July 1, 2023 - June 30 , 2025

BIENNIAL REPORT

NORTH DAKOTA DWR

NORTH Dakota
Be Legendary.

Water Resources

NORTH Dakota | Water Resources

Be Legendary.

January 27, 2026

Governor Kelly Armstrong
600 East Boulevard Avenue
Bismarck, ND 58505-0001

Secretary of State Michael Howe
600 East Boulevard Avenue
Bismarck, ND 58505-0001

SUBJECT: 2023-2025 Biennial Reports, N.D.C.C. § 54-06-03; N.D.C.C. § 54-06-04; and other applicable laws.

Dear Governor Armstrong and Secretary of State Howe:

On behalf of the Department of Water Resources and the State Water Commission, I am pleased to submit our Biennial Report for the period of July 1, 2023, through June 30, 2025. This report highlights key events, accomplishments, and activities from the past biennium for your information and consideration.

DWR remains committed to our mission of responsibly managing North Dakota's water needs and risks for the benefit of its people. Guided by our vision of sustainable water management and development, we continue to serve with fairness, objectivity, and accountability, using sound science and professional standards.

Respectfully submitted,

Reice Haase
Director

VISION

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.

MISSION

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

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.

BIENNIAL REPORT CONTENTS

For more information, visit us at www.dwr.nd.gov

History & **Mandates**

The Office of the State Engineer was established in 1905 to regulate and administer matters concerning the allocation of the state's water and related land resources, in compliance with Article XI, § 3 of the North Dakota Constitution, which declares that all waters are the property of the state for public use. In 1937, additional duties were assigned to this office when the State Engineer was designated as the Chief Engineer and Secretary to the Commission.

The State Water Commission was created by legislative action in 1937 as a response to the drought of the 1930s. Its purpose was to foster and promote water resource development throughout the state.

During the 2021 Legislative Assembly, House Bill (HB) 1353 reorganized the Office of the State Engineer and the State Water Commission into the Department of Water Resources (DWR). The reorganization became effective on August 1, 2021. The agency's first Director, Dr. Andrea Travnicek, was appointed, and the Department became a member of the Governor's Cabinet.

DWR has the authority to investigate, plan, construct, and develop water-related projects and serves as a mechanism to financially support these efforts throughout North Dakota. The Office of the State Engineer, as part of DWR, continues to be responsible for several regulatory functions, including water allocation, dam safety, and drainage management.

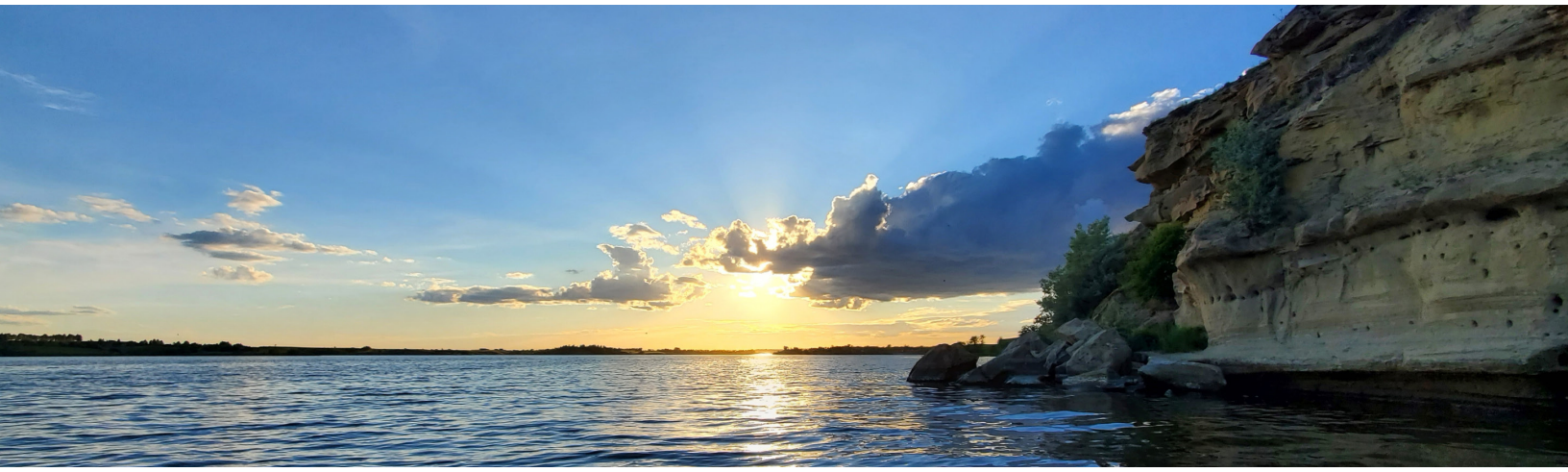
Organization

The agency formerly known as the State Water Commission transitioned to the Department of Water Resources on August 1, 2021, as required by HB 1353. However, the decision-making body related to cost-share, known as the State Water Commission (SWC), remains active.

The Commission consists of the Governor (serving as Chairman), the Commissioner of Agriculture, and eight members appointed by the Governor to serve staggered six-year terms. The terms are structured so that two, but not more than three, expire on the first day of July of each odd-numbered year.

The Commission appoints a secretary—formerly the State Engineer, now the Director of the Department of Water Resources—who serves as its executive officer and manages DWR staff as needed to carry out the work of the Commission.

Principal
Agency Activities



The authorizing legislation for the Department of Water Resources (DWR) is found in Chapter 61-03 of the North Dakota Century Code. Primary DWR functions and statutory responsibilities include:

- Allocation of the state's waters, including obtaining and recording data for the determination, development, and appropriation of the state's waters
- Hydrographic surveys and investigations of each stream system and source of water supply in the state, beginning with those most used for irrigation
- Facilitation of water rights determinations
- Water-related data collection
- Dam safety, including receipt of emergency action plans for high-hazard or medium-hazard dams
- Construction and drainage permits
- Staffing and analysis for the State Water Commission and execution of its decisions
- Rulemaking authority
- Oversight of water storage reservoirs
- Implementation of economic analysis for water conveyance projects and flood-related projects
- Implementation of life cycle cost analysis for water supply projects
- Cooperation with federal agencies in the execution of topographic surveys and maps of North Dakota
- Custodian of all plats, field notes, and similar records provided to the state by a federal government entity
- Inspection or investigation of alleged statutory violations
- Removal or modification of unsafe or unauthorized works
- Sovereign land management
- Removal, modification, or destruction of dangers in, on the bed of, or adjacent to navigable waters
- Hearings for persons aggrieved by an action or decision of DWR
- Cost-Share Program administration
- Floodplain management
- Cloud Modification Program administration
- State Water Development Plan
- Emergency response
- Water Education Program administration
- Development of the Northwest Area Water Supply (NAWS) and Southwest Pipeline Project (SWPP)
- Operation of the Devils Lake Outlets

Water Resources
Legislation

During the 2025 Legislative Session, the Department of Water Resources (DWR) testified in favor of 20 bills, neutrally on six bills, and in opposition to nine bills.

DWR introduced or sponsored 11 bills, primarily focused on updating Title 61 to reflect current DWR operations and to clarify existing policies related to appeals and notifications. Ten of these agency-sponsored bills were enacted.

- HB 1040: Removes the requirement for applicants to the state Drought Disaster Livestock Water Assistance Program to first apply and be denied for cost-share assistance from the United States Department of Agriculture, Farm Services Agency's Emergency Conservation Program. (Passed)
- HB 1041: Removes outdated permitting thresholds for dams, dikes, and other devices. (Passed)
- HB 1042: Updates language to be consistent regarding portions of a permit when extending time for applications for water permits to be put to beneficial use. (Passed)
- HB 1043: Removes redundant language related to the Governor serving as the SWC's chair and makes clear that the Governor selects the Vice Chair of the SWC. (Passed)
- SB 2044: Transitions DWR away from the primary watercourse determination role into an appeal remedy for any aggrieved party by a state or political subdivision's watercourse determination. (Passed)
- SB 2045: Removes outdated procurement requirements. (Passed)
- SB 2058: Cleans up language related to the Board of Water Well Contractors. (Passed)
- SB 2059: Clarifies notification processes for conditional water permit application hearings and processes related to appealing water resource district decisions and drainage complaints. (Passed)
- SB 2060: Adds a notification to DWR when state property or structures are constructed within a special flood hazard area designated by FEMA. (Passed)
- SB 2065: Specifies DWR would make a determination regarding the feasibility of a proposed irrigation district based on a petitioner's already-completed report. It places the requirements of estimating probable costs on the petitioning entity. (Passed)
- SB 2118: This bill would have transitioned the DWR away from making flow rate determinations for streamcrossings and into an appeal remedy for any aggrieved party by a state or state political subdivision's streamcrossing determination. (Failed)
- Additionally, the Department worked with legislative sponsors to introduce SB 2141 related to the change in purpose of use of a conditional or perfected water permit and to amend HB 1201 related to expanding the amount of water for irrigation use that can be applied for from 720 acre-feet total (except the Missouri River) to 720 acre-feet from a single surface or ground water source (except the Missouri River). Both bills passed with broad support.

Water Resources **Legislation**

DWR BUDGET

- HB 1020 included funding for five new full-time equivalent (FTE) positions, $615.2 million for water projects, and all agency optional requests, including equipment and an internship program. It authorized $360 million in lines of credit from the Bank of North Dakota for water-project financing, allowed the carryover of prior-biennium funding (estimated at over $600 million), revised the duties of Legislative Management's Water Topics Overview Committee, and directed multiple studies to be conducted by the Department, Commission, or Legislative Management.
- HB 1020 was declared an emergency measure, enabling immediate funding for construction projects during the 2025 construction season.

PROJECT-PURPOSE FUNDING UNDER HB 1020

- Rural and Municipal Water Supply: $110 million
- Regional Water Supply: $245 million
- Flood Control: $117.6 million
- General Water: $18 million
- Discretionary: $10 million
- **State Projects:**
- NAWS: $12.6 million
- SWPP: $101 million,
- Devils Lake Outlets: $1 million

DWR BOARD RESPONSIBILITY UPDATES

- SB 2308: Transitioned the duties of the Devils Lake Outlet Advisory Committee, the Atmospheric Resources Board, and the Board of Water Well Contractors to the Department. (Passed)
- HB 1554: Adds the DWR as their ex officio, nonvoting technical member of the North Dakota Outdoor Heritage Fund Advisory Board. (Passed)
- SB 2188: Adds DWR Director or designee as a technical advisor to the Clean Sustainable Energy Authority. (Passed)

NFIP TOWNSHIP STUDY

During the 2023-2025 interim, DWR worked with the Interim Agriculture and Natural Resources Committee on the SB 2365 (2023) NFIP Township Study to clarify the roles of state agencies and local jurisdictions in tracking and updating land-use authority outside municipal boundaries.

The resulting legislation, SB 2027, established a process to identify and track which political entity has floodplain management responsibility. It also created a new Floodplain Management Authority Repository, housing information reported annually to DWR by local entities.

OTHER RELATED WATER BILLS

- HB 1025: DWR Director appointed to the interim Advanced Nuclear Energy Committee which studies the feasibility, siting, and deployment of advanced nuclear power plants in North Dakota. (Passed)
- HB 1162: Adds a member to the Lake Agassiz Wate Authority. (Passed)
- HB 1218: Pauses economic analysis for assessment drain projects between August 1, 2025, and July 31, 2027, disallows economic analysis for assessment drain projects if the project is expected to cost less than $1 million, and mandates a study on Economic Analysis for Assessment Drain Projects. (Passed)
- SB 1385: Proposes establishing deadlines for regulatory actions of the Department including construction permits, construction complaint appeals, drainage permits, and drainage complaint appeals. (Failed)
- HB 1514: Proposes criminalizing cloud seeding operations in the state and prohibiting research and development of cloud seeding technology. (Failed)
- SB 2106: Proposed to ban weather modification operations and criminalize the performance of weather modification in North Dakota. (Failed)
- SB 2210: Mandates a Legislative Management Study on water management based on watershed boundaries. (Passed)
- SB 2276: Creates a mediation and appeal process for joint water resource boards through the DWR.
- HCR 3018: Establishes a Legislative Management Study regarding water and wetland regulations and the taxation of inundated lands of the state.

Legal Actions

FEDERAL LAND BOUNDARY LITIGATION

DWR is a named party, or provides litigation support, in several cases against the federal government concerning property boundaries between state and federal interests along the Missouri River beneath Lake Sakakawea. Most of these cases remain stayed while a lead case (Continental) seeks to resolve several legal principles applicable to the others. In addition, DWR provides litigation support regarding sovereign-land ownership issues within the Mandan, Hidatsa, and Arikara (MHA) Nation Reservation.

SOVEREIGN LANDS AND MINERALS LITIGATION

An ongoing case challenges the state's determination that it owns certain islands in the bed of the Yellowstone River, as well as the bed of the river up to the ordinary high-water mark. A final ruling is anticipated in the next biennium.

CONSTRUCTION LITIGATION

DWR manages several construction projects on behalf of the State Water Commission (SWC). The SWC was sued by a contractor alleging changed conditions; the case remains ongoing.

DWR also resolved multiple construction issues through mediation prior to litigation. Significant resources were devoted to mediation and construction-management activities related to the Southwest Pipeline Project Supplemental Raw Water Intake.

ADMINISTRATIVE CASES

DWR participated in several administrative proceedings involving water-appropriation permits, drain-permit reviews, and watercourse-determination complaint appeals.

OTHER FEDERAL LITIGATION SUPPORT

While not a named party, DWR staff provided technical support for state litigation concerning Waters of the United States (WOTUS). Although no new litigation was filed during the biennium, DWR dedicated staff resources to reviewing and challenging certain federal agency actions and positions.

Unmanned Aerial Systems (UAS) **Program**

The North Dakota Department of Water Resources (NDDWR) has established a Small Unmanned Aircraft System (sUAS) program consisting of four aircraft and four licensed pilots. The program has significantly enhanced the Department's monitoring capabilities and documentation processes.

During the 2023–2025 biennium, more than 450 flights were completed to support activities across four DWR divisions. The Regulatory Division used the UAS program to document dam sites, helping to establish a comprehensive inspection database and record historical conditions. The Planning and Education Division collected aerial imagery to enhance external communications and outreach materials. The Water Development Division deployed drones for survey missions, ground-condition monitoring, lake-gauging operations, and model-data verification efforts.

STATE WATER COMMISSION MEMBERS
AS OF JUNE 30, 2025

NAME	POSITION	APPOINTED	TERM ENDS
Kelly Armstrong	Governor - Chairman		
Doug Goehring	Department of Agriculture, Commissioner	Ex-Officio	
Steve Hanson	James River Basin	June 26, 2025	June 30, 2031
Michael Anderson	Lower Red River Basin	August 10, 2017	June 30, 2027
Jeff Frith	Devils Lake Basin	August 17, 2023	June 30, 2031
James Odermann	Little Missouri, Upper Heart, & Upper Cannonball Basin	July 26, 2021	June 30, 2031
Gene Veeder	Upper Missouri River Basin	July 26, 2021	June 30, 2027
April Walker	Upper Red River Basin	July 26, 2021	June 30, 2029
Jay Volk	Lower Missouri River Basin	July 30, 2019	June 30, 2031
Jason Zimmerman	Mouse River Basin	August 10, 2017	June 30, 2029
Reice Haase	*Secretary*	*January 9, 2025*	

STATE WATER COMMISSION MEETINGS
JULY 1, 2023 THROUGH JUNE 30, 2025

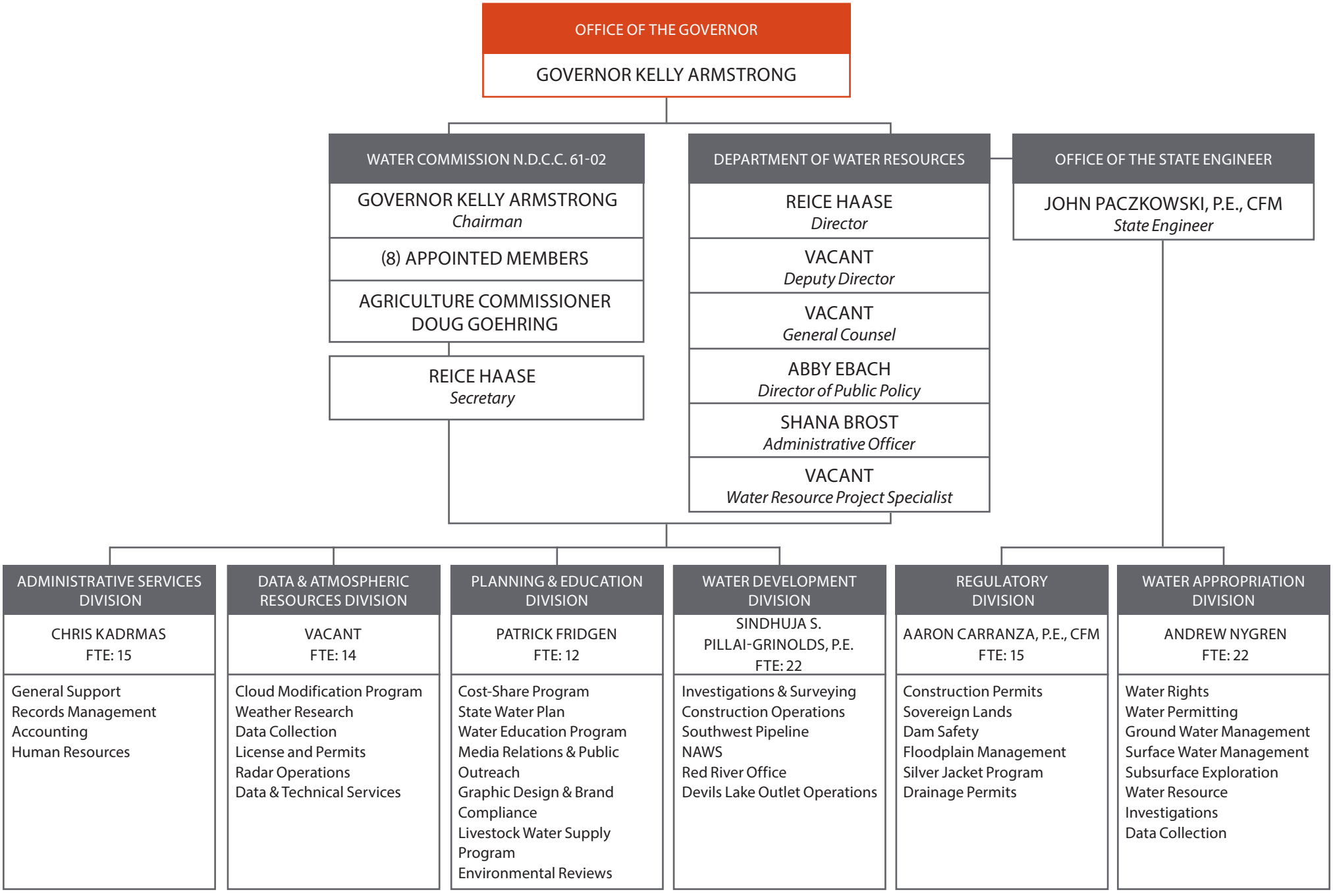
DATE	LOCATION
August 10, 2023	Bismarck
October 12, 2023	Grand Forks
December 8, 2023	Bismarck
February 8, 2024	Bismarck
April 11, 2024	Bismarck
June 13, 2024	Bismarck
August 8, 2024	Bismarck
October 10, 2024	Bismarck
December 13, 2024	Bismarck
February 13, 2025	Bismarck
April 10, 2025	Bismarck
May 28, 2025	Virtual
June 12, 2025	Bismarck
June 8, 2025	Bismarck

2024 COMMISSIONER-HOSTED BASIN MEETINGS

DATE	COMMISSIONER	
June 17, 2024	Upper Red	April Walker
June 17, 2024	James River	Connie Ova
June 18, 2024	Devils Lake	Jeff Frith
June 18, 2024	Lower Red	Michael Anderson
June 24, 2024	Lower Missouri	Jay Volk
June 27, 2024	Upper Missouri	Gene Veeder
June 27, 2024	Little Missouri, Upper Heart, & Devils Lake, Upper Cannonball	James Odermann
July 10, 2024	Mouse River	Jason Zimmerman

NORTH DAKOTA DEPARTMENT OF WATER RESOURCES

AS OF JUNE 30, 2025



DEPARTMENT OF WATER RESOURCES TEAM

OFFICE OF THE DIRECTOR

Director	Reice Haase
Deputy Director	Vacant
State Engineer	John Paczkowski
Administrative Staff Officer	Shana Brost
General Counsel	Vacant
Director of Public Policy	Abby Ebach
Water Resource Project Specialist	Vacant

