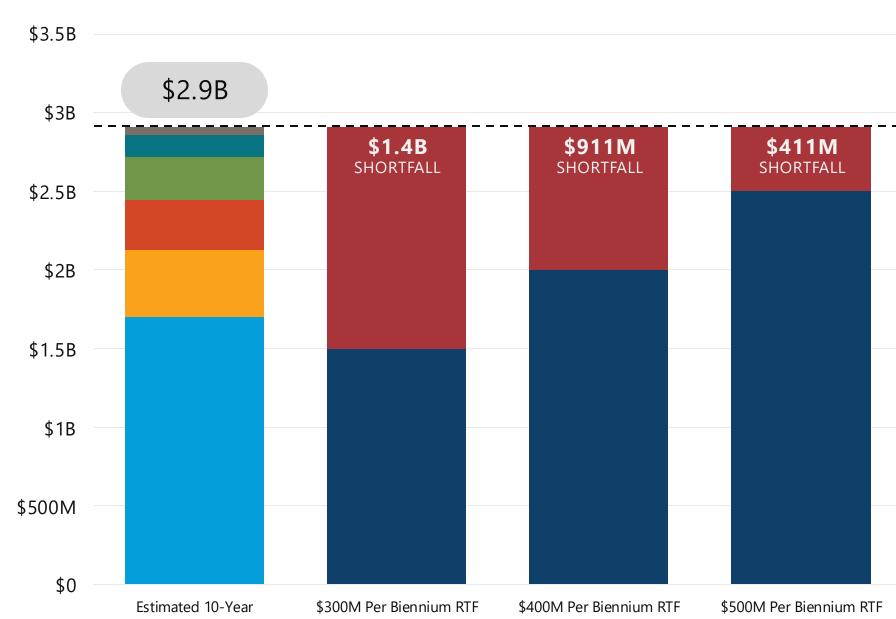
# 2025-2027 PROJECT & PURPOSE FINANCIAL NEEDS SUMMARY

ESTIMATED DWR SHARE BY PRIORITY

	Project Purposes	Water Development Plan Inventory Project Needs		
		High Priority	Moderate Priority	Low Priority
	Flood Control (Total = \$307.9M)	\$190.2	\$54.5	\$63.2
	Heart River - Mandan	\$8.6	-	-
	Mouse River Enhanced Flood Protection	\$76.1	-	-
	Other Flood Control	\$16.5	\$0.9	\$0.5
	South Bismarck	\$73.0	-	-
	Valley City Permanent Flood Protection	\$16.0	-	-
	Water Conveyance	-	\$53.6	\$62.7
	General Water (Total = \$51.8M)	\$8.6	\$40.1	\$3.1
	Rural Water Supply (Total = \$267.9M)	\$5.3	\$61.3	\$201.3
	Water Supply (Total = \$635.7M)	\$267.5	\$16.9	\$351.3
	Municipal	-	\$16.9	\$351.3
	Red River Valley Water Supply	\$221.0	-	-
	Western Area Water Supply	\$46.5	-	-
	<b>State Owned Projects (Total = \$164.4M)</b>	\$164.4	\$0.0	\$0.0
	Devils Lake Outlets	\$1.7	-	-
	Northwest Area Water Supply	\$12.7	-	-
	Southwest Pipeline Project	\$150.0	-	-
	TOTAL IDENTIFIED NEEDS (\$1.4B)	\$635.9	\$172.8	\$618.9

### 10-YEAR PROJECTIONS





### WATER DEVELOPMENT PLAN & DASHBOARD







Web-Based Version

Launched & Operational

Dashboard Includes

**Interactive Charts** 

Changing Conditions

Information
Can Be Updated
By Staff

Access Any Time

Phones & Computers

### DWR BUDGET SUMMARY

	2023-2025 Appropriation	2025-2027 Base Level
Salaries & Wages	\$23,727,769	\$22,998,148
Operating Expenses	\$59,479,068	\$56,625,923
Capital Assets	\$275,783,950	\$124,136,712
Water Supply Projects	\$348,200,000	\$316,200,000
Rural Water Supply	\$52,000,000	\$52,000,000
Flood Control Projects	\$115,700,000	\$115,700,000
General Water Projects	\$12,000,000	\$12,000,000
Discretionary Projects	\$9,000,000	-
TOTAL	\$895,890,787	\$699,660,783
Full Time Equivalents (FTE)	93	93

### HB 1020: FUNDING FOR WATER PROJECTS



# 2025 LEGISLATION

11 Agency-Sponsored Bills

Red Tape Reduction

Clean Up & Clarification

NAWS Authority Support

NFIP Township Study (SB 2365 (2023))

Water Appropriation Updates



### CHALLENGES & OPPORTUNITIES



Drainage & Water Conveyance

Water Reuse & Recharge

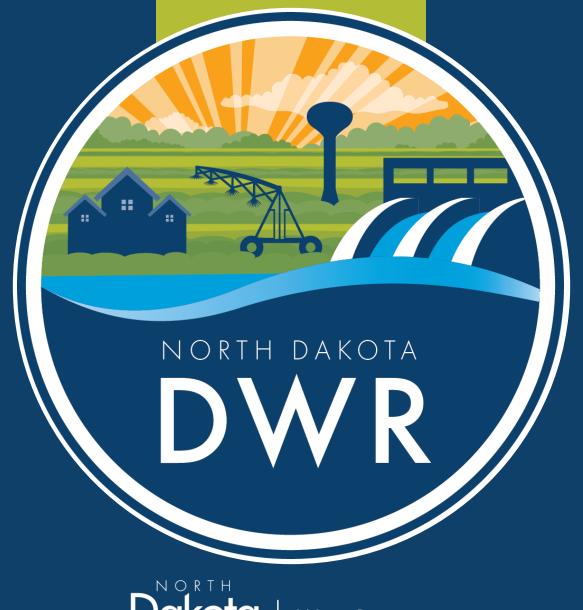
Cost/Benefit Analysis

Infrastructure & Resources

- Real Time Data
- Data Analysis
- Education
- Technical/Legal
- Emergency Response

Competing Uses For North Dakota's Water

- International
- Other States





# THANK YOU



701.328.2750



dwr@nd.gov



dwr.nd.gov



/NDWaterResources