DATA & ATMOSPHERIC RESOURCES DIVISION

Data & Atmospheric Resource Division Director	Vacant
Chief Meteorologist	Mark Schneider
Meteorologist	Daniel Brothers
Program Manager	Kelli Schroeder
Data & Technology Services	Paul Moen
Data Processing Coordinator	Travis Stramer
Hydrologist III	Angela Gregory
Hydrologist III	Nicole Evans
Hydrologist III	Benjamin Gehrig
GIS Specialist III	Rodney Bassler
Engineering Technicians	Albert Lachenmeier Neil Martwick McCoy Pinkham Ryan Novak

PLANNING & EDUCATION DIVISION

Division Director	Patrick Fridgen
Administrative Assistant	Michelle Gerrity
Water Resource Education Program Manager	Tina Harding
Water Resource Planners	Cory Drevecky Kyle Yrkoski
Natural Resource Economist	Duane Pool
Water Resource Engineer Managers:	Abigail Franklund Julie Prescott
Water Resource Program Administrators	Beth Nangare Lori Noack
Public Information Officer	Cammie Wright
Graphic Artist	Sheila Fryer

REGULATORY DIVISION

Division Director	Aaron Carranza
Program Support	Courtney Rogstad Chance Nolan
Water Resource Engineer Managers	Karen Goff Matthew Lindsay
Water Resource Engineers	Garrett Larson Kelsey Huber Jennifer Martin Damon Grabow Nicholas Bendickson
Water Resource Program Administrators	Amy Winkelman Laura Horner Tyler Spomer
Silver Jacket Coordinator	Michael Hall

ADMINISTRATIVE SERVICES DIVISION

Director of Administrative Services	Chris Kadrmas
Account/Budget Specialist	Sarah Felchle
Human Resource Business Partner	Missy Schmidt
Records Management Specialist	Karen Heinert
Account/Budget Specialist	Vacant

WATER APPROPRIATION DIVISION

Division Director	Andrew Nygren
Administrative Assistant	Lora Johnson
Hydrologist Managers	Rex Honeyman Jun Yang Kimberly Fischer Michaela Halvorson Joe Nett
Hydrologists	Bryce Klasen Samuel DeVries Bosten Bartholomay Lucas Roy Sid Abudureyimu Chioma Onwumelu Saber Aradpour Margaret Windingstad Collins Asante-Sasu
Water Resource Program Administrators	Chris Colby Devin Schwindt
Water Resource Engineer	Bassel Timani
Program Manager	Kathryn Arneson
Rotary Drill Operator	Dan Bahm
Equipment Operator	Bryan Pulkrabek

WATER DEVELOPMENT DIVISION

Division Director	Sindhuja S.Pillai-Grinolds
Project Support Assistant	Travis Thyberg
Water Resource Engineer Managers	Alexis Faber Joseph Morrissette Justin Froseth Vacant Randy Gjestvang
Water Resource Engineers	Clay Carufel Laura Ackerman Yaping Chi Kathryn Goos
Engineer Technicians	Dan McDonald Casey Renner Bryan Hanson Tom Engberg Clint Cogdill Vacant Brandon Weist
Project Manager	Andrew Rodriguez
Water Resource Senior Manager	Darron Nichols Perry Weiner
Devils Lake Outlet	Jeff Trana Del Nordum

Administrative Services Division

The Administrative Services Division provides overall direction for the Department's powers and duties as described in North Dakota's water laws. Budgeting and fiscal control are carried out in accordance with statutory requirements and established accounting principles derived from those laws.

The Director or their appointee, along with the State Engineer, serves as North Dakota's representative on numerous boards and associations. The Director is a member of the United States International Souris River Board, the International Red River Watershed Board, the Red River Retention Authority, the Board of Directors for the Red River Basin Commission, the Upper Missouri Water Users Association, the North Dakota Water Education Foundation, the Association of Western State Engineers, and other related groups. The Director also chairs the Devils Lake Outlet Advisory Board and is a member of the High-Level Radioactive Waste Advisory Council. Additionally, the Director serves as an executive council member of the Western States Water Council and as an ex officio member of the North Dakota Water Users Association Board of Directors.

DATA ACQUISITION

DWR collects a wide range of water-resource data, using both traditional field methods and modern remote-sensing technology.

TECHNOLOGY INTEGRATION

The Department continues to modernize its monitoring systems, enhancing real-time data collection and supporting scientific and regulatory work.

DATA ACCESS & SHARING

DWR expands public access to water-resource information through improved online tools, mapping services, and statewide datasets.

DATA & TECHNICAL SERVICES

The Department of Water Resources (DWR) integrates information technology across nearly all facets of water resource management. The Data and Technical Services section provides the technology infrastructure and data collection activities that support the Department's scientific and regulatory functions. It also supports routine office and back-office automation systems essential to fulfilling the Department's mission.

DATA ACQUISITION

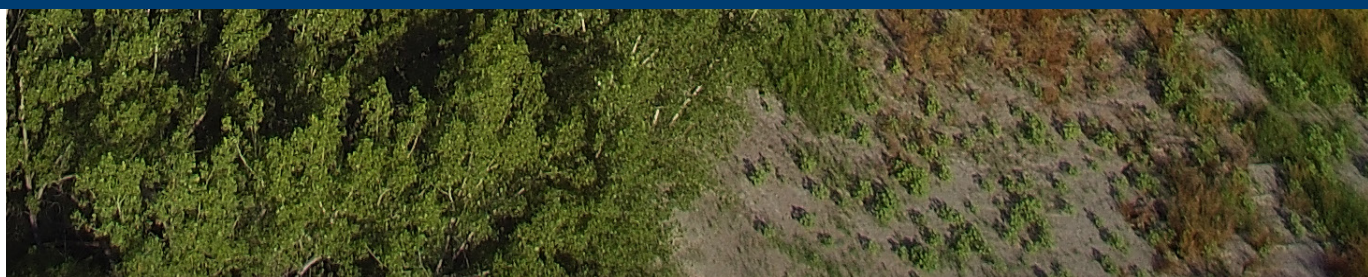
The Department conducts a wide range of data collection activities that support its mission, including stream gauging, groundwater and surface water level monitoring, pumping rate measurements, precipitation data collection, and other water-resource monitoring programs. Historically, many of these efforts relied heavily on manual data collection by division staff.

SPECIFIC TEAM MEMBERS' RESPONSIBILITIES INCLUDE

- DWR and Water Commission operations
- Accounting
- Information Data and Technology
- Records Management
- Support services for all agency programs

- Budget and fiscal control work
- Human Resources Management
- Agency accounting through the keeping of financial records
- Preparation of financial statements and reports, project or program cost accounting, preparation of budgets, and proper control of various funds appropriated by the state legislature

- Coordinating water resource programs with federal agencies and other state and local entities
- Coordinating contracts and agreements



To improve efficiency and provide real-time data for water-resource management, the Department continued development and deployment of the PRESENS (Pushing REmote SENSors) system. The 2023–2025 biennium presented multiple challenges for the PRESENS platform. The previously used cellular modem was discontinued, requiring firmware adaptation for a new modem. The new modem, however, offers faster boot speeds and extended range. Firmware development—historically completed in-house by DWR staff—was partially outsourced to the North Dakota company that manufactures the PRESENS hardware, due to increased workload and deprecation of the existing development environment. This partnership allows DWR to continue supporting PRESENS without additional staffing.

Despite these challenges, the PRESENS network continues to expand, with over 670 dataloggers collecting more than 125,000 data points each day. The units monitor groundwater and surface water levels, air temperature, barometric pressure, soil moisture, conductivity, soil temperature, and rainfall. The system was adapted to capture one-minute interval measurements and transmit real-time data for pump tests, including pumping-rate data from 4–20 mA sensors. Looking ahead to the 2025–2027 biennium, two new sensor types—ultrasonic and radar—will be evaluated for surface water and snowfall measurement. The PRESENS system remains an essential and evolving platform that provides the data needed for current and future water resource analysis.

DATA DISSEMINATION

The Department's Light Detection and Ranging (LiDAR) data dissemination service continues to expand. The state now has full QL2 LiDAR coverage, accessible via the DWR LiDAR Dissemination site: https://lidar.dwr.nd.gov. QL1 data from 25 North Dakota cities is also available.

The DWR's water resource data access webpages were redesigned to integrate PRESENS-collected datasets and can be accessed at https://www.dwr.nd.gov/info_edu/map_data_resources/waterresourcesites/.

The North Dakota Historical Map & Aerial Photography Dissemination Service (https://aerial.dwr.nd.gov) continues to grow, with the following projects added during the biennium:

- 1946 Missouri River maps of Lake Oahe
- 1940s U.S. Army Corps of Engineers maps of the Bois de Sioux River, showing channelization, original channel locations, and land ownership
- Missouri River segment maps produced by the U.S. Army Corps of Engineers (provided by the BLM survey office in Montana), identifying public and private tracts acquired for Lake Sakakawea
- 2023 statewide 6-inch (15 cm) aerial photography
- 2023 Bismarck-Mandan MPO 3-inch photography
- 2023 Fargo-Moorhead photography
- 2023 and 2024 statewide USDA NAIP photography
- County Groundwater Studies maps, including geology and bedrock maps
- Historical USGS topographic quadrangles (1:24,000; 1:62,500; 1:125,000 scales)

There are now approximately 350 aerial photo and map projects with more than 150,000 images available through the service, including 306 accessible via the Department's Web Map Service (WMS). DWR continues to enhance its data dissemination efforts to ensure that all collected data is publicly accessible and useful for scientific and planning purposes.

Atmospheric Resource Board

The Atmospheric Resource Board (ARB) functioned as a quasi-judicial, quasi-legislative advisory, and rule-making body within the Department of Water Resources. The ARB was co-located with the State Water Commission and operated as one of its divisions.

The Board consisted of ten members: seven appointed by the Governor and three ex officio members — the Director of the Department of Water Resources, the Director of the State Aeronautics Commission, and a representative from the Department of Environmental Quality.

During the 2025 Legislative Assembly, Senate Bill 2308 amended duties of existing boards and commissions. Following the bill's passage and the Governor's approval, the ARB was dissolved, and its duties and responsibilities were absorbed by the Department of Water Resources. As a result, DWR initiated a departmental reorganization process that will consolodate our atmospheric resources, data, and monitoring functions into a new Data and Atomospheric Resources Division.

WEATHER MODIFICATION

DWR regulates and oversees cloud seeding activities and related operational procedures.

CLOUD MODIFICATION PROJECT

Seasonal hail suppression and rainfall enhancement operations are conducted with trained crews and contracted aircraft.

WEATHER DATA & RESEARCH

DWR operates regional radars, supports statewide precipitation monitoring, and collaborates on atmospheric research.

NORTH DAKOTA CLOUD MODIFICATION PROJECT (NDCMP)

The North Dakota Cloud Modification Project (NDCMP) operated in five western counties during the 2023–2025 biennium: Bowman (2023–2025), McKenzie (2023–2024), Mountrail (2023–2024), Williams (2023–2024), and a portion of Slope County (2023–2025). County participation in the NDCMP requires a public process to establish a county weather modification authority.

The NDCMP has two primary objectives:

1. Suppression of damaging hail, and
2. Enhancement of rainfall.

Suitable clouds over two multi-county operational districts were treated during June, July, and August of the 2023 and 2024 summer seasons. Five twin-engine aircraft, operated by Weather Modification International of Fargo, were deployed under contract to participating counties. Operations were directed by project meteorologists from radar operations centers located at the Bowman and Stanley airports.

SPECIFIC TEAM MEMBERS' RESPONSIBILITIES INCLUDE

- Carrying out the administrative procedures required for the licensing of weather modification contractors and the permitting of cloud seeding operations and research activities
- Developing and maintaining a system for the collection of data and records of all operational weather modification activities
- Conducting research into atmospheric precipitation processes to assess and improve the effectiveness of cloud seeding technology
- Promulgating rules and regulations governing cloud seeding activities to ensure environmental and public safety
- Monitoring and evaluating cloud seeding activities and reporting back to sponsoring entities
- Monitoring, collecting, and disseminating accurate precipitation and climate data

Following the withdrawal of McKenzie, Mountrail, and Williams Counties from the program before the 2025 season, the remaining Bowman and Slope operational district continued utilizing two twin-engine aircraft to maintain coverage.

WEATHER RADAR OPERATIONS

During the 2023–2025 biennium, the Atmospheric Resource Board (ARB) continued operating two WSR-74C weather radars, located at the Bowman (2023–2025) and Stanley (2023–2024) airports. At the close of the biennium, installation began on a new Vaisala WRS300 weather radar in Bowman to replace the existing WSR-74C. Funding for the new radar was approved during the 68th Legislative Session, ensuring continued service to the region for decades to come.

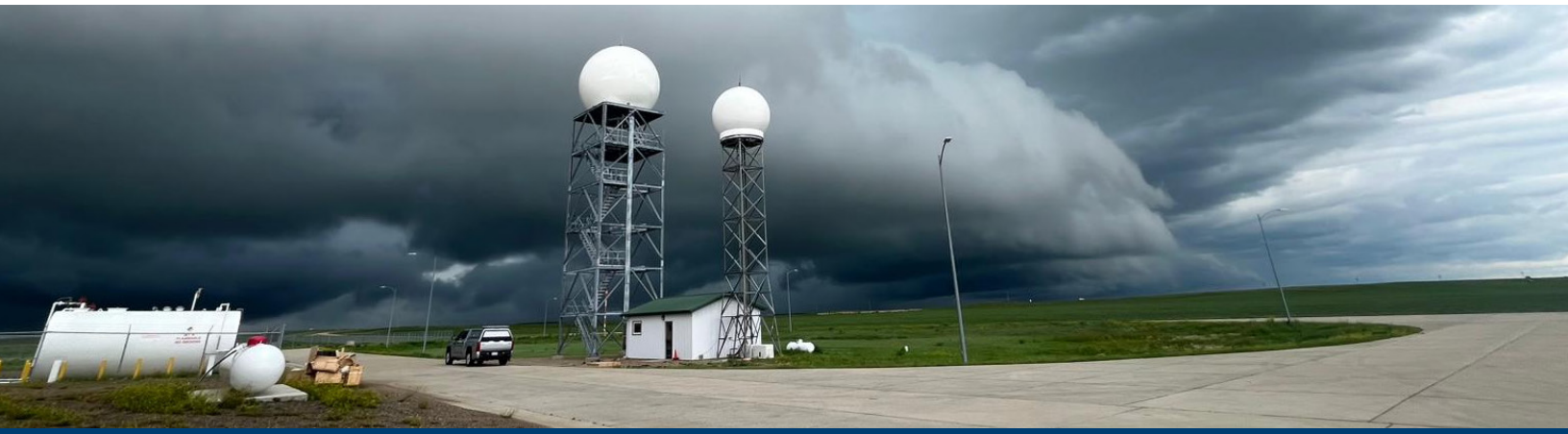
These radars provide low-altitude atmospheric coverage of storms and precipitation across western North Dakota, an area where National Weather Service (NWS) radars have limited visibility. This additional coverage improves the accuracy of precipitation monitoring for residents within the service areas.

The Bowman radar is strategically located at the outer limits of NWS radar coverage from Bismarck, Billings, Glasgow, and Rapid City. Its position allows for enhanced monitoring of the lower atmosphere across southwestern North Dakota, southeastern Montana, and northwestern South Dakota.

In 2011, the ARB partnered with eight counties—Billings, Bowman, Dunn, Golden Valley, Slope, Stark (North Dakota), Fallon (Montana), and Harding (South Dakota)—which collectively pledged $24,000 annually to support year-round operation of the Bowman radar. That partnership continued through the 2023–2025 biennium at the same cost, ensuring consistent regional radar coverage. Real-time radar images and raw data are made available through the Department's website.

In addition to the Bowman and Stanley sites, Williams County purchased and installed a C-band weather radar at the Williston Basin International Airport in 2020. The Department hosts the Williams County radar data on its public website.

Due to McKenzie, Mountrail, and Williams Counties ending their participation in the North Dakota Cloud Modification Project, the Stanley radar was not operated during the 2025 season.



STUDENT INTERN PROGRAMS

Twelve intern copilots from the University of North Dakota's (UND) John D. Odegard School of Aerospace Sciences participated in the NDCMP during the 2023–2025 biennium. UND's curriculum includes a four-credit course on applied weather modification, and students must meet all flight certification requirements prior to participation.

Since the program's creation in 1975, 414 intern pilots have logged approximately 30,000 hours of flight time conducting NDCMP operations across North Dakota. In addition to recording time, location, duration, and meteorological conditions for each seeding and reconnaissance mission, intern copilots are fully qualified to operate the aircraft, providing an additional margin of safety. Many participants later return to the program as Pilots in Command in subsequent project seasons. Intern copilots are paid an hourly wage and serve as temporary employees of the Department during the summer months.

The weather modification pilot training program is the only one of its kind in the United States and continues to supply a significant number of qualified cloud-seeding pilots for projects nationwide and internationally.

The Department also retained undergraduate students majoring in atmospheric science as intern meteorologists during the 2023–2025 biennium. Six interns assisted NDCMP radar meteorologists at the Bowman and Stanley radar operations centers, bringing the total number of participants to 76 since the program's inception. Like the intern pilots, intern meteorologists demonstrate a high level of enthusiasm and dedication to the program, helping to ensure a well-qualified pool of future radar meteorologists.

STATEWIDE PRECIPITATION OBSERVATIONS

The Atmospheric Resource Board Cooperative Observer Network (ARBCON) continued to collect and report precipitation data across North Dakota during the 2023–2025 biennium. Approximately 450 volunteer observers statewide contribute to the program, building on a continuous dataset that dates to 1977. Since its inception, ARBCON has compiled more than five million daily precipitation observations.

To support improved flood forecasting and water management, ARBCON began measuring and reporting snowfall and snow water equivalent in October 2010. This initiative more than doubled the number of snow-reporting stations previously active in the state. Currently, approximately 200 ARBCON observers provide year-round data.

Observers with internet access submit daily reports directly through the Department's website using secure login credentials. This online reporting system allows precipitation data to be available more quickly than traditional monthly reporting cards. About one-third of ARBCON participants now report electronically, a number expected to increase in coming years.

Rain, hail, and snow data—along with color maps showing monthly and growing season precipitation, departures from normal, and 30-year averages—are publicly available for download through the Department's website. These data play an essential role in assessing rainfall extremes, snowfall totals, flooding events, and drought conditions across North Dakota.

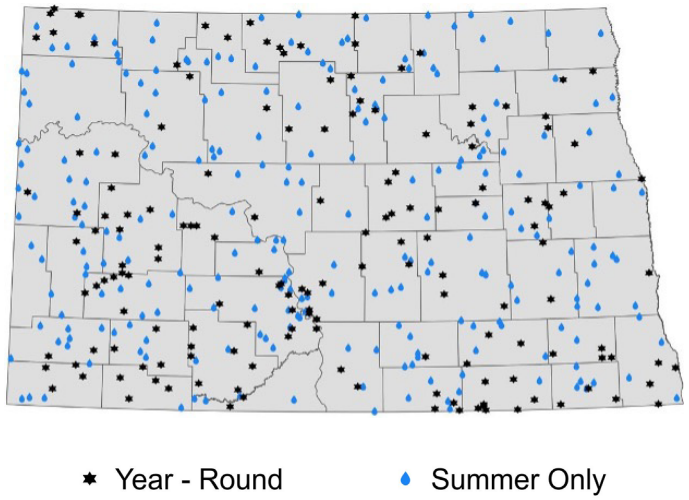
RESEARCH & DEVELOPMENT

The ARB continued collaborating with the UND Department of Atmospheric Sciences to provide mesoscale numerical weather forecast modeling support for the operational cloud-seeding program. UND's ongoing development of the Weather Research and Forecasting (WRF) model has improved convective weather and precipitation forecasts that guide NDCMP operations.

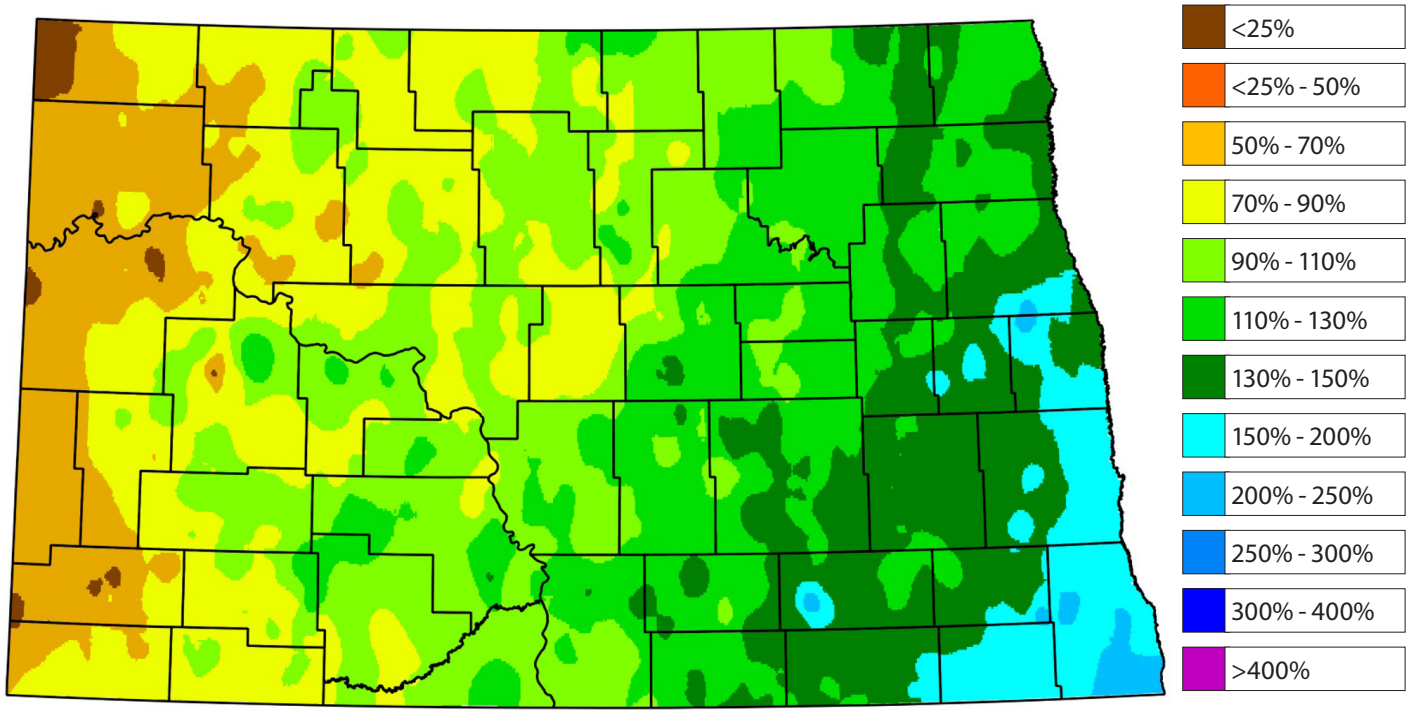
The model is run twice daily at the university, and the resulting data are made available to NDCMP forecasters through a secure website interface.

In addition, the ARB and the National Institute of Meteorological Sciences (NIMS) of South Korea established a memorandum of understanding (MOU) to advance research and collaboration in cloud-seeding operations. NIMS utilizes a cloud chamber to study seeding materials and has extended an invitation for future joint research with the Department.

2023 ARBCON OBSERVERS

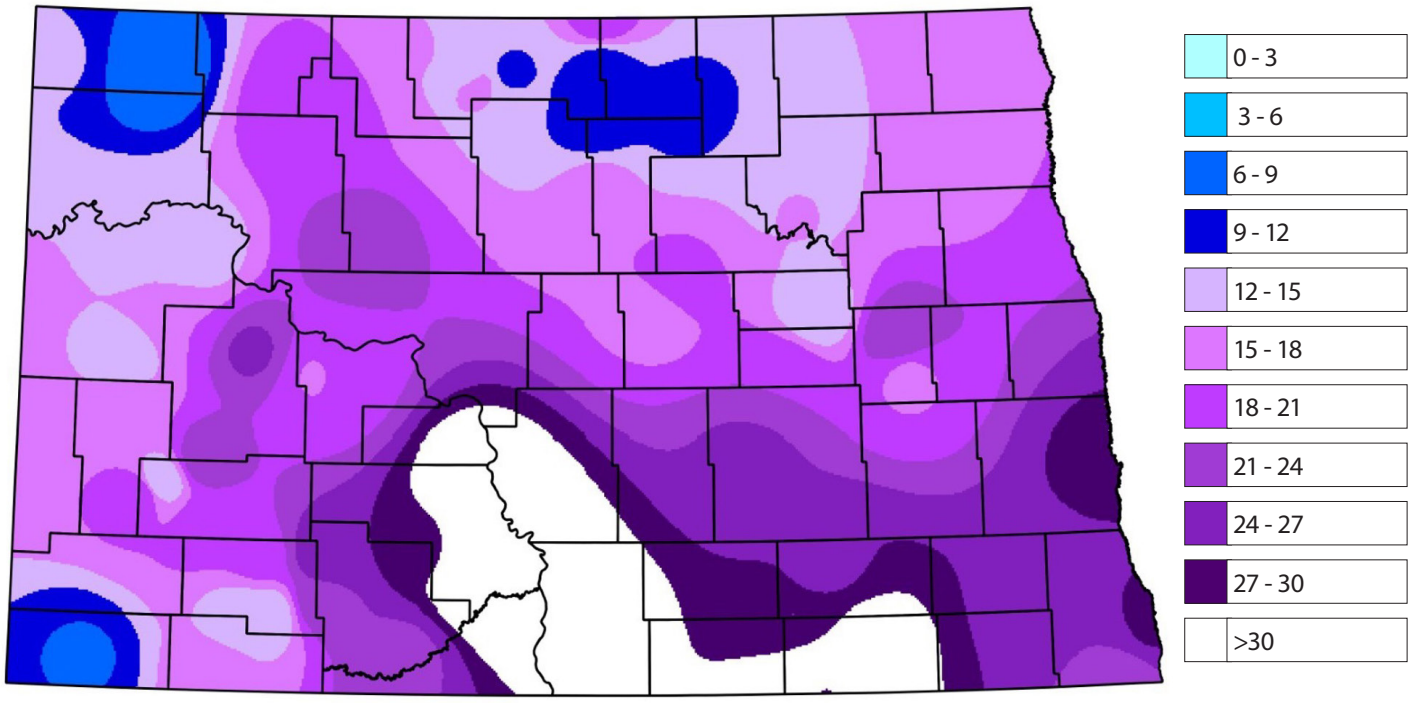


APRIL-SEPTEMBER 2023 PERCENT OF NORMAL RAINFALL



Source: NDARB Cooperative Observer Network

MARCH 2023 SNOWFALL (IN INCHES)



Source: NDARB Cooperative Observer Network

Planning & Education Division

The primary responsibilities of the Planning and Education Division are to manage the agency's Cost-Share Assistance Program; maintain the state's water project inventory and water development plan; and manage public information and outreach efforts. Division staff also participate in numerous regional, state, local, and inter-office planning activities; coordinate environmental reviews; and manage the Drought Disaster Livestock Water Supply Assistance Program (when activated).

COST-SHARE & PROJECT PLANNING

DWR supports local sponsors, maintains the statewide water project inventory, and evaluates project funding needs.

WATER PLANNING

The division leads long-range water planning efforts, oversees the State Water Development Plan, and manages the agency's strategic goals.

PUBLIC OUTREACH & EDUCATION

DWR communicates agency initiatives through presentations, media, publications, school programs, and statewide water education efforts.

COST-SHARE PROGRAM

Policy development and program application decisions related to the agency's cost-share program are the responsibility of the State Water Commission. The Commission has adopted a policy to support local sponsors in the development of sustainable water-related projects in North Dakota. The policy reflects cost-share priorities and provides the basic requirements for all projects considered for prioritization during the agency's budgeting process. Projects and studies that receive cost-share funding from the agency's appropriated funds are consistent with the public interest.

The State Water Commission has been fortunate to have access to significant funding for project support in recent years. That funding has come at a time of serious water resource challenges across the state, with major flood control, water supply, and other projects facing funding needs. During the 2023-2025 biennium, the Planning Division processed approximately 1,750 cost-share requests and payments. There were approximately 292 projects approved totaling over $559 million.

SPECIFIC TEAM MEMBERS' RESPONSIBILITIES INCLUDE

- Supporting local sponsors in the development of sustainable water-related projects in North Dakota through the Cost-Share Assistance Program
- Maintaining a water project inventory and Water Development Plan to promote efficiency in meeting North Dakota's future water development and funding needs
- Conducting and reviewing economic and life cycle cost analyses to ensure responsible and efficient use of taxpayer dollars
- Leading or participating in special studies that result in water resource and related land management plans at various levels of government
- Monitoring water resource issues and advising decision makers on possible impacts to North Dakota's water management objectives
- Representing the Department on regional, national, and international natural resource planning bodies
- Preparing presentations, developing and maintaining the agency's online and social media presence, and fostering public awareness about water resources and agency activities
- Providing graphic design support for public-facing and internal documents
- Reviewing publications for "North Dakota Be Legendary" brand compliance
- Providing opportunities for adults and students to increase their understanding of North Dakota's water resources and how these resources are managed
- Coordinating and managing interagency environmental reviews

MUNICIPAL, RURAL, & INDUSTRIAL WATER SUPPLY

In federal fiscal years 2024 and 2025, the Municipal, Rural, and Industrial (MR&I) Water Supply Program received $10.7 million in federal grant funds for the development of water supply facilities in the state. This brought the total received from the federal government to $496.5 million since the program was authorized by the Garrison Reformulation Act of 1986 and the Dakota Water Resources Act of 2000.

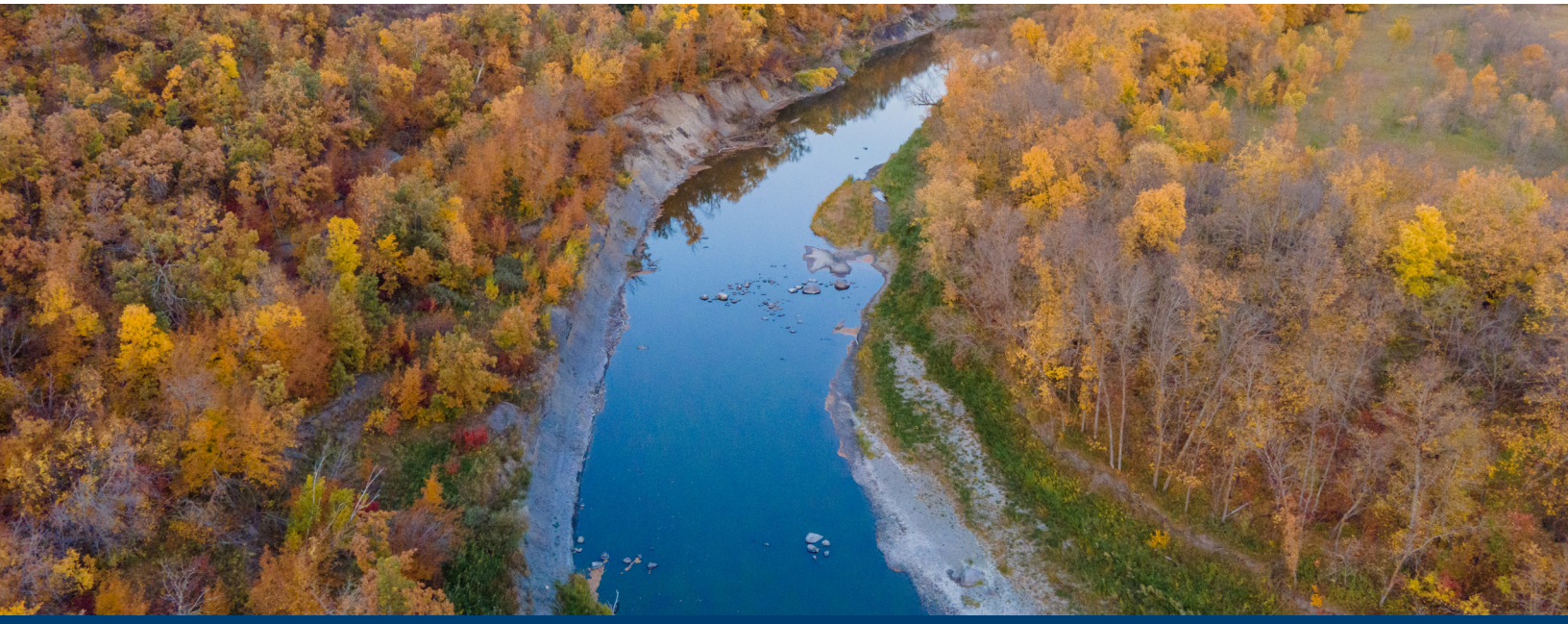
The 2024 and 2025 federal MR&I funds were allocated to the Northwest Area Water Supply (NAWS) Project for the development of the biota water treatment plant, intake, and water transmission pipelines. MR&I funds were also allocated for Eastern North Dakota Alternative Water Supply Project development.

STATE WATER DEVELOPMENT PLAN

By virtue of North Dakota Century Code, Section 61-02-14, Powers and Duties of the Commission; Section 61-02-26, Duties of State Agencies Concerned with Intrastate Use or Disposition of Waters; and Section 61-02-01.3, Comprehensive Water Development Plan, the SWC is required to develop and maintain a comprehensive, short- and long-range water plan for the sound management and development of North Dakota's water resources.

The most recent North Dakota State Water Development Plan was completed in January 2025. The purpose of the 2025 State Water Development Plan is to outline the planning process; provide a progress report on the state's priority water management and development efforts; provide information regarding North Dakota's current and future water development project funding needs and priorities; provide information regarding North Dakota's revenue sources for water development; serve as a formal request for funding from the Resources Trust Fund; and identify goals and objectives to meet water development challenges.

In addition, the 2025 Water Development Plan considers longer-term planning horizons. While previous plans typically focused on a funding picture two to four years in the future, the 2025 Plan estimates the potential financial needs of water-related infrastructure in ten years, twenty years, and beyond.



AGENCY STRATEGIC PLANNING

The Planning and Education Division manages implementation of the agency's current 5 Year Strategic Plan, which was completed during the 2021-2023 biennium. The DWR Strategic Plan is intended to provide direction and clearly articulate where the agency will prioritize efforts through June 30, 2027.

The Strategic Plan included the following overarching objectives:

1. Effectively communicate with the public and stakeholders with a primary focus on collaboration and building partnerships.
2. Develop world-class, sustainable, and resilient water development and management practices.
3. Support the beneficial use of Missouri River system water and other available water supply sources.
4. Implement innovative ideas, technology, and grow analytic capabilities to improve efficiencies in water management and development.
5. Improve the department's internal resilience and promote a positive culture.

PUBLIC RELATIONS

External communication efforts are disseminated via multiple methods to the public, media, elected leaders, Commission members, organizations, and stakeholders.

The agency maintains a public website that contains up-to-date information about departments, programs, policies, data, maps, goals, and its mission and vision. Social media outlets such as Facebook, YouTube, LinkedIn, and other platforms are also used to distribute current events and agency news.

The Planning and Education Division's Communications Manager serves as a resource to the entire agency, providing communication assistance in areas such as news releases, social media initiatives, talking points and speeches, coordinating media interviews, public outreach campaigns, agency communication plans, presentations, producing educational agency-based tutorial videos, generating internal and external newsletters, creating water-focused magazine articles, and participating in community events.

INTERNAL COMMUNICATION

The agency utilizes a variety of tools for internal communication. One of those tools is using an intranet site. This site provides the latest agency news, information, upcoming events, and meetings. The agency also promotes staff interests with effective internal communications, including a weekly update that is distributed to staff featuring weekly meetings and other information that might be of interest to team members that week. Team engagement efforts called Coffee Chats and Town Hall meetings also were developed as effective internal communication strategies to encourage collaboration and team building. They consist of informative, educational, and sometimes entertaining presentations by staff members about their roles or important agency initiatives. External presenters are also sometimes scheduled to talk about issues of interest.

INTERAGENCY PROJECT REVIEWS

Planning and Education Division staff continue to conduct and coordinate interagency environmental reviews involving projects associated with Community Development Block Grants and Loans; Hazard Mitigation Grant Program; Rural Development Loan Program; highway improvements; airport improvements; dike/levee projects; water storage impoundments; municipal and rural water supply development and treatment projects; municipal waste treatment projects; oil and gas well projects; oil and gas pipeline projects; electrical transmission line development/maintenance/modification projects; and various federal and state water, land, and wildlife management plans, studies, Environmental Assessments (EAs), and Environmental Impact Statements (EIS).

Throughout the 2023-2025 biennium, DWR continued to use the electronic internal routing system that was developed internally. This system continues to allow staff an adequate amount of time to complete reviews and decreases the agency's response time to the applicant. In the 2023-2025 biennium, the agency received 475 requests for project reviews. Staff have a maximum of 30 days to provide comments, but on average, a signed comment letter is provided to the project sponsor in less than three weeks.

Environmental review comments address compliance requirements involving agency regulatory responsibilities in issuing permits pertaining to water appropriation, floodplain management, sovereign lands, and the construction of dikes, levees, dams, drains, and water holding ponds. Staff members also provide information concerning the location of water wells, stream gauges, well monitoring sites, and elevation benchmarks.

ECONOMIC & LIFE CYCLE COST ANALYSES

House Bill 1020, passed by the North Dakota Legislature in 2017, created NDCC 61-03-21.4, requiring the agency to "develop an economic analysis process for water conveyance projects and flood-related projects expected to cost more than one million dollars, and a life cycle analysis process for municipal water supply projects. When the State Water Commission is considering whether to fund a water conveyance project, flood-related project, or water supply project, DWR shall review the economic analysis or life cycle analysis and inform the State Water Commission of the findings from the analysis and review."

To comply with NDCC 61-03-21.4, DWR contracted with HDR Inc. to assist the agency in drafting Economic Analysis (EA) and Life Cycle Cost Analysis (LCCA) processes. Additionally, the agency and HDR completed fillable electronic platforms that project sponsors and the agency can access to assist with more efficient and consistent assessments of projects.

Policy was revised to require all water supply projects requesting cost-share assistance to complete the provided Life Cycle Cost Analysis worksheet and for all water conveyance and flood protection projects greater than $200,000 to complete an Economic Analysis worksheet. These worksheets must be submitted to the agency for review prior to consideration for funding by the Water Commission.

To assist with EA and LCCA completion and reviews, the agency hired a Natural Resource Economist in 2019. This economist provides guidance to communities preparing EAs and LCCAs, investigates alternatives, reviews the results of the submissions, and prepares a summary for consideration by the Commission. During the 2023-2025 biennium, 9 EAs and 155 LCCAs were completed.

NORTH DAKOTA WATER EDUCATION

In 1984, the (then) State Water Commission took the initiative to provide water education throughout the state, with the primary goal of educating the public about the importance of water in North Dakota. When the program first started, it was called Water Education for Teachers (WET).

Today, WET is known as Project WET (Water Education Today), a supplemental and interdisciplinary water education program accepted around the world. North Dakota's Project WET became the template for the program's growth, and it now involves all 50 states and 60 countries, supporting the mission of advancing water education to understand local and global challenges and inspiring local solutions.

Since 1997, North Dakota Project WET has enhanced its scope and vision with the innovative "Explore Your Watershed" Program. Now called North Dakota Water Education, it promotes the importance of water in all aspects of our lives, including conservation, water quality, non-point source pollution, stewardship, protection, access, health, and best management practices. North Dakota Water Education develops and fosters partnerships and collaboration with schools, local, state, and federal agencies, and water entities throughout the state to provide educational opportunities and information.

Project WET publications, trainings, festivals, and community events are based on four core beliefs: 1) water connects us all, 2) water is for all, 3) water must be managed for sustainability, and 4) water is dependent on personal responsibility and actions. Water Education is delivered to educators, youth, communities, and the public through multi-credit watershed institutes, teacher workshops, facilitator trainings, water festivals, and special community events.

The Water Education Program is delivered through interactive learning, awareness, exploration, and action-based stewardship of North Dakota water resources, with a focus on how water interacts with both the human and natural environments within our own watersheds. Programs are based on the well-developed, and time-tested Project WET curriculum, through the development and dissemination of indoor, outdoor, and classroom-ready experiences, teaching aids, printed materials, and online resources that are hands-on, user-friendly, non-biased, age-appropriate, adaptable, and relevant.

The water education program has experienced growth over the years, and the adoption of virtual and online opportunities play a key role in advancing water education. Online resources assist teachers, community members, and students by providing the tools required to gain a better understanding of how we think about water as a limited resource.

OTHER GOVERNMENTAL & NON-GOVERNMENTAL ORGANIZATION INVOLVEMENT

The Planning and Education Division also participated, to varying degrees, in several other governmental and non-governmental organizations, providing input from DWR's perspective. During the biennium, staff were involved with the Devils Lake Basin Joint Water Resource Board; Upper Sheyenne River Joint Water Resource Board; the International Water Institute; North Dakota Missouri River Advisory Council; Red River Retention Authority; Red River Basin Commission; Assiniboine River Basin Initiative, Western States Water Council, National Water Resources Association, and National Water Supply Alliance.

THE CURRENT

The Current, which was created in early 2016, is a quarterly newsletter that provides the latest agency-specific information concerning water development, regulatory and appropriation efforts, water education, policy changes, Water Commission meeting approvals, and much more. In April 2020, The Current evolved into a digital publication, and the average distribution of the newsletter is approximately 1,100 per quarter.

NORTH DAKOTA WATER MAGAZINE

Since 1993, various water interests in North Dakota have pooled resources through the North Dakota Water Education Foundation to publish a magazine titled North Dakota Water. This magazine provides a broad spectrum of high-quality information about the state's water resources to the widest possible audience. While monthly distribution varied during the 2023–2025 biennium, the magazine typically reached about 20,000 readers in print and 14,000 digitally. Readers include the public, local, state, and federal agencies, and elected officials.

The Planning and Education Division develops and writes the agency's contribution, a two-page section called The Oxbow. A third page is contributed by the Atmospheric Resource Board.

Regulatory Division

The Regulatory Division is responsible for regulating the following areas under North Dakota Century Code as a function of the agency.

PERMITTING & REGULATION

DWR regulates drainage, construction, and sovereign lands activities to ensure projects meet engineering, legal, and safety standards.

SOVEREIGN LANDS & DAM SAFETY

The Department manages navigable waters, oversees dam safety inspections, and maintains statewide inventories of regulated structures.

FLOODPLAIN & FLOOD RISK

DWR administers FEMA-supported floodplain programs, collaborates with partners to reduce flood risk, and maintains statewide flood mapping and management support.

PERMITS

The Department of Water Resources has several statutory responsibilities related to the permitting of water management projects. Construction permits are required—within defined thresholds—for the construction or modification of a dam, dike, or other structure used for water conservation, flood control, watershed improvement, or water storage.

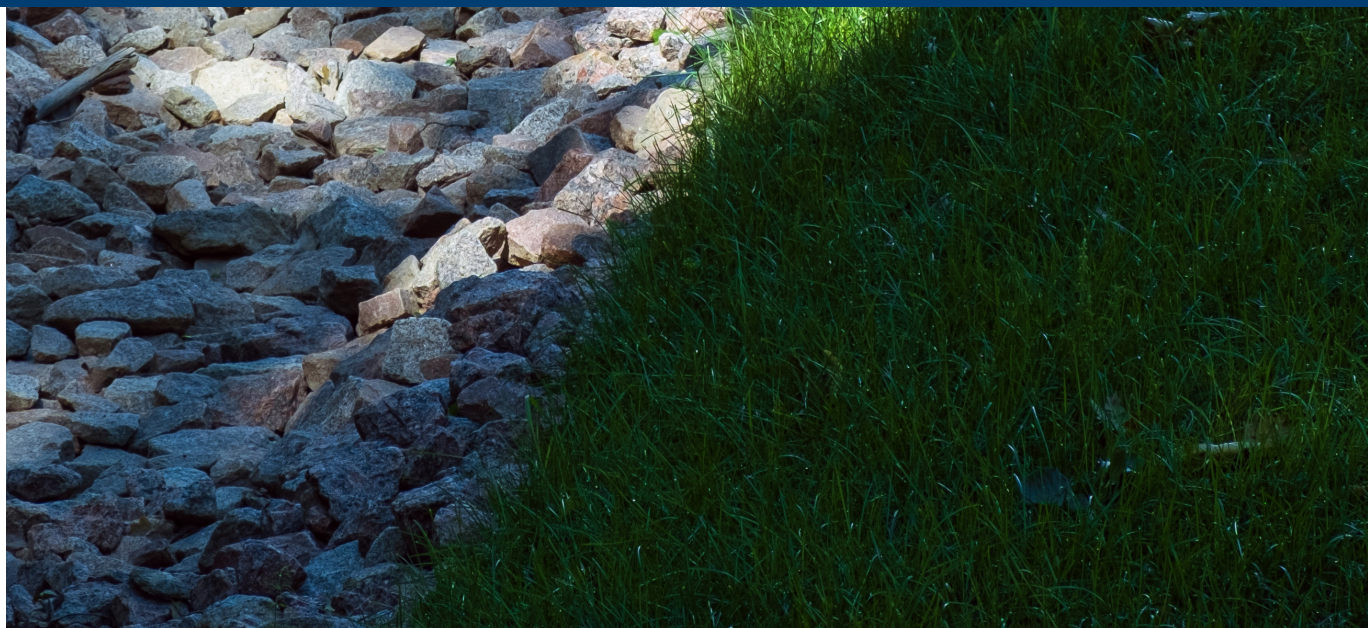
Drainage permits are required to drain a pond, slough, lake, or sheetwater—or any series thereof—with a watershed area of eighty acres or more, as well as for emergency drainage. Sovereign lands permits are required for specific work or activities occurring within the ordinary high-water mark (OHWM) of the state's navigable waters.

Additional regulatory duties include reviewing water-related complaints; handling appeals of water resource district decisions; reviewing stream-crossing and watercourse determination requests; maintaining records of water resource district–approved subsurface water management permits; and coordinating environmental review assistance in collaboration with the Planning and Education Division.

Division staff also represent the agency at a variety of technical meetings and professional forums, including those organized by the U.S. Army Corps of Engineers, the Natural Resources Conservation Service (NRCS) State Technical Committee, the NRCS Interagency Watershed Committee,

SPECIFIC TEAM MEMBERS' RESPONSIBILITIES INCLUDE

- Administering and providing guidance on permit applications for surface drains; construction of dams, dikes, and other devices; and sovereign land projects
- Offering technical assistance to water resource district boards
- Administering FEMA's North Dakota Dam Safety Program and Risk Mapping, Assessment, and Planning programs
- Providing floodplain management assistance to communities participating in the National Flood Insurance Program through FEMA's Community Assistance Program - State Support Services Element
- Managing North Dakota's non-mineral interests in sovereign lands through Ordinary High Water Mark (OHWM)delineations and navigable waters identification
- Reviewing and permitting projects located within navigable waters
- Coordinating the state's participation in the U.S. Army Corps of Engineers' Silver Jackets Program
- Reviewing determination requests, complaints, and complaint appeals



the Association of Soil Conservation Districts, the North Dakota Soil Conservation Committee, the Natural Resources Trust, the National Association of Flood and Stormwater Management Agencies, the Association of State Dam Safety Officials, and the Association of State Floodplain Managers.

ENGINEERING & PERMITTING

Drainage and flood risk reduction remain top priorities for North Dakota. Recent state investments in new drainage and flood risk reduction projects—as well as upgrades to existing systems—underscore the Department's need to maintain an informed and active role in regulating and overseeing engineering and water management practices consistently across the state.

The Engineering and Permitting (E&P) Section provides oversight and regulatory review of drainage and flood control projects, including agricultural drainage, dikes, levees, floodwalls, and channel diversions. Its goal is to ensure thorough, technically sound, and safety-focused evaluations of jurisdictional projects submitted for Department consideration.

The E&P Section reviews permit applications to confirm that proposed projects adhere to modern engineering standards and comply with North Dakota's codified water management rules and regulations. The section works closely with water resource districts and their agents as both collaborators and applicants, since the permitting process for drainage and construction often involves joint engagement with local water resource districts.

E&P staff routinely collaborate with other state and federal agencies, political subdivisions, and the public throughout the permitting process. They also review complaints, complaint appeals, and assessment appeals, and evaluate stream-crossing and watercourse determination requests. These responsibilities require the E&P Section to maintain expertise in multiple areas of civil engineering, as well as in statutes, administrative rules, policies, and case law, to ensure that water control and management projects are designed and constructed in accordance with engineering and legal requirements.

During the 2023–2025 biennium, the E&P Section was involved in several key efforts, including participation in the Governor's Red Tape Reduction Initiative, contributions to the Department's Watershed Study, and updates to the Administrative Code.

2023-2025 BIENNIUM RECEIVED & PROCESSED PERMITS

	RECEIVED/ INITIALLY PROCESSED	PROCESSED/ COMPLETED[1]	AGENCY DECISION[2]
Construction Permit Applications	53	43	39
Surface Drain Permit Applications	49	40	40
Emergency Drain Permit Applications	2	2	2
Subsurface Water Management Permits[3]	392	392	–
Sovereign Lands Permit Applications	93	62	58
Special Problems or Other Determination Requests[4]	120	83	74

[1] Processed/Completed applications or requests include requests received before the 2023-2025 biennium.

[2] Agency Decision means those applications or requests that resulted in an agency permit decision or agency determination. (Excluding withdrawn applications or unresponsive applicants.)

[3] Subsurface Water Management Permits do not involve agency decision-making but are a common daily processing activity that requires document management and database processing.

[4] Special Problems or Other Determination Requests includes drainage complaints, drainage complaint appeals, dam or dike complaints, dam or dike complaint appeals, assessment appeals, watercourse determinations, and stream crossing determinations.

GOVERNOR'S RED TAPE REDUCTION – SB 2044

As part of the Governor's Red Tape Reduction Initiative, the E&P Section proposed Senate Bill 2044 (SB 2044) to streamline and clarify the Department's role in watercourse determinations under N.D.C.C. § 61-01-06.

The bill redefined the Department of Water Resources' involvement, shifting it from serving as the primary decision-making authority to an administrative appeal remedy for individuals or entities aggrieved by watercourse determinations made by a state agency or political subdivision.

This legislative change enhances transparency, reduces procedural redundancy, and ensures that local jurisdictions retain responsibility for initial determinations while maintaining a fair and consistent appeal process through the Department.

E&P ADMINISTRATIVE CODE UPDATES

Following actions by the 69th Legislative Assembly, the E&P Section is developing updates to the Administrative Code to address procedures for watercourse determination reviews, drainage complaint appeal reviews, and permitting timelines.

These revisions are intended to promote a clearer and more consistent application of legislative intent while ensuring that Department responsibilities are implemented efficiently and transparently.

SOVEREIGN LANDS MANAGEMENT

North Dakota's sovereign lands include areas—such as beds and islands—located within the ordinary high-water mark (OHWM) of the state's navigable lakes and streams. The Department of Water Resources is responsible for determining which of these water bodies were navigable in fact at the time of statehood under the standards of the Equal Footing Doctrine, thereby qualifying as sovereign lands of the state. Responsibilities also include delineating the OHWM of navigable water bodies and overseeing the state's non-hydrocarbon mineral interests within these lands. Any project occurring partially or wholly on sovereign lands requires authorization through a Sovereign Land Permit.

The Department's objective is to manage, operate, and supervise sovereign lands for multiple public uses, consistent with the Public Trust Doctrine, and in the best interests of current and future generations. These goals are increasingly challenging due to growing recreational demand, waterfront property development, and the expansion of water-based businesses.

In 2007, the Department (then the Office of the State Engineer) completed the North Dakota Sovereign Land Management Plan, which outlines the state's authority and strategies for improving sovereign land management. That same year, the OHWM Delineation Guidelines were developed to provide a consistent and repeatable process for accurately delineating the ordinary high-water mark in both riverine and lake environments. All OHWM delineations on sovereign lands must adhere to these guidelines.

Legislation passed during the 65th and 66th Legislative Assemblies clarified state ownership of riverbed segments and established requirements for OHWM determinations. To date, 17 water bodies have been identified as navigable in fact under the Equal Footing Doctrine, with three formally adjudicated as such.

During the 66th Legislative Assembly, a formal procedure for determining the navigability of lakes and streams not yet adjudicated was codified as N.D.C.C. § 61-33-05.1. In the 68th Legislative Assembly, the Department received funding to conduct a study of six of the fourteen unadjudicated navigable waters to evaluate their navigability status. The Department remains committed to completing reviews of all currently claimed navigable waters as directed by the Legislature.

Because the Department does not employ law enforcement personnel, it has established an agreement with the North Dakota Game and Fish Department to enforce state code on sovereign lands. Additionally, the Department collaborates with city, county, federal, and other state land managers to enhance public access and promote non-motorized recreational use of these areas.

SOVEREIGN LANDS ADMINISTRATIVE CODE UPDATES

In alignment with its mission to manage the state's navigable waters for the benefit of the public, the Sovereign Lands Section is advancing updates to the North Dakota Administrative Code. These revisions include adjustments to the violation fee schedule, the establishment of a temporary permitting process, and general clarifications to existing regulatory language.

These updates are intended to enhance transparency, improve compliance, and ensure consistency in the administration of sovereign land management across North Dakota.

DAM SAFETY PROGRAM

The purpose of North Dakota's Dam Safety Program is to minimize risks to life and property associated with the potential failure of dams throughout the state. The program's primary functions include reviewing dam construction permit applications, conducting dam inspections, and maintaining a comprehensive inventory of dams within North Dakota.

The state's dam inventory currently includes approximately 3,300 known dams. Of these, 52 dams are classified as high hazard and 64 as medium hazard, meaning their failure could result in loss of life or significant downstream property damage. Maintaining and improving this statewide inventory is a continual effort of the Dam Safety Program.

During the 2023–2025 biennium, the program reviewed and approved 37 construction permit applications for dams, with one additional project determined not to require a permit.

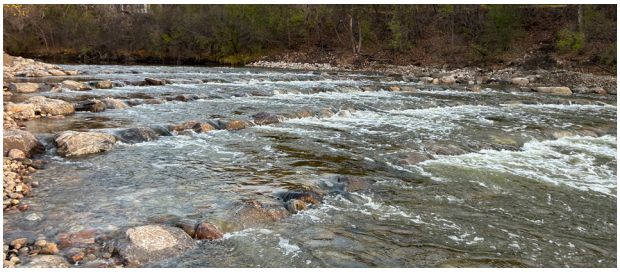
Another core responsibility of the program is to conduct safety inspections and provide maintenance and repair recommendations to dam owners. High- and medium-hazard dams—whether state, local, or privately owned—are inspected on a rotational schedule. During the biennium, the Dam Safety Program completed 48 full periodic inspections, covering approximately 41% of North Dakota's high- and medium-hazard dams.

In addition, 31 dam site visits were conducted to address public or owner-reported concerns, monitor dam conditions during spring flooding, read instrumentation, and update information on low head dams.

DAM SAFETY ADMINISTRATIVE CODE UPDATES

In coordination with the E&P section, the Dam Safety Section is advancing updates to the North Dakota Administrative Code to clarify the dam construction permit review process and establish clear timing expectations.

Additionally, the Department is proposing streamlined guidance for the submission of operation and maintenance manuals, ensuring consistency and efficiency in review and approval procedures.



NORTH DAKOTA SILVER JACKETS PROGRAM

The North Dakota Silver Jackets program, sponsored by the U.S. Army Corps of Engineers, is designed to establish a joint federal–state flood risk management team in every state. Its mission is to enhance coordination and promote comprehensive flood risk reduction efforts across North Dakota.

The North Dakota Silver Jackets Team is led by the Department of Water Resources and includes representatives from the U.S. Army Corps of Engineers (St. Paul and Omaha Districts), U.S. Geological Survey (USGS), U.S. Fish and Wildlife Service (USFWS), Natural Resources Conservation Service (NRCS), National Weather Service (NWS), Federal Emergency Management Agency (FEMA) Region VIII, North Dakota Department of Emergency Services (NDDES), and the North Dakota Geological Survey (NDGS).

The program fosters collaboration among these agencies to identify, develop, and implement projects and initiatives aimed at reducing flood threats and impacts statewide. Through cooperative planning and action, the Silver Jackets program continues to strengthen flood risk awareness and mitigation efforts in North Dakota.

The North Dakota Silver Jackets Team was active in several flood risk reduction projects and studies during the 2023-2025 biennium:

- Continued Light Detection and Ranging (LiDAR) collection support through FEMA grant opportunities, including the collection of Quality Level I and II data.
- Partnered with the St. Paul Corps to collect Red River Bathymetry in the 2023- 2025 biennium.
- Continued partnership with USGS and the SWC for a multi-year effort to update USGS stream gauges, Streamstats, and regression equations.
- Pursued multiple opportunities with USGS, Omaha Corps, and St. Paul Corps with funding from the SWC to create and update statewide datasets to help advance flood risk resilience decision-making statewide.

FLOODPLAIN MANAGEMENT

Two Department staff members administer FEMA-funded floodplain programs within the Regulatory Division; both associated with the National Flood Insurance Program (NFIP). These include Risk Mapping, Assessment, and Planning (Risk MAP) and the Community Assistance Program – State Support Services Element (CAP-SSSE).

The Risk MAP Program identifies, assesses, communicates, and mitigates flood hazards to provide high-quality data that increases public awareness and supports actions to reduce risks to life and property. This program is fully funded by FEMA.

The Risk MAP Program Manager works directly with communities to assess jurisdictional needs. Once FEMA grants are approved and awarded, the Program Manager oversees the selection of engineering consultants—chosen annually—to perform Flood Insurance Rate Map (FIRM) creation and manage related contracts. The Department currently manages 14 active floodplain mapping contracts. During the 2023 and 2024 FEMA grant cycles, an additional $2,800,580 in FEMA Risk MAP funding was awarded to support survey work, hydrologic analyses, and hydraulic studies across North Dakota.

The CAP-SSSE Program provides 75% federal funding to assist communities participating in the NFIP and to evaluate their performance in implementing local floodplain management activities. The State NFIP Coordinator supports 338 participating communities, which collectively maintain approximately 5,500 active flood insurance policies providing more than $1.7 billion in coverage statewide.

Each community designates a Floodplain Administrator to oversee floodplain development in high-risk or flood-prone areas. Local floodplain ordinances must meet or exceed minimum federal and state standards, as outlined in North Dakota Century Code Chapter 61-16.2, which includes the state's requirement for one foot of freeboard on new or substantially improved structures.

The Community Rating System (CRS) recognizes communities that implement floodplain management measures exceeding FEMA's minimum standards. Currently, 12 North Dakota communities participate in the CRS program, providing policyholders with discounted flood insurance premiums. The estimated statewide annual savings from CRS participation total approximately $318,000.

CIVIL TOWNSHIP STUDIES

In spring 2022, an issue was identified concerning National Flood Insurance Program (NFIP) policies written for properties located within civil townships in North Dakota. Insurance agents were found to have incorrectly associated policies with the wrong communities, resulting in administrative and jurisdictional inconsistencies within the NFIP database.

To address this, Department staff launched studies and supported legislative efforts aimed at clarifying community identification, improving policy accuracy, and ensuring that floodplain management responsibilities are correctly assigned across local jurisdictions.

FEMA TOWNSHIP STUDY

- In summer 2022, FEMA Region VIII began a 100% FEMA-funded study to aggregate and verify which civil townships in the state have zoning authority, including floodplain management authority.
- The FEMA study also seeks to document which civil townships within the state have an active power transfer agreement with their county for the purposes of floodplain management.
- FEMA township study results are expected during the 2025-2027 biennium.

SB 2365 - ND LEGISLATIVE STUDY

- During the 68th legislative assembly, SB 2365 was passed. SB 2365 required an interim legislative study to review how insurance agents and the public may find which entity has floodplain management authority at the parcel scale. SB 2365 study results were provided during the 2023-2025 biennium and included legislative recommendations for the 69th legislative assembly to consider (see SB 2027 below).

SB 2027 – ND TOWNSHIP FLOODPLAIN MANAGEMENT BILL

During the 69th Legislative Assembly, Senate Bill 2027 (SB 2027) updated the types of communities authorized to conduct floodplain management activities in North Dakota. This legislation followed the findings of the Senate Bill 2365 (SB 2365) study from the 68th Legislative Assembly, which revealed that overlapping city, township, and county jurisdictions created confusion for insurance agents when assigning the correct community to National Flood Insurance Program (NFIP) policies.

Beginning in the 2025–2027 biennium, counties will assume primary responsibility for floodplain management activities outside city limits. Organized townships may obtain floodplain management authority from the county through a defined transfer process.

All political subdivisions with approved floodplain management authority are required to report that authority annually to the Department. The Department will develop and maintain a public statewide repository of this information, to be updated each year by May 31.

Water Appropriation Division

The Water Appropriation Division is responsible for the appropriation and management of the state's water resources in accordance with Article XI of the North Dakota Constitution and Chapter 61 of the North Dakota Century Code. These laws are based on the Doctrine of Prior Appropriation.

WATER PERMITTING

DWR evaluates water permit applications, monitors water use, and maintains statewide water-rights records.

GROUNDWATER & DATA

The division operates drilling and monitoring programs to assess groundwater conditions and support long-term water management.

RESEARCH & RESOURCE

DWR conducts studies, collaborates with partners, and provides technical guidance to ensure sustainable water use and support economic development.

PERMIT & WATER USE

In addition to the permitting and water use data below, Water Appropriation staff completed the following functions during the 2023-2025 biennium:

- 82 inspections of constructed works associated with conditional or perfected water permits.
- 1,234 temporary water permits were issued.
- 170 conditional or perfected water permits were canceled for non-development or use.
- 29 conditional water permit applications were denied.
- 106 perfected water permits were issued.

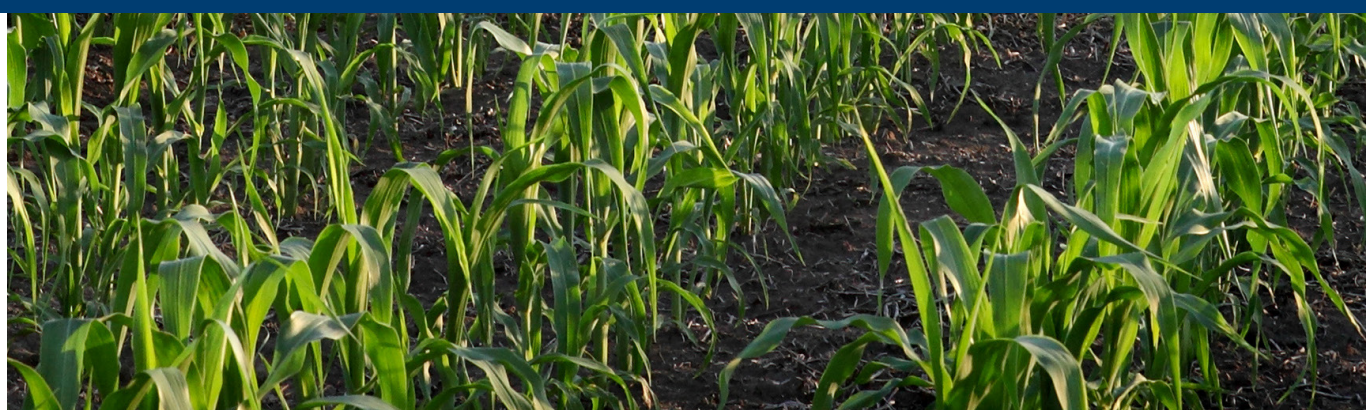
DRILLING PROGRAM & DATA ACQUISITION

During the 2023–2025 biennium, the Water Appropriation Division's Drilling Program completed 115 test holes, of which 104 included monitoring well installations. Additionally, 87 monitoring wells were either plugged or plugged and replaced to maintain data integrity across the state's monitoring network.

Thirteen surface sites were monitored for water stage and periodically stream-gaged, while seven sites were dedicated to monitoring water-level elevations. Three new stilling wells were installed at Lake Ilo, Spring Creek near Killdeer, and Paulson Creek near its confluence with the White Earth River.

SPECIFIC TEAM MEMBERS' RESPONSIBILITIES INCLUDE

- Conducting analyses and providing recommended decisions to the State Engineer and Director on water permit applications
- Carrying out the administrative procedures required for water permit applications, water permits, and water rights
- Conducting field inspections to verify permit compliance and investigate potential violations
- Developing and maintaining a system for the storage and retrieval of water permit records
- Monitoring the use of each conditional and perfected water permit through annual water use reports, and maintaining a permanent record
- Collecting, storing, and disseminating data on water use
- Assessing the impacts of existing water use on ground water levels, stream flow, and chemical quality of water for the purposes of future allocation and management
- Identifying the availability and chemical quality of the state's water resources
- Participating in committees and task forces pertaining to water quantity or quality issues as required
- Investigating and employing new technologies and strategies to improve the understanding and knowledge of the occurrence and movement of the state's surface and ground water resources
- Assisting municipalities and other public entities in developing solutions to water supply problems



NEW DRILL RIG

In fall 2024, the Department expanded its Subsurface Exploration Program with the addition of a new Versa-Drill 140X rig—its fourth drilling unit. The new rig represents a significant investment in improving field safety, reliability, and operational efficiency at drilling sites across North Dakota.

A major portion of the drilling program focuses on maintaining the Department's existing monitoring well network. This includes replacing aging wells to preserve the continuity and accuracy of the state's long-term groundwater level data—an essential resource for effective water management statewide.

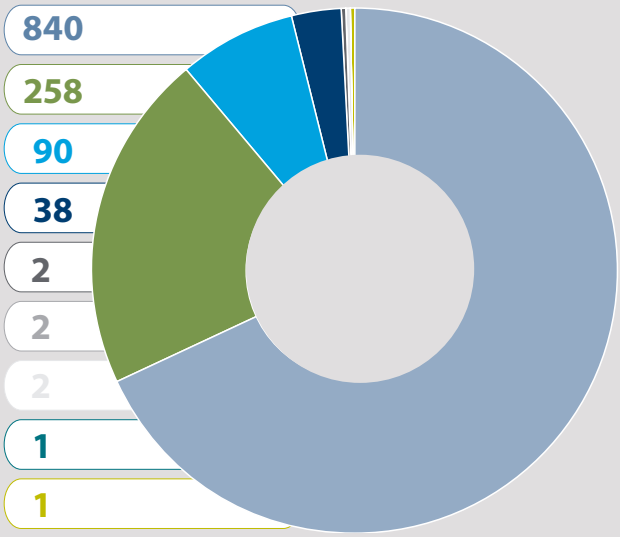
ECONOMIC DEVELOPMENT

Economic development remains a key state priority, and in most cases, water is a critical factor in supporting new enterprises. The Water Appropriation Division provides technical information to the North Dakota Department of Commerce and other entities regarding the availability and chemical quality of water to serve proposed developments.

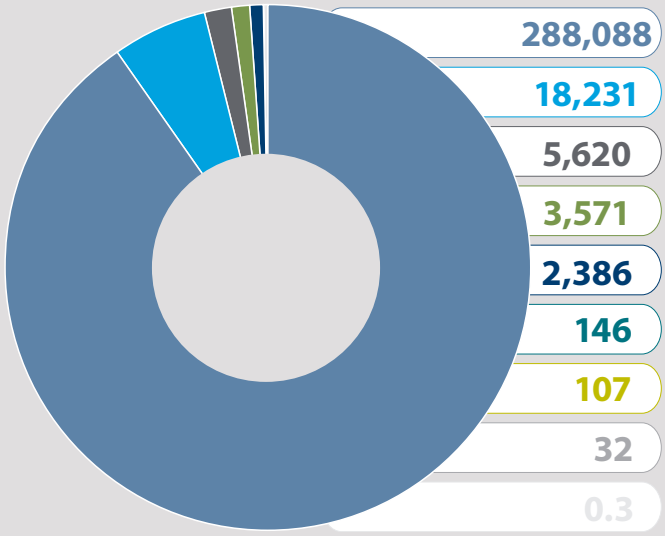
This collaboration ensures that new industries and infrastructure projects are supported by reliable and sustainable water resources, aligning economic growth with responsible resource management.

TEMPORARY WATER PERMITS
ISSUED: 2023-2025

NUMBER ISSUED



PERMITS BY ACRE-FEET



IND. - WATER DEPOT
IRRIGATION
MUNICIPAL
CONSTRUCTION
INDUSTRIAL
RECREATION
FISH & WILDLIFE
RESOURCES PLANNING
FIRE PROTECTION

AIRBORNE ELECTROMAGNETIC SURVEY

The 69th Legislative Assembly approved a one-time appropriation of $750,000 to fund Aerial Electromagnetic (AEM) surveys aimed at improving the understanding and management of North Dakota's groundwater resources. In May 2024, the Department entered a contract with Aqua Geo Frameworks, LLC to conduct the surveys.

Two priority survey areas were identified by the Department:

- Area 1: Portions of Kidder and Stutsman Counties in central North Dakota
- Area 2: Portions of Cass, Richland, Ransom, and Sargent Counties in southeastern North Dakota

AEM data collection was completed during the summer of 2024 using a helicopter-mounted system that measures subsurface electromagnetic responses. This non-invasive method identifies underground geological features, enabling the delineation of aquifers and assessment of groundwater extent and availability.

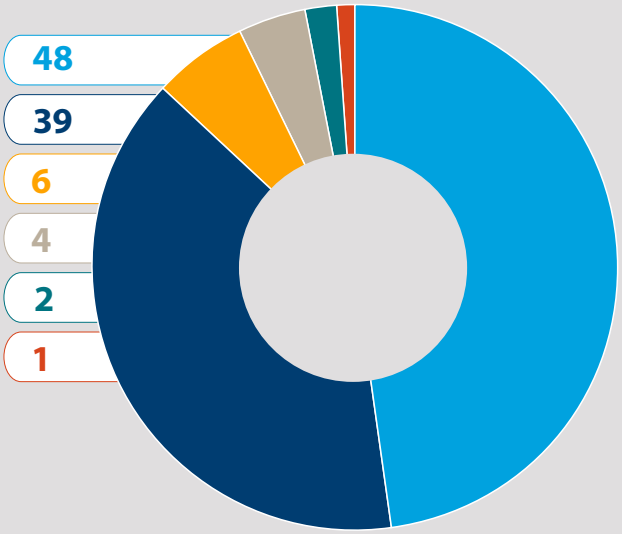
Project deliverables included:

- Raw geophysical data files
- Maps
- Google Earth files (grids, contours, flight lines, and survey boundaries)
- Two-dimensional profile sections
- Three-dimensional fence diagrams
- Three-dimensional voxel models
- Final report

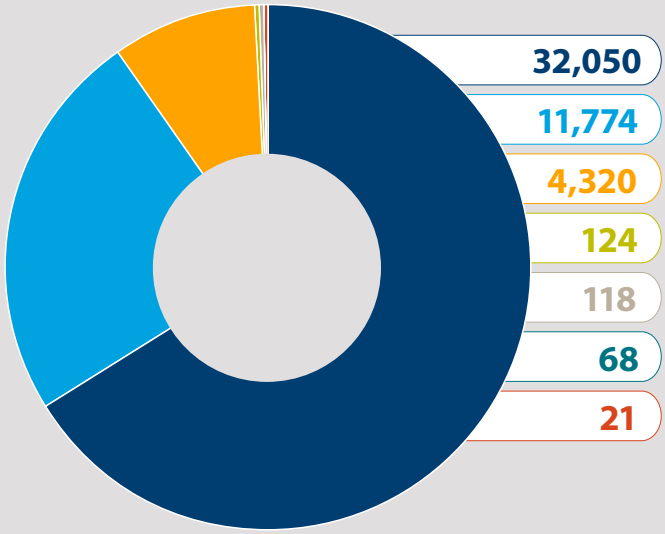
The datasets produced through this effort provide valuable tools for advancing science-based decision-making related to the management, investigation, and appropriation of the state's groundwater resources.

CONDITIONAL WATER PERMIT APPLICATIONS RECEIVED: 2023-2025

NUMBER RECEIVED



APPLICATIONS BY ACRE-FEET

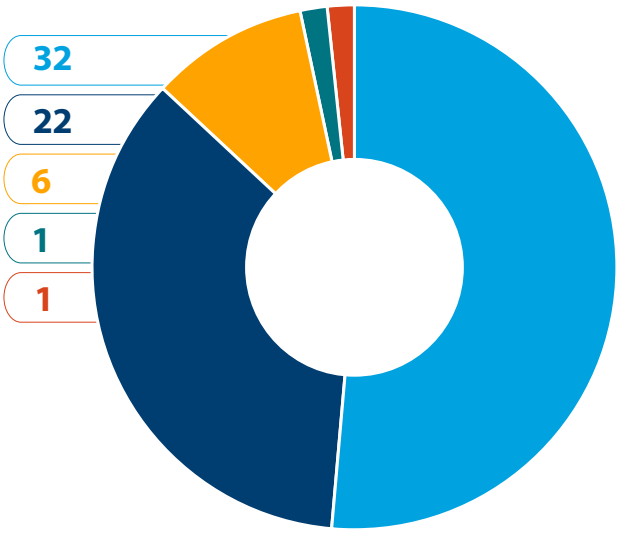


IRRIGATION | INDUSTRIAL | RURAL WATER | FLOOD CONTROL

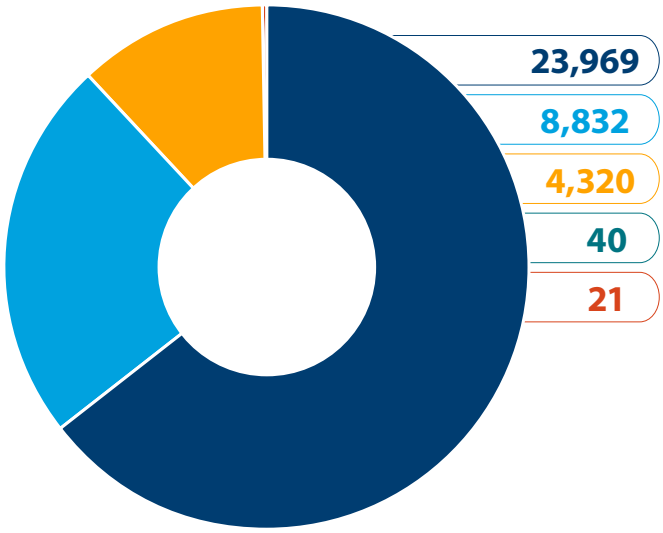
RECREATION | STOCK

RECEIVED CONDITIONAL WATER PERMITS
GROUNDWATER APPLICATIONS: 2023-2025

NUMBER RECEIVED



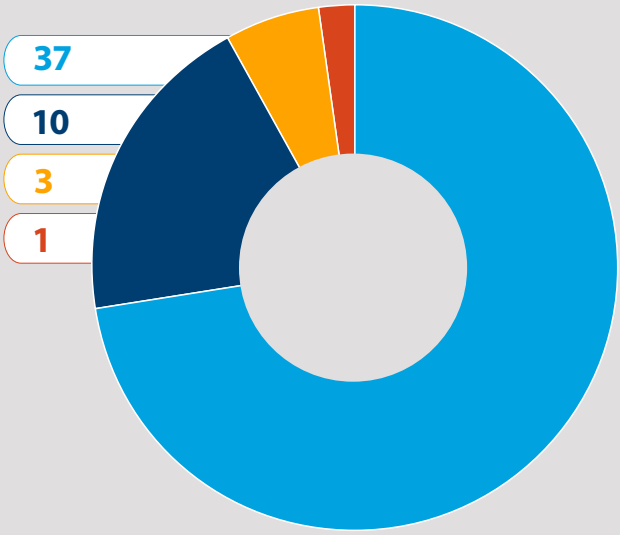
APPLICATIONS BY ACRE-FEET



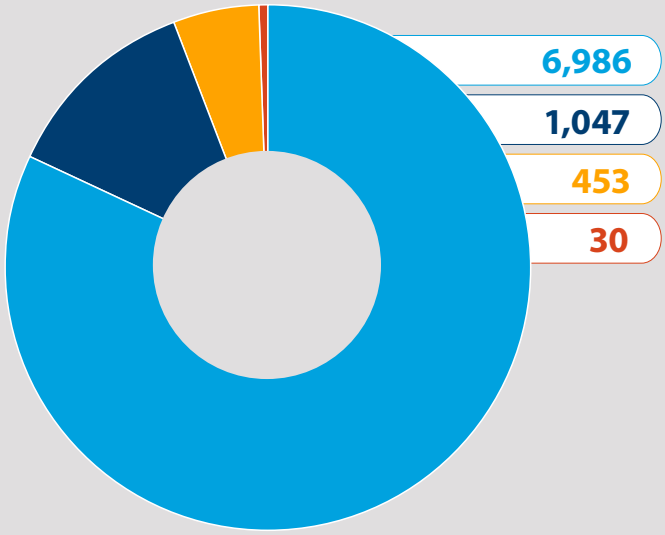
IRRIGATION | INDUSTRIAL | RURAL WATER | RECREATION | STOCK

GROUNDWATER PERMITS APPROVED: 2023-2025

NUMBER APPROVED



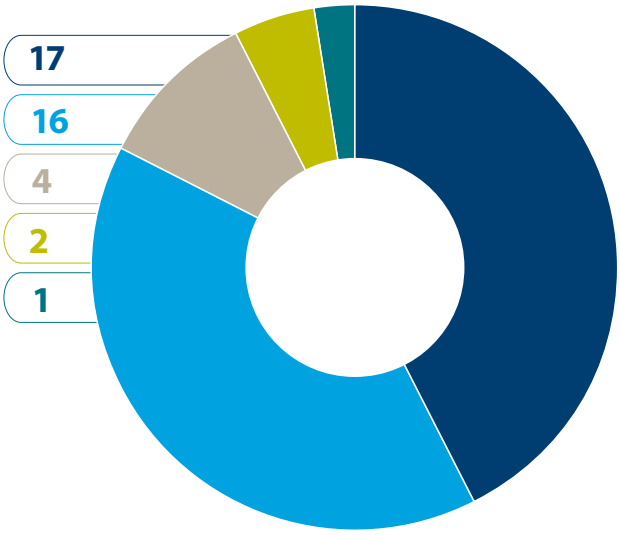
APPROVALS BY ACRE-FEET



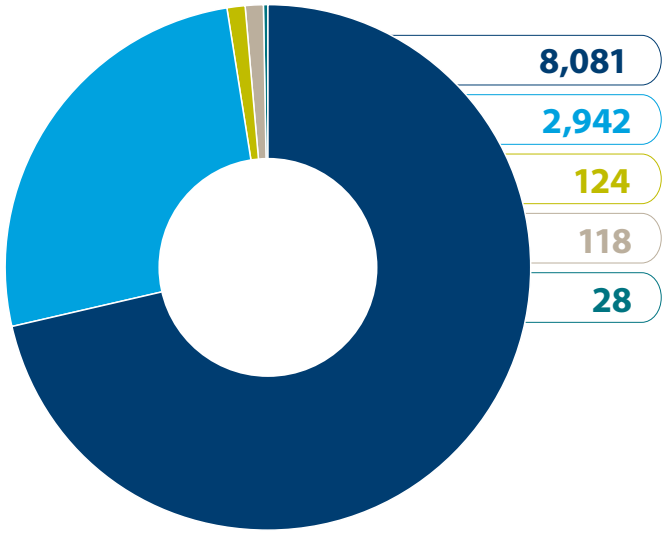
IRRIGATION | INDUSTRIAL | RURAL WATER | STOCK

RECEIVED CONDITIONAL WATER PERMITS
SURFACE WATER APPLICATIONS: 2023-2025

NUMBER RECEIVED



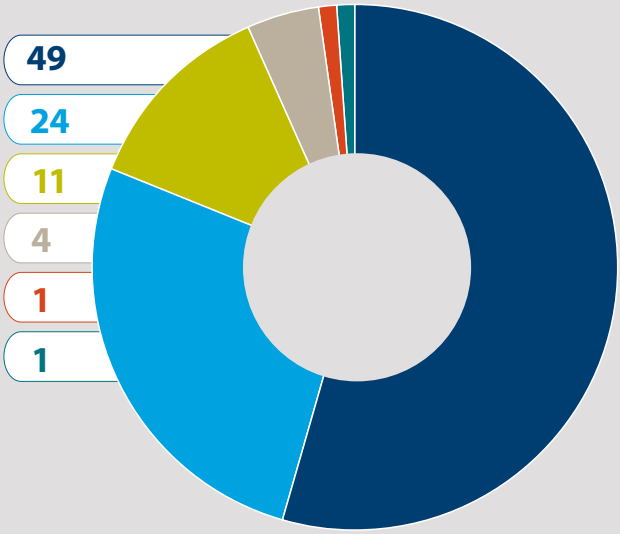
APPLICATIONS BY ACRE-FEET



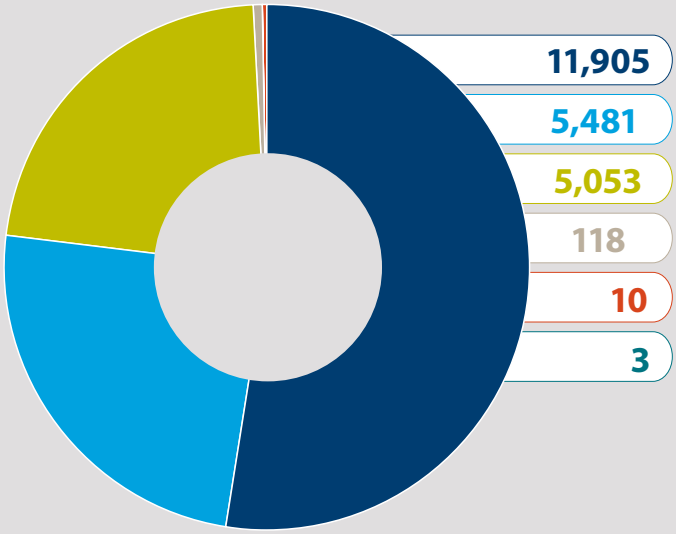
INDUSTRIAL | IRRIGATION | FISH & WILDLIFE | FLOOD CONTROL | RECREATION

SURFACE WATER PERMITS APPROVED: 2023-2025

NUMBER APPROVED

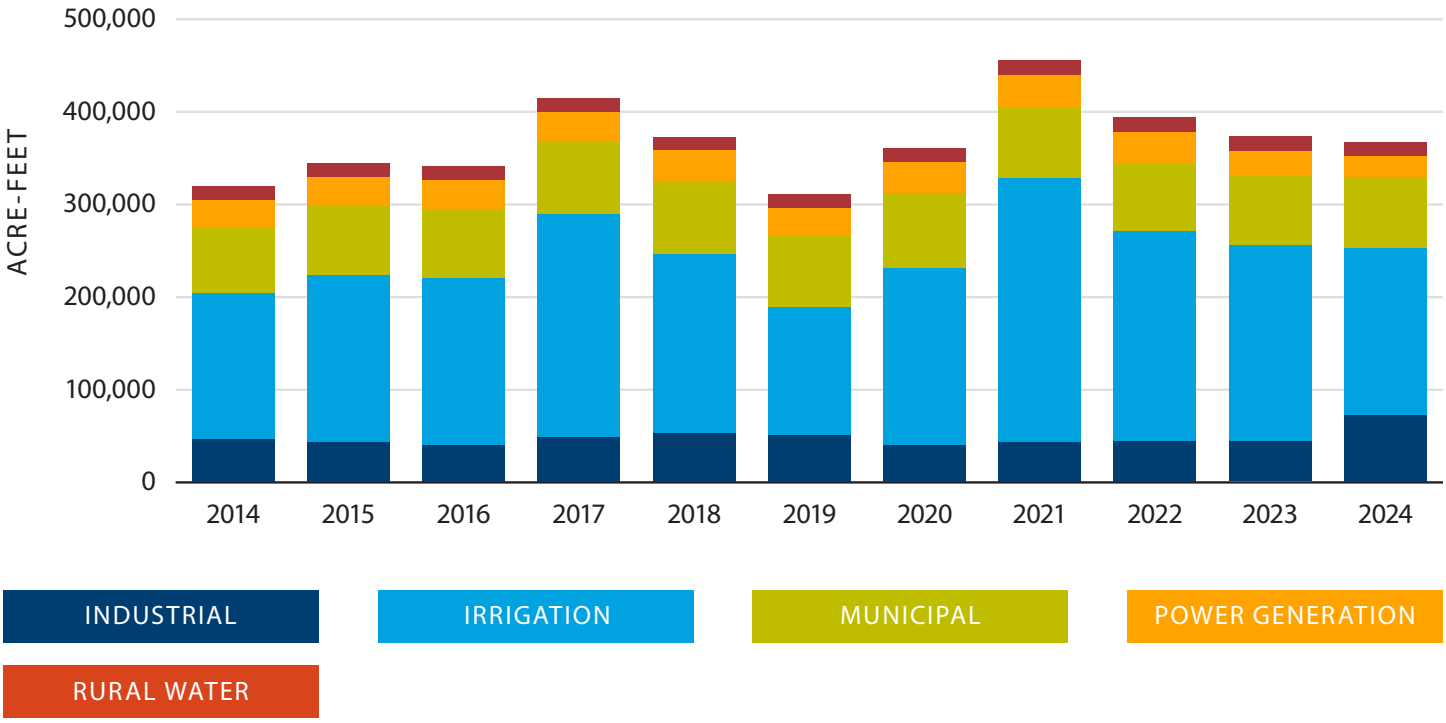


APPROVALS BY ACRE-FEET

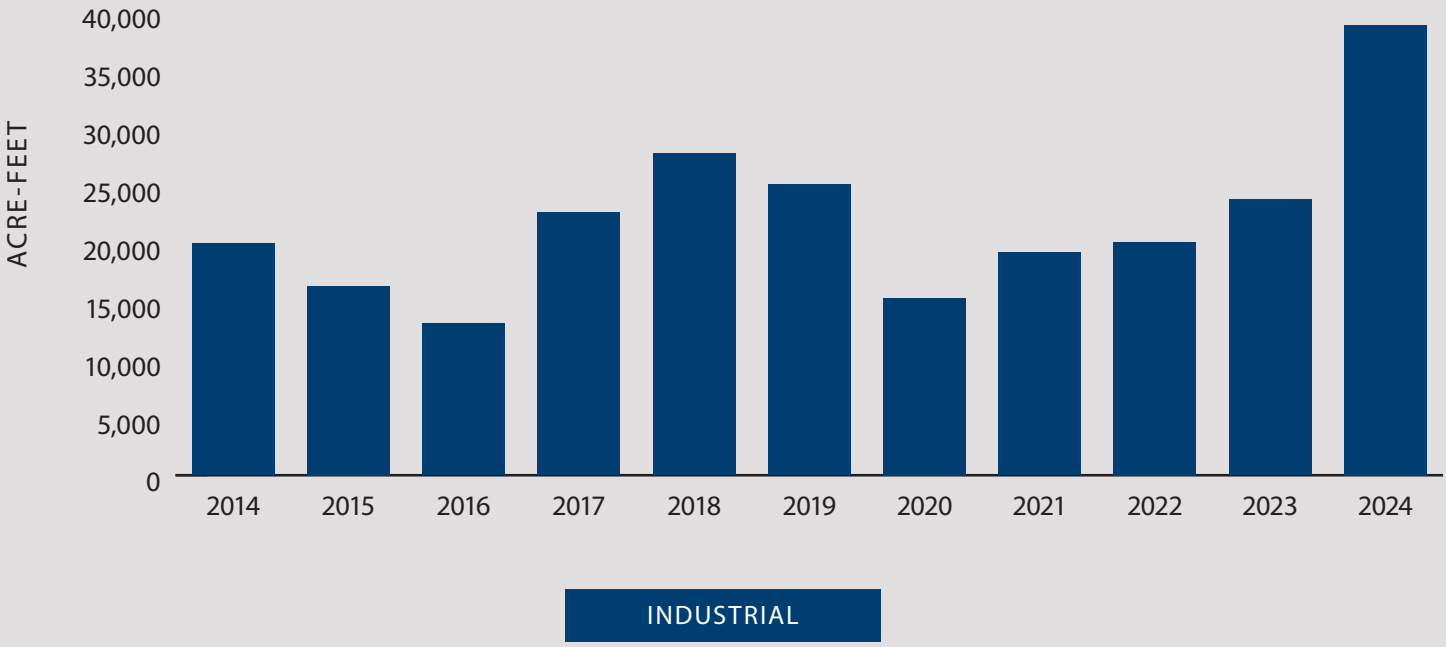


INDUSTRIAL | IRRIGATION | FLOOD CONTROL | FISH & WILDLIFE | STOCK | RECREATION

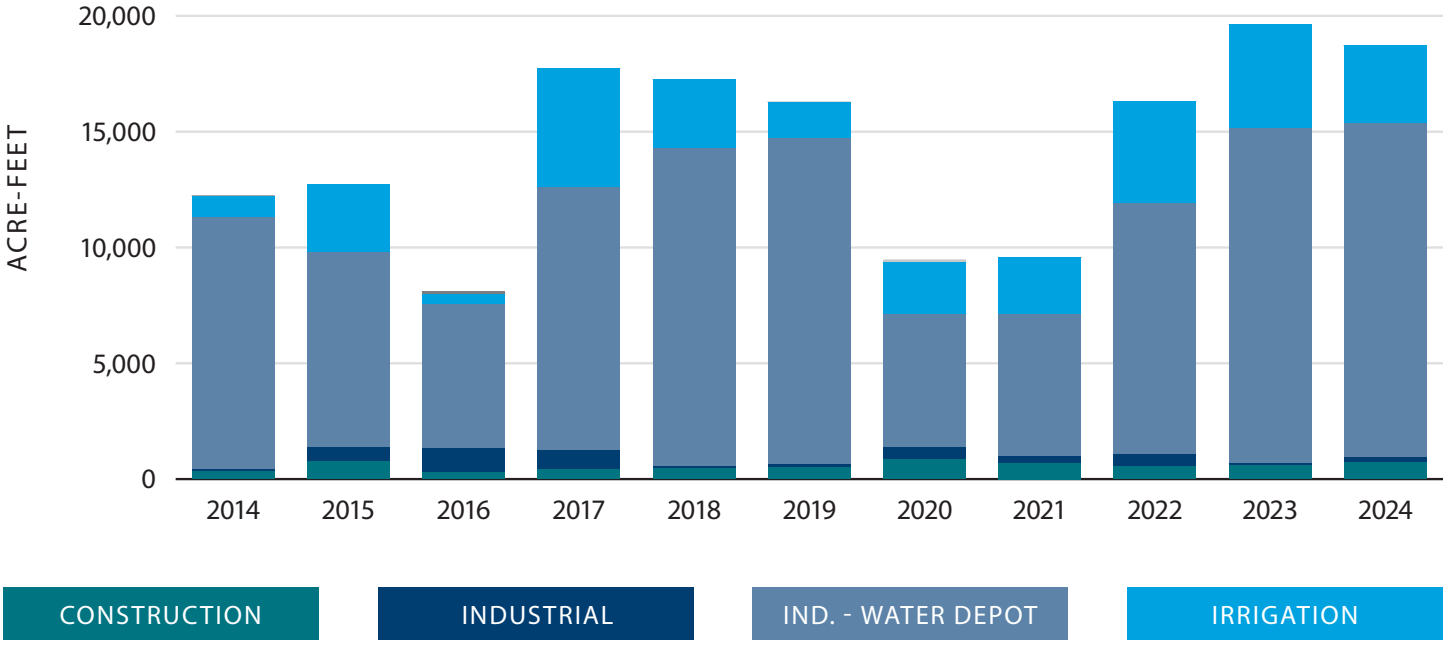
CONDITIONAL **PERMIT WATER USE: 2014-2024**



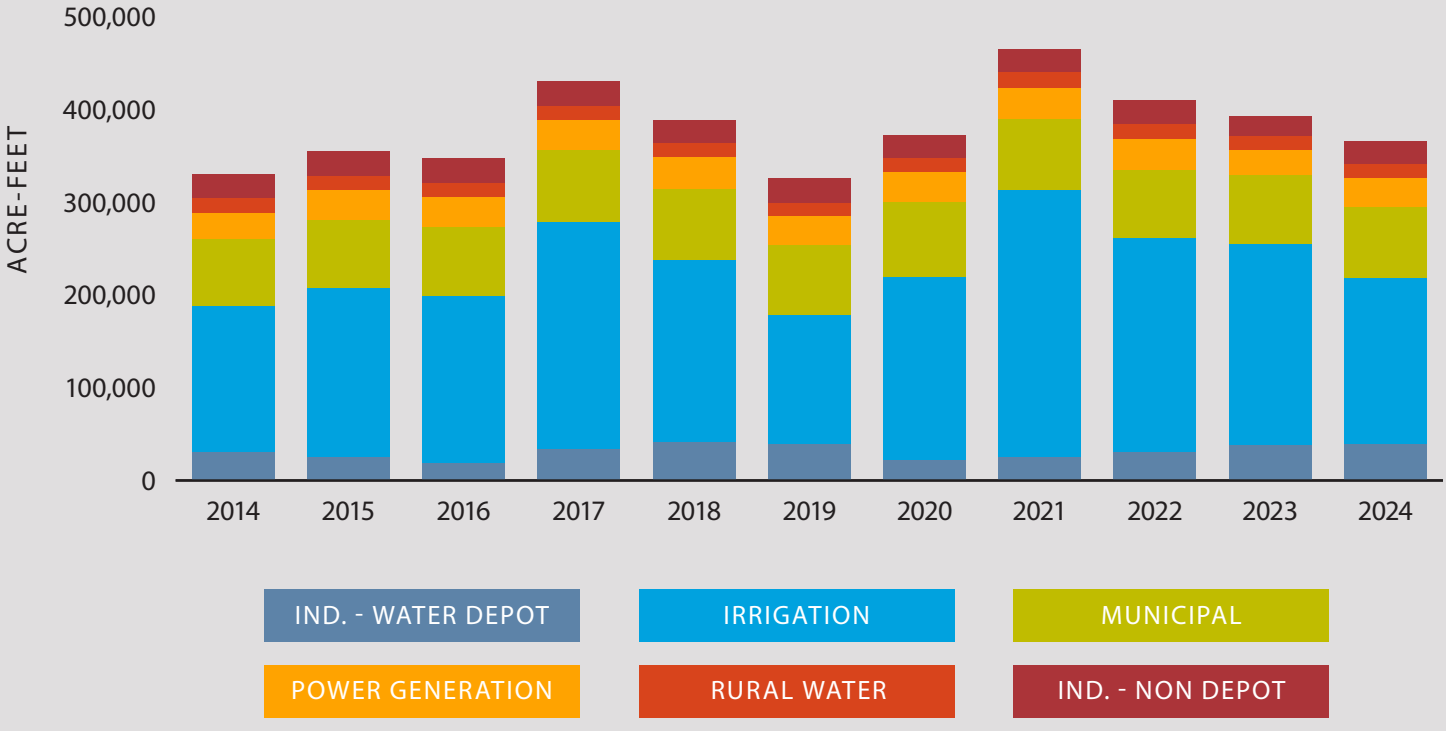
INDUSTRIAL **PERMIT USE (DEPOT): 2014-2024**



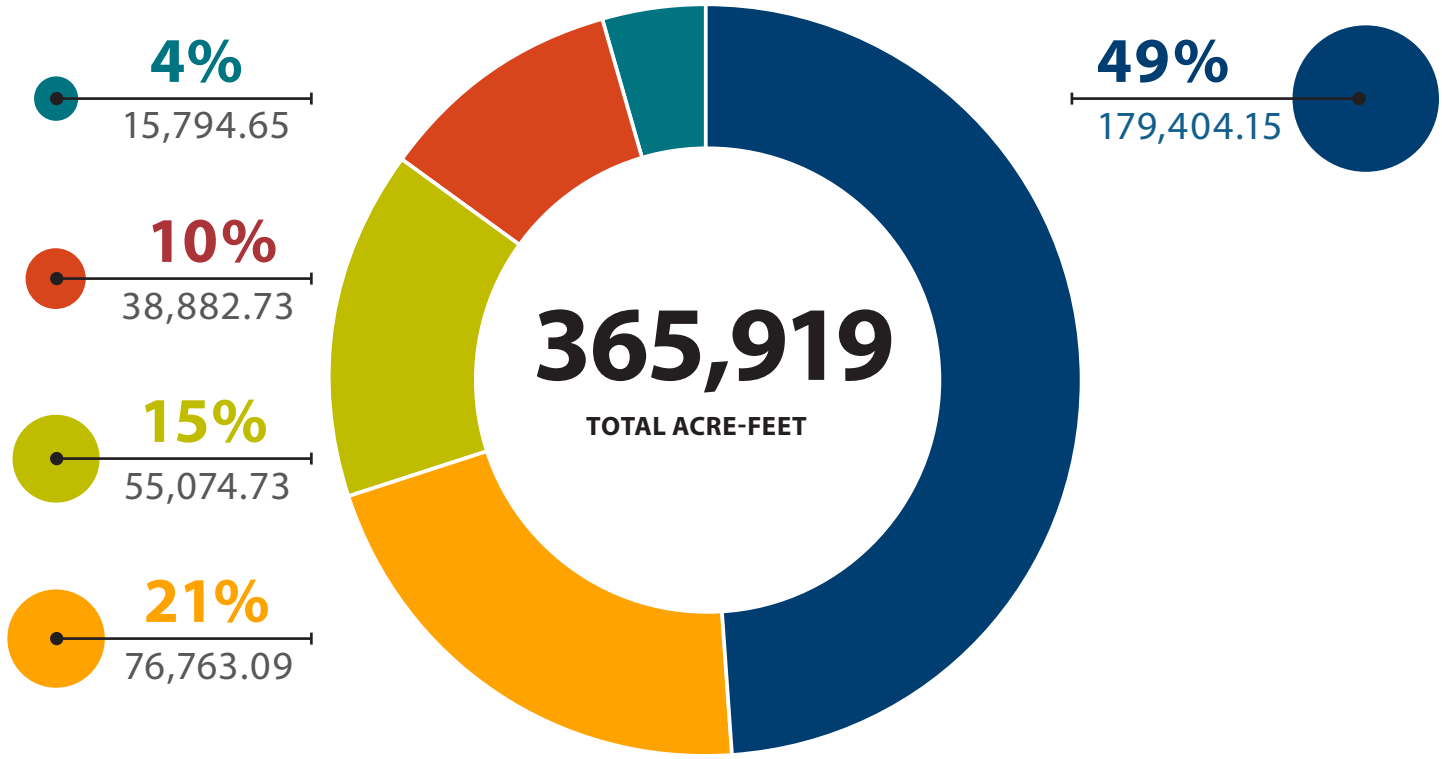
TEMPORARY **WATER PERMIT USE: 2014-2024**



TOTAL **PERMITTED WATER USE: 2014-2024**



2024 NORTH DAKOTA **CONSUMPTIVE WATER USE**



IRRIGATION

MUNICIPAL

INDUSTRIAL (NON-WATER DEPOT), POWER GENERATION, MULTI-USE

INDUSTRIAL (WATER DEPOT)

RURAL WATER

OAKES COLD REGION MODELING

In fall 2024, the Department of Water Resources received results from a Cold Region Hydrologic Modeling Study designed to improve understanding of groundwater recharge from precipitation and snowmelt within the Oakes Aquifer.

As part of the study, snow water equivalent (SWE) was measured at ten sites between February 2023 and March 2024. Additionally, soil moisture data were collected at one site using a PRESENS monitoring unit. These data were used to operate a Cold Region Hydrologic Model that simulated recharge through the unsaturated zone.

Modeling results underscored the critical importance of soil moisture monitoring in accurately representing recharge processes. The study's findings highlight the need to expand soil moisture data collection across North Dakota to enhance the accuracy of future groundwater recharge estimates.

WATER USE SURVEY

The Department of Water Resources led a Western Water States Survey to identify the technology platforms used to collect and manage water resource data across the 17 western U.S. states. The survey's goal was to better understand regional practices in water data management and identify opportunities for collaboration and improvement.

Conducted between April and June 2024, the survey received responses from 33 individuals representing 28 agencies. While the sample size was limited, it provided valuable insight into data management trends across a broad geographic area.

Survey topics included water use, water chemistry, atmospheric and soil moisture, surface water flow and stage, and groundwater. Respondents highlighted the advantages of automated data collection, while also noting challenges related to data quality control, coordination, and consistency across agencies. Several agencies reported expanding their monitoring programs to include soil moisture and climate data collection.

Although most respondents had not yet incorporated artificial intelligence (AI) into their operations, there was widespread interest in exploring its potential applications.

For the Department, the survey served as a useful benchmarking exercise to evaluate and reflect on its own data management practices.

Key recommendations included:

- Exploring the integration of telemetry and AI technologies
- Investing in soil moisture and surface water monitoring
- Enhancing interagency collaboration to improve data coordination and accessibility

MANAGED AQUIFER RECHARGE

In early 2024, the Department of Water Resources completed a Managed Aquifer Recharge (MAR) assessment to evaluate the feasibility of using MAR techniques to enhance the resiliency of North Dakota's glacial drift aquifers. The project established a scientific framework for assessing MAR potential and identified opportunities to strategically expand groundwater sustainability across the state.

The assessment, completed under contract with a consulting firm, produced a detailed report and a set of interactive maps available through the Department's Map Services. The report defines criteria for five separate MAR potential tiers, allowing glacial drift aquifers to be ranked by recharge suitability. This framework represents an important step toward identifying locations where MAR methods—such as infiltration basins or injection wells—could be effectively implemented in the future.

Following the completion of this initial assessment, the Department initiated Phase II to develop transient MODFLOW groundwater models for the Elk Valley, Spiritwood–Warwick, and Wahpeton Buried Valley aquifers. These aquifers were selected based on findings from the MAR potential report, concerns about water availability during drought, pending or deferred conditional water permit applications, and their potential for future appropriation requests.

Completion of the Phase II modeling effort is anticipated in early 2026.

AGENCY REPRESENTATION

The Water Appropriation Division represents the Department on state, regional, and national natural resource organizations. Members of the division have provided input at meetings or reviews pertaining to:

- Section 319 Task Force
- North Dakota Board of Water Well Contractors
- North Dakota Water Resources Research Institute
- North Dakota Public Service Commission Mining Plans
- North Dakota State University Extension Irrigation Workshops
- Yellowstone River Compact review meetings
- International Red River and Souris River Boards
- North Dakota Water Quality Planning Committee
- State Mapping Advisory Committee

LANDFILL, MINE, & ENVIRONMENTAL REVIEW

The Water Appropriation Division collaborates closely with the North Dakota Department of Environmental Quality (DEQ) to review groundwater aspects of landfill applications, ensuring that proposed sites and operations comply with groundwater protection standards.

The Division also reviews coal mining permits and revisions related to groundwater and well impacts. These environmental reviews range from quarterly evaluations of nationwide permit continuations to detailed assessments of mine expansion plans. Each review considers both groundwater and surface water resources within the project area and evaluates the potential effects of mining activities on those resources. Division staff provide technical comments and recommendations to mine operators, DEQ, and other regulatory agencies as part of the coordinated review process.

In addition, members of the Division contribute to the environmental review of all projects submitted to the Department of Water Resources, ensuring that water resource considerations are fully integrated into agency decision-making.

WATER USE MANAGEMENT

Water use by the oil industry in western North Dakota remained steady during the 2023–2025 biennium, following several biennia of significant growth. Authorized water use for oil field operations is managed through conditional and temporary water permits.

During this period, the Department issued 843 temporary industrial water permits for oil field use.

All permitted water supply depots are required to install telemetry systems that transmit daily water meter readings in real time using state-approved protocols. Violations of permit conditions or water use limitations result in substantial penalties to ensure compliance. Fines for unpermitted pumping are profit-based, designed to remove any financial incentive for illegal withdrawals.

The Division uses Administrative Consent Agreements (ACAs) as the preferred mechanism for resolving water use violations, providing an efficient alternative to formal legal proceedings. During the biennium, 20 violations were resolved through ACAs, resulting in total fines of $382,236.40, of which $149,736.40 was paid and the remainder suspended. All collected fines are deposited into the state general fund.

Water Development Division

The Water Development Division supports various efforts of the Department of Water Resources by providing technical expertise through its management of various projects and programs.

PROJECT DESIGN & SUPPORT

DWR provides engineering, surveying, and technical support for water projects, flood responses, and small dam repairs statewide.

INVESTIGATIONS & MONITORING

The division studies lakes and rivers, monitors closed-basin water levels, and collects survey and drone data to support modeling and planning.

INFRASTRUCTURE & PARTNERSHIPS

DWR manages NAWS, SWPP, Devils Lake outlets, and works with regional, national, and international partners on Missouri and Souris River issues.

INVESTIGATIONS SECTION

During the 2023–2025 biennium, the Investigations Section provided technical support and analysis for multiple projects and studies. Activities conducted in connection with the Mouse River, Missouri River, and Surveyor projects are described in greater detail in their respective sections of this report.

SPECIFIC TEAM MEMBERS' RESPONSIBILITIES INCLUDE

- Preparing engineering and feasibility reports and designs for the construction, maintenance, and major repair of water resource projects
- Completing various hydrologic and hydraulic modelling efforts, technical review of other studies and models, and technical support to other areas of the agency
- Providing technical assistance to water resource district boards
- Managing and operating the Devils Lake outlet projects and Tolna Coulee Control Structure
- Managing the design, and construction of the Southwest Pipeline Project
- Managing the design, construction, and operation of the Northwest Area Water Supply Project
- Participating in the collection of statewide survey data
- Providing surveying services for the agency and other cooperating agencies
- Providing engineering and construction services for the repair of small dams and gauging stations
- Providing technical support during flood response
- Surface water elevation monitoring
- Participating in international and national water resource committees such as the International Souris River Board (ISRB), International Red River Watershed Board (IRRWB), and Missouri River Recovery Implementation Committee (MRRIC)

MERCER COUNTY STUDY

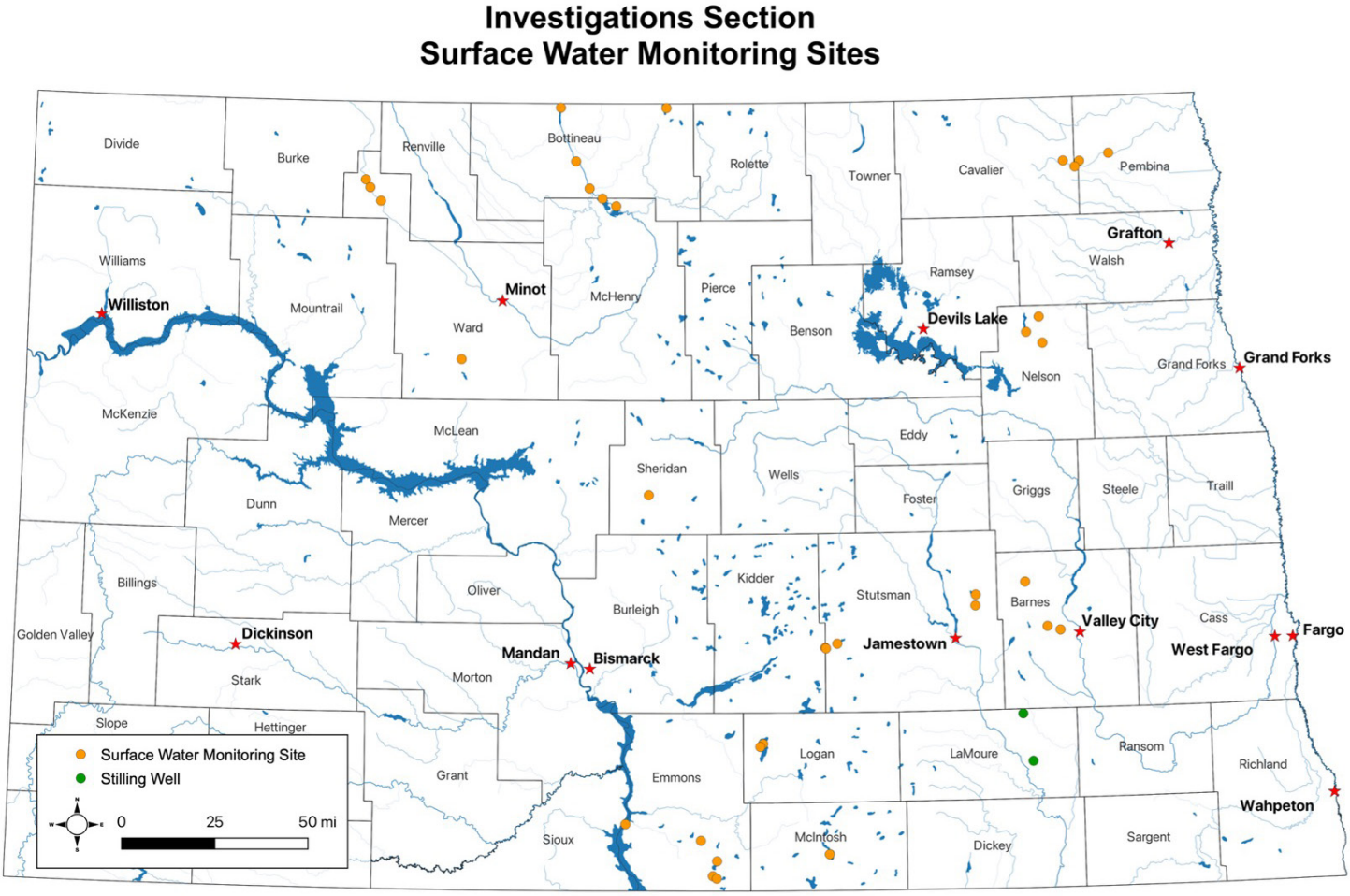
Under the Planning and Assistance to States agreement between the U.S. Army Corps of Engineers (USACE) and the Mercer County Water Resource District, Department staff completed a flood risk analysis for the City of Beulah in 2018. The analysis included the development of a hydrologic model for the Knife River Basin, a hydraulic model for the Knife River near Beulah, preliminary engineering for a potential dry dam site on the West Tributary near Beulah, a structural inventory within the city, and an alternatives analysis for flood mitigation.

An amendment to the agreement later added similar tasks for the City of Zap, including development of a hydraulic model for Spring Creek, a structural inventory, and an alternatives analysis to reduce local flood risk. The Spring Creek existing-conditions hydraulic analysis was completed in January 2024, and the alternatives analysis for the City of Zap was finalized in June 2025. The USACE is currently conducting a cost-benefit analysis of the proposed flood risk reduction alternatives to determine their feasibility.

RICE LAKE STUDY (EMMONS COUNTY)

In April 2020, the Department entered into an Investigation Agreement with the Emmons County Water Resource District to evaluate flood risk at Rice Lake.

- Phase I focused on collecting field data, assessing existing lake conditions, and evaluating downstream topography. This phase was completed in August 2020.
- Phase II focused on evaluating flood mitigation alternatives, including hydrologic and hydraulic modeling of the Rice Lake system. This phase was completed in April 2024.



CLOSED-BASIN LAKE AND RESERVOIR MONITORING

The Investigations Section monitors water levels of closed-basin (landlocked) lakes and reservoirs throughout North Dakota. Measurements are obtained using a combination of data from PRESENS gages and Global Positioning System (GPS) elevation surveys.

Where conditions allow, the Department is transitioning monitoring sites from traditional surface water methods to stilling wells to support year-round data collection. These wells provide uninterrupted observations, including during spring melt conditions, enhancing the Department's ability to monitor and respond to flood events.

During the 2023–2025 biennium, monitoring sites at Boom Lake and Twin Lakes (both in LaMoure County) were converted to stilling wells.

A list and map of the Department's 2023–2025 closed-basin monitoring locations are provided below.

Hobart Lake (Barnes County)	Dam 326 Reservoir, J. Clark Salyer National Wildlife Refuge (McHenry County)
Sanborn Lake (Barnes County)	Dry Lake (McIntosh County)
Ten Mile Lake (Barnes County)	Lake Laretta (Nelson County)
Dam 332 Reservoir, J. Clark Salyer National Wildlife Refuge (Bottineau County)	McHugh Slough (Nelson County)
Dam 341 Reservoir, J. Clark Salyer National Wildlife Refuge (Bottineau County)	Michigan Spillway (Nelson County)
Dam 357 Reservoir, J. Clark Salyer National Wildlife Refuge (Bottineau County)	Herzog Dam (Pembina County)
Lake Metigoshe (Bottineau County)	Olson Dam (Pembina County)
Senator Young Dam (Cavalier County)	Renwick Dam (Pembina County)
Lake Oahe, Jennerville Boat Ramp (Emmons County)	Lake Lily (Sheridan County)
Minna Lake (Emmons County)	Alkali Lake (Stutsman County)
Rice Lake (Emmons County)	Crystal Springs Lake (Stutsman/Kidder Counties)
Strasburg Slough (Emmons County)	Reule Lake (Stutsman County)
Unnamed Slough (Emmons County)	Spiritwood Lake (Stutsman County)
Boom Lake (LaMoure County)	Stink Lake (Stutsman County)
Twin Lakes (LaMoure County)	Rice Lake (Ward County)
McKenna Lake (Logan County)	Upper Des Lacs Lake, Des Lacs National Wildlife Refuge (Ward County)
West Lake (Logan County)	Middle Des Lacs Lake, Des Lacs National Wildlife Refuge (Ward County)
Dam 320 Reservoir, J. Clark Salyer National Wildlife Refuge (McHenry County)	Lower Des Lacs Lake, Des Lacs National Wildlife Refuge (Ward County)

SURVEY ACTIVITIES

The Department has employed a surveyor since the creation of the Water Conservation Commission in 1937. The Surveyor collects field data statewide to support a wide range of Department activities, including:

- Surveys of water bodies for hydraulic and hydrologic modeling
- Aquifer monitoring and high-water mark identification
- Evaluation of drainage issues and geomorphic changes
- Support for sovereign lands investigations
- Ground-truthing of real-time data collected through PRESENS gages
- Water level monitoring and snowpack assessments

The Surveyor conducts work on behalf of the Department, water resource boards, cities, counties, and other public agencies. Snowpack monitoring is performed in coordination with the National Weather Service (NWS) and the U.S. Army Corps of Engineers (USACE).

During the 2023–2025 biennium, several bathymetric surveys of the Missouri River were completed, with a focus on the confluence of the Heart and Missouri Rivers. Additional water surface profiles were surveyed each field season along the Missouri River from Double Ditch to Graner Bottoms, and bathymetric surveys were conducted at other areas of concern statewide.

The Surveyor also serves as one of the Department's four licensed drone pilots, collecting imagery for studies and publications. This drone imagery supports statewide LiDAR collection, assists in the identification of low head dams, and helps address a variety of ongoing water resource issues across North Dakota.

DEVILS LAKE OUTLETS

Flood relief efforts in the Devils Lake Basin continued to require substantial Department resources during the 2023–2025 biennium. In June 2023, the water surface elevation of Devils Lake reached 1,450.9 feet (NGVD 29)—approximately four feet below the record elevation experienced in 2011—due to wetter-than-normal conditions.

The Devils Lake outlets began operating in May 2024 and May 2025 at the maximum allowable discharge rates, which are limited by both channel capacity and water quality standards on the Sheyenne River. The minimum operational levels for outlet activation are 1,445 feet for the West Outlet and 1,446 feet for the East Outlet.

Unlike riverine flooding, where events are typically discrete, the flooding of Devils Lake results from long-term climatic trends. Over the past three decades, sustained wetter-than-normal conditions have led to historically high lake levels, necessitating emergency measures such as levee construction, road raises, and outlet pumping. While the risk of future lake level rise remains a concern, declining levels approaching minimum operational thresholds also present management challenges.

The Devils Lake outlets serve as regional flood mitigation infrastructure, gradually stabilizing lake levels by discharging water into the Sheyenne River during ice-free months. The summer of 2025 marked the 20th year of operation for the West Outlet and the 14th year for the East Outlet.

During the 2023–2025 biennium, outlet discharge volumes increased significantly compared to the 2021–2023 period. The outlets released an estimated 200,000 acre-feet of water, bringing their combined total discharge since inception to more than 1.5 million acre-feet.

DEVILS LAKE OUTLET OFFICE

The Devils Lake outlets are critical flood mitigation infrastructure that require continuous maintenance and monitoring to ensure reliable operation and performance. To support this effort, the Department employs two full-time Devils Lake Outlet Operators based in the region.

These operators are responsible for operating, maintaining, and monitoring all outlet works. Their duties include performing weed control, collecting water quality samples, and providing rapid response to any operational issues. During the winter months, they also conduct snowpack monitoring across the Devils Lake Basin to support spring flood forecasting and operational planning.

Throughout the 2023–2025 biennium, the Department completed numerous maintenance projects to sustain and improve outlet functionality, including:

- Preventative maintenance of switchgears at both outlets
- Onsite inspection of all pumps and motors at both outlets
- West End Capital Improvement Plan
- West End Round Lake pump #4 capacitor and fuse replacements
- West End bypass pipe and valve replacement
- West End new flow meters replacement
- West End Josephine Motor #4 reconditioning
- East End transmission line repair, including permanent backfill and wiring

NORTHWEST AREA WATER SUPPLY (NAWS)

Construction of the Biota Water Treatment Plant in Max, which began in spring 2021, progressed significantly during the biennium. Delays in the delivery of Lake Sakakawea water for startup and commissioning required a contract modification, allowing the use of groundwater from the Sundre Aquifer to facilitate commissioning. Completion has been delayed due to a disagreement between the contractor and the Engineer of Record regarding repairs to defective filter underdrains. Efforts to resolve this issue remain ongoing.

The Snake Creek Pumping Plant intake modifications were divided into five separate contracts: three Equipment Procurement Contracts, one Demolition Contract, and one Construction Contract. Equipment deliveries were completed between winter 2024 and spring 2025, and the Demolition Contract reached substantial completion in December 2024. Construction continues under revised timelines, with a projected completion date of December 2025.

Construction of the South Prairie Reservoir, Hydraulic Control Structure, Bottineau Reservoir, and Pump Station was completed during the biennium. The Discharge Pipeline Contract, connecting the Snake Creek Pumping Plant and the NAWS pipeline, also achieved near completion.

The Department secured a construction license from the U.S. Army Corps of Engineers for the permanent intake pipeline and screen structure, and the project was advertised for bids at the end of the 2023–2025 biennium.

SOUTHWEST PIPELINE PROJECT (SWPP)

Significant progress was made on the SWPP during the 2023–2025 biennium toward expanding raw water intake, treatment, and distribution capacity. With continued population and industrial growth in southwest North Dakota, work focused on increasing intake capacity, replacing aging treatment infrastructure, and expanding service to new rural users.

SUPPLEMENTARY RAW WATER AND EXISTING INTAKE

Following more than two years of negotiations, a mediated settlement agreement was reached in principle among all parties involved in the Supplementary Raw Water Intake Project, clearing the way for final design and construction.

Meanwhile, the State Water Commission (SWC) amended its agreement with Basin Electric Power Cooperative (BEPC) to increase the project's water allocation by 3,000 gallons per minute (gpm), bringing the total allocation to 13,600 gpm. Final design efforts are underway to upgrade pumping infrastructure and integrate the expanded capacity.

CONTRACT HI-2021 COMPLETION

Contract HI-2021, a major hydraulic improvement initiative, was completed during the biennium. The project added hydraulic capacity in the Fairfield, Killdeer Mountain, New Hradec, and Twin Buttes service areas. Over 17 miles of 3- to 6-inch parallel pipeline and five new booster pump stations were installed, providing capacity for more than 100 new users and accommodating future service growth.

WEST ZONE CAPACITY IMPROVEMENTS

Preliminary design for West Zone capacity expansion was completed. Given that the route traverses U.S. Forest Service lands, careful design was essential to avoid future permitting complications.

The Buffalo Gap Water Tank, a 500,000-gallon ground storage reservoir located between Medora and Sentinel Butte, was bid and awarded during the biennium. Construction is scheduled to begin in summer 2025, with the facility expected to be operational in 2026.

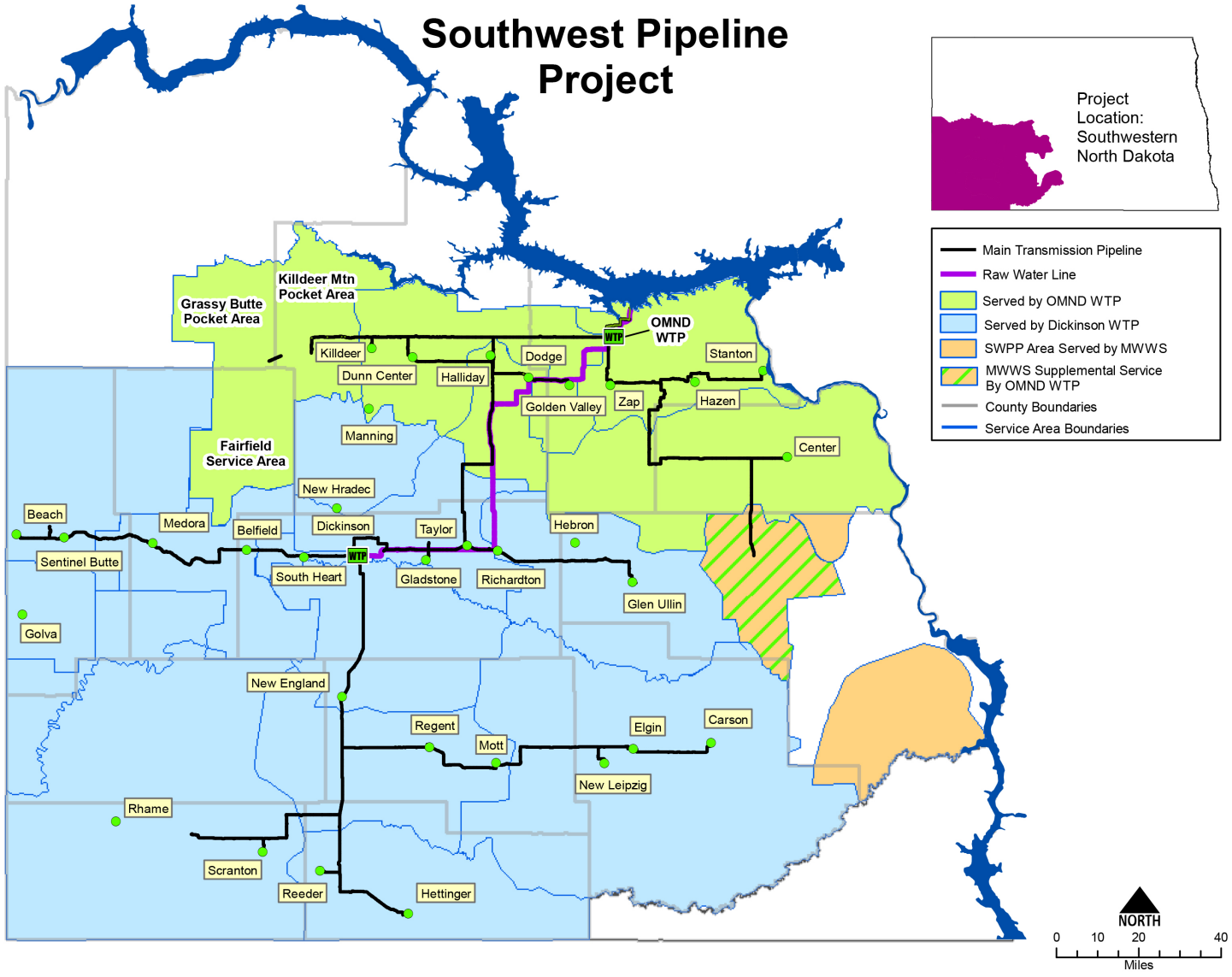
SOUTHWEST WATER TREATMENT PLANT EXPANSION

Construction of the Southwest Water Treatment Plant (SWTP) began in spring 2025, following the contract award at the December 2024 SWC meeting. The $86 million project is the largest single contract ever awarded for the SWPP. The expansion will increase treatment capacity from 6 million gallons per day (MGD) to 18 MGD, allowing decommissioning of the aging Dickinson Water Treatment Plant.

RURAL EXPANSION PROGRESS – BURT-HEBRON SERVICE AREA

Progress continued expanding service to rural and underserved areas. The SWC and the Southwest Water Authority finalized an agreement updating the maximum cost per Equivalent Service Unit (ESU) and associated exclusions in feasibility criteria. In exchange for higher cost thresholds, users agreed to increased Capital Repayment obligations, ensuring fair reimbursement to the state.

Design of the Burt–Hebron Service Area is advancing, prioritizing the Hebron Rural Service Area as the initial phase. This project includes rural service around Hebron and Glen Ullin, with future service to Lake Tschida planned as demand and funding allow.



CAPITAL REPAYMENT UPDATE

Capital Repayments for the 2023–2025 biennium totaled $13.2 million, all deposited into the Resources Trust Fund. Cumulative repayments reached $105.8 million, surpassing the $100 million milestone in September 2024. The achievement was recognized with a ceremony honoring this significant accomplishment.

DESIGN & CONSTRUCTION SECTION

During the 2023–2025 biennium, the Department's Design and Construction (D&C) Section conducted repairs, upgrades, and operational support for water resource structures statewide, including assistance with Devils Lake Outlet operations and other state-owned facilities.

BELFIELD DAM – STARK COUNTY

Belfield Dam, an earth embankment structure originally built in 1910, was modified in 1993 and again in 2002 to add a seepage cutoff wall. Recent issues included leakage from the principal spillway riser and deterioration of its asphalt-coated conduit. At the request of the City of Belfield, the Department entered into an agreement to:

- Construct a concrete enclosure around the existing CMP riser
- Replace the low-level drawdown system with a prefabricated stoplog structure
- Install a cured-in-place-pipe (CIPP) liner within the outflow conduit

The D&C Section completed construction of this project during summer 2024.

RALEIGH DAM – GRANT COUNTY

Raleigh Dam, a 48-foot-high earth embankment originally constructed in 1910 and reconstructed in 1988, required new conduit joint repairs after prior material degradation.

The Department entered into an agreement with the Grant County Water Resource District to:

- Remove existing conduit joint material
- Reseal the joints with hydrophilic closed-cell polyurethane foam

The project is scheduled for completion in late 2025.

MISSOURI RIVER

Department of Water Resources (DWR) staff continue to closely monitor potential federal overreach affecting North Dakota's state water appropriation and sovereign land rights. The Department manages all state-owned lands below the ordinary high-water mark (OHWM) of navigable water bodies, including islands and sandbars within the Missouri River.

Any group or entity proposing to undertake a project on sovereign lands must first obtain a Sovereign Land Permit from the Department.

During the 2023–2025 biennium, the Department issued a formal letter to the U.S. Army Corps of Engineers (USACE) reminding the agency of this requirement prior to conducting activities such as signage installation or chemical vegetation removal on sandbars. These actions are part of the USACE's efforts to protect nesting habitat for the threatened piping plover.

DWR staff also participated in national conferences and policy discussions to remain informed on federal developments and initiatives that may influence management or jurisdictional authority over the Missouri River.

MISSOURI RIVER RECOVERY IMPLEMENTATION COMMITTEE

The Department of Water Resources (DWR) has participated in the Missouri River Recovery Implementation Committee (MRRIC) since 2011. MRRIC is a collaborative group of nearly 70 members representing a broad range of local, state, tribal, and federal interests throughout the Missouri River Basin.

The purpose of MRRIC is to provide guidance and recommendations to the U.S. Army Corps of Engineers (USACE) and the U.S. Fish and Wildlife Service (USFWS) regarding actions aimed at recovering the threatened piping plover and endangered pallid sturgeon.

MRRIC's efforts are centered around implementing the Adaptive Management Plan, adopted in 2018 when the USACE issued a Record of Decision for the Missouri River Recovery Management Plan and Environmental Impact Statement (MRRMP-EIS). The MRRMP-EIS evaluated a range of alternatives designed to prevent jeopardy to the piping plover, least tern, and pallid sturgeon associated with operation of the Missouri and Kansas River reservoir systems and the Missouri River Bank Stabilization and Navigation Project.

During the 2023–2025 biennium, DWR staff continued to represent the State of North Dakota on MRRIC, actively participating in multiple subcommittees, including the Bird and Agenda Work Groups.

SNAKE CREEK EMBANKMENT

Department of Water Resources staff have worked closely with the Garrison Diversion Conservancy District (GDCD) to review materials released as part of the U.S. Army Corps of Engineers Dam Safety Modification Study (DSMS) for the Snake Creek Embankment. This review included the Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) released in February 2023.

The Snake Creek Embankment is a key feature of the congressionally authorized Garrison Diversion Unit. It provides relocation routes for a highway, railroad, and utilities inundated by the creation of Lake Sakakawea, and serves as a sub-impoundment dam supporting wildlife, recreation, and the diversion of Missouri River waters into the James and Sheyenne Rivers.

The preferred alternative identified in the EA would modify how the embankment is operated. This proposal raised concerns, as the Red River Valley Water Supply Project (RRVWSP) depends on the embankment and could face operational limitations during severe drought conditions under the USACE's initial plan.

The DWR has consistently advocated for a structural solution to ensure the embankment maintains its water supply, recreation, and wildlife benefits under all foreseeable climate conditions. After several years of discussion, the USACE informed the DWR in April 2025 that it will pursue a structural fix as its new preferred alternative.

The DWR and GDCD continue to meet with the USACE as the DSMS is updated to reflect this revised preferred alternative.

MISSOURI RIVER POTENTIAL INTAKE LOCATIONS INVESTIGATION

The Department of Water Resources initiated the Missouri River Potential Intake Locations Investigation in February 2024 to identify potential sites where an intake with a capacity of at least 15,000 acre-feet per year could be constructed. The purpose of this effort was to support industrial expansion, attract new development opportunities, and enhance irrigation and municipal water supply capabilities across the state.

This comprehensive desktop analysis evaluated multiple criteria to determine suitable surface water and subsurface intake sites along the Missouri River corridor, extending from the Montana state line to Washburn, North Dakota.

The study was completed in May 2025, and the final report identified 11 potential surface water intake sites and 6 potential subsurface intake sites. Each site was evaluated for feasibility, opportunities, and constraints to inform future planning, design, and development efforts.

RED RIVER OFFICE

The Red River Office was established in 1984 at the request of the Red River Joint Water Resource District (RRJWRD). Originally located in West Fargo, the office was relocated to Fargo in 2014.

The RRJWRD provides a 50 percent cost-share for office expenses associated with one full-time Water Resource Engineer Manager position. Two additional North Dakota Department of Water Resources employees are also based at the Red River Office — one from the Water Development Division and one from the Water Appropriation Division. These positions, however, are not included in the cost-share agreement with the RRJWRD.

During the 2023–2025 biennium, the Water Resource Engineer Manager participated in a range of NDDWR activities across eastern North Dakota.

Technical assistance was provided in support of the RRJWRD's flood control initiatives within the Red River watershed, including:

- Participating as a technical team member for the Lower Red River Basin Regional Detention Analysis.
- Assisting with reconnaissance level studies of potential dams.
- Providing recommendations on cost-share requests for various projects.
- Updating the proposed project list for the RRJWRD watershed management strategy.
- Providing technical assistance on various committees that were formed because of the Red River basin's flooding problems.
- Working with ND Agriculture Weather Network (NDAWN) to obtain additional all-season gages in the Red River basin.
- Working with the Red River Retention Authority (RRRA), Natural Resources Conservation Service, and local sponsors to pursue completion of watershed protection studies through the PL-566 program.
- Attended meetings of task teams for the three remaining PL-566 watershed studies (Upper Maple River, Shortfoot Creek, and North Branch of Antelope Creek) in North Dakota.
- Being a member of the agency committee and technical committee for rehabilitation studies for six high hazard dams which includes Larimore Dam, Matecjek Dam, Fordville Dam, Bylin Dam, Senator Young Dam, and Olson Dam.
- Coordinating with the MN Red River Watershed Management Board, RRRA, and Red River Basin Commission on flood damage reduction projects.
- Assisting individual water resource boards on several water related issues.

In addition, the Water Resource Engineer Manager was active performing the following:

- Providing technical assistance to DWR's Director, a member of the International Red River Watershed Board (IRRWB).
- Being a member of the hydrology committee of the IRRWB.
- Being a technical advisor for the Pembina River Basin Task Team organized in 2018 by Governor Burgum.
- Attending various meetings concerning the Fargo-Moorhead Diversion project.
- Being a Technical Committee member of the Northern Red River Flood Study overseen by the ND Department of Transportation. The study aims to analyze improvements to the transportation system during flood conditions and reduce flood damages in segment along the Red River

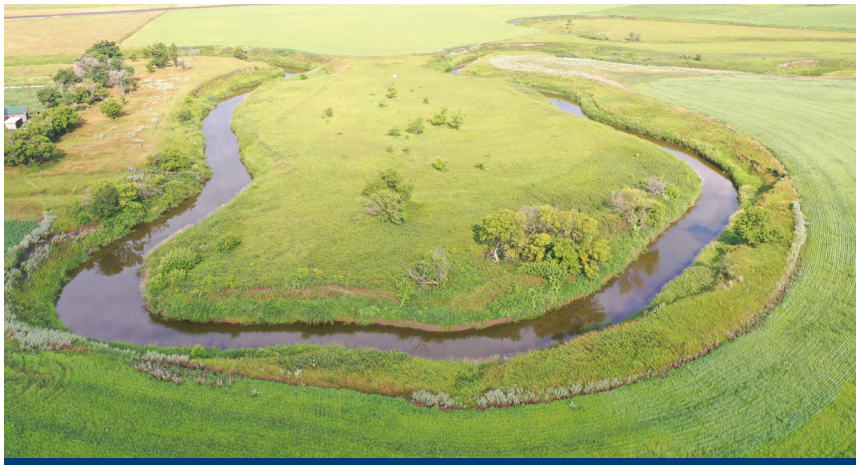
between Grand Forks and the Canadian border.

- Observing and providing updates on river conditions during flood events.
- Attended various water resource district meetings, including the Upper Sheyenne River Joint Water Resource District.

MOUSE RIVER ENHANCED FLOOD PROTECTION PROJECT

The Minot and Souris River Joint Board–sponsored Mouse River Enhanced Flood Protection Project (MREFPP) is a comprehensive, basin-wide initiative designed to reduce flood risk throughout the Mouse River Basin in North Dakota.

During the 2023–2025 biennium, Department of Water Resources staff monitored project developments and provided technical and administrative support as needed to assist in advancing the project's implementation and coordination efforts.



INTERNATIONAL SOURIS RIVER BOARD

The International Souris River Board (ISRB) is responsible for monitoring compliance with international water-sharing agreements between Canada and the United States within the Souris River Basin. The Board provides oversight of flood operations, maintains an ecosystem-based approach to transboundary water management, including water quality monitoring, and assists the International Joint Commission (IJC) in preventing and resolving transboundary disputes.

During the 2023–2025 biennium, Department of Water Resources staff remained actively involved in ISRB activities. Work continued completing the updated ISRB Directive and restructuring the Board and its committees, following the 2022 completion of the International Souris River Study and a subsequent governance review.

To fulfill responsibilities under the 1989 Agreement that fall outside the ISRB's scope, a new Water Management Agencies (WMA) group was formed through interagency discussions in 2023 and 2024. The WMA operates in close coordination with the ISRB and includes representation from the U.S. Army Corps of Engineers, North Dakota Department of Water Resources, U.S. Fish and Wildlife Service, Saskatchewan Water Security Agency, and Manitoba Department of Environment and Climate Change.

In February 2025, the IJC approved the WMA Terms of Reference. This was followed in April 2025 by the issuance of the updated ISRB Directive and committee Terms of Reference, with the restructured framework implemented in June 2025.

Under the current structure, DWR staff serve as:

- A member of the ISRB
- Co-chair of the Natural Flow and Apportionment Committee
- Member of the Adaptive Management Committee
- Member of the Water Management Agencies group (WMA)

Financial Information

The following pages contain financial information summarized in various formats.
The remainder of the report addresses project and object expenditures.

TABLES & CHARTS INCLUDE

Department Of Water Resources Appropriations 2023-2025 Biennium

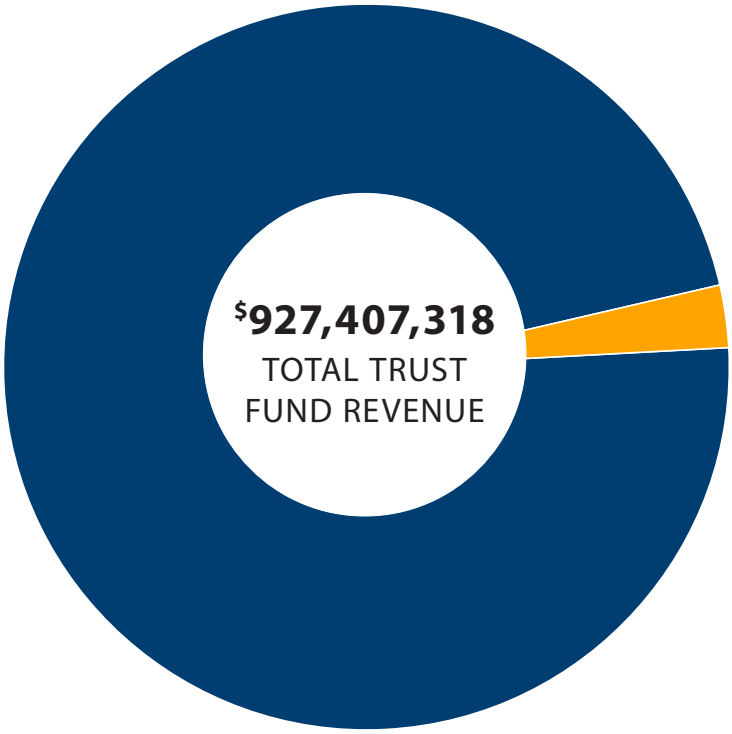
Expenditure By Fund Total And Line Item

Program Budgeting Expenditures For Biennial Period Ending June 30, 2025

State Water Commission Financial Project Summary: 2023-2025 Biennium

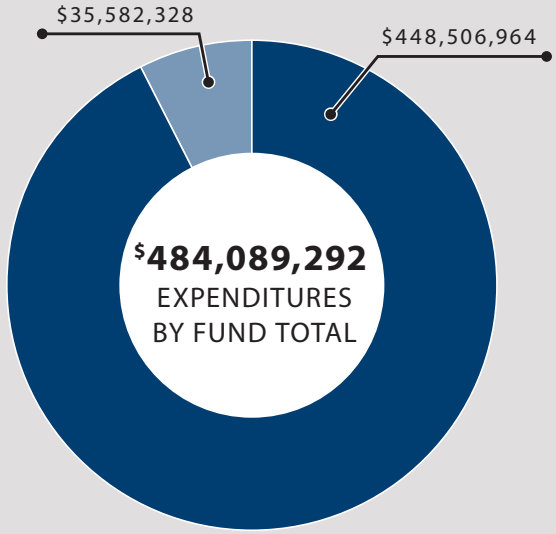
Object Expenditures For Biennial Period Ending June 30, 2025

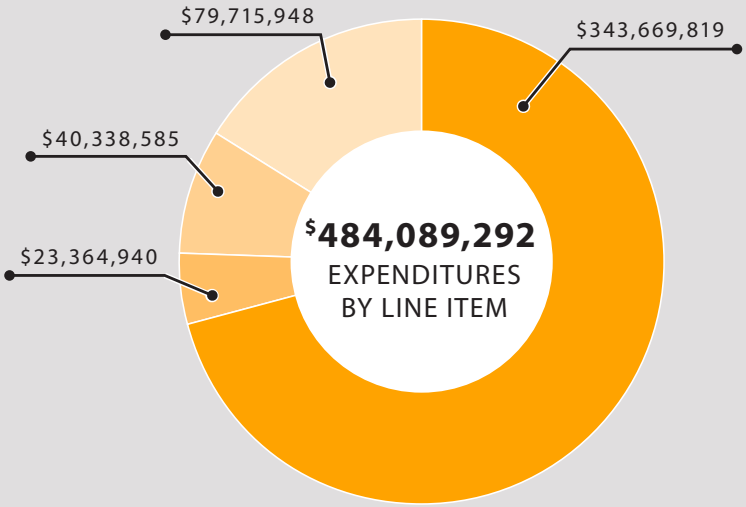
STATE WATER COMMISSION APPROPRIATIONS
2023-2025 BIENNIUM



FUNDS & TAX	TOTAL AMOUNT
RTF Beginning Balance	$428,790,986
Oil Extraction Tax	$465,695,848
Other Revenue	$32,920,484
Resources Trust Fund (RTF) Total	**$927,407,318**
Total Transferred To Water Project Stabilization Fund	**$25,726,837**

EXPENDITURES BY FUND TOTAL & LINE ITEM





SPECIAL FUNDS

FEDERAL FUNDS**

GRANTS & CONTRACTS*

SALARIES & BENEFITS

OPERATING

CAPITAL ASSETS

*State Water Commission cost-share funding is provided through reimbursements based on Commission or Secretary approved percentages. These expenditures include $10 million to pay $10 million of an outstanding balance on a line-of-credit for the Water Infrastructure Revolving Loan Fund (WIRLF).

**Includes $10.9 million of federal ARPA state and local fiscal recovery funds appropriated in SB 2345 (2021 Special Session) for water projects.

PROGRAM BUDGETING EXPENDITURES
FOR BIENNIAL PERIOD ENDING JUNE 30, 2025

AGENCY PROGRAM	SALARIES/ BENEFITS	OPERATING EXPENSES/ CAPITAL ASSETS	GRANTS & CONTRACTS	PROGRAM TOTALS
ADMINISTRATION				
Allocated	$6,381,265	$18,802,609		$25,074,104
Expended	$5,450,215	$13,566,992	$147,485	$19,164,692
ATMOSPHERIC RESOURCE				
Allocated	$1,248,145	$2,491,907	$4,363,026	$9,769,007
Expended	$1,248,145	$726,221	$1,302,953	$3,277,319
PLANNING & EDUCATION				
Allocated	$2,914,074	$287,100		$3,201,174
Expended	$2,914,074	$197,435		$3,111,509
REGULATORY				
Allocated	$3,655,008	$8,769,990		$12,424,998
Expended	$3,655,008	$2,383,590	$72,231	$6,110,829
WATER APPROPRIATION				
Allocated	$4,973,713	$4,786,588	$250,00	$10,010,301
Expended	$4,973,713	$2,607,321	$22,410	$7,603,444
WATER DEVELOPMENT				
Allocated	$3,825,368	$11,199,500		$15,070,243
Expended	$3,825,368	$7,445,897		$11,271,265
NORTHWEST AREA WATER SUPPLY				
Allocated	$754,049	$168,819,174		$169,637,608
Expended	$754,049	$69,199,827		$69,953,876
SOUTHWEST PIPELINE				
Allocated	$544,368	$130,106,150		$130,650,528
Expended	$544,368	$19,867,273		$20,411,641
STATEWIDE WATER PROJECTS				
Allocated			$867,286,974	$867,286,974
Expended		$1,059,977	$342,124,741	$343,184,718
PROGRAM TOTALS				
Allocated	$24,295,990	$345,263,018	$871,900,000	$1,241,459,008
Expended	$23,364,940	$117,054,533	$343,669,820	$484,089,293

STATE WATER COMMISSION
FINANCIAL PROJECT SUMMARY: 2023-2025 BIENNIUM

	2021-2023 CARRYOVER	2023-2025 APPROP.	2023-2025 TOTAL	APPROVED	APPROP. BALANCE
TOTAL	**$285,241,386**	**$457,127,274**	**$742,368,660**	**$666,760,200**	**$75,608,460**
MUNICIPAL & REGIONAL WATER SUPPLY					
MUNICIPAL WATER SUPPLY	$52,603,934	$117,070,027	$169,673,962	$169,673,962	$0
RED RIVER VALLEY	$38,269,022	$180,000,000	$218,269,022	$218,269,022	$0
OTHER REGIONAL WATER SUPPLY	$27,700,109	$18,783,155	$46,483,265	$46,483,265	$0
UNOBLIGATED MUNICIPAL/ REG WATER SUPPLY	$18,504	$346,817	$365,322	$0	$365,322
TOTAL	$118,591,570	$316,200,000	$434,791,570	$434,426,248	$365,322
% Obligated		99.89%			
RURAL WATER					
RURAL WATER SUPPLY	$55,316,257	$51,859,371	$107,175,627	$107,175,627	$0
UNOBLIGATED RURAL WATER SUPPLY	$8,404	$140,629	$149,034	$0	$149,034
TOTAL	$55,324,661	$52,000,000	$107,324,661	$107,175,627	$149,034
% Obligated		99.73%			
GENERAL WATER					
GENERAL WATER	$11,503,023	$7,827,207	$19,330,230	$19,330,230	$0
UNOBLIGATED GENERAL WATER	$127,822	$2,422,793	$2,550,615	$0	$2,550,615
TOTAL	$11,630,845	$10,250,000	$21,880,845	$19,330,230	$2,550,615
% Obligated		76.36%			
SUBTOTAL	$185,547,076	$378,450,000	$563,997,076	$560,932,105	$3,064,971

STATE WATER COMMISSION
FINANCIAL PROJECT SUMMARY: 2023-2025 BIENNIUM

	2021-2023 CARRYOVER	2023-2025 APPROP.	2023-2025 TOTAL	APPROVED	APPROP. BALANCE
TOTAL	**$285,241,386**	**$457,127,274**	**$742,368,660**	**$666,760,200**	**$75,608,460**
FLOOD CONTROL					
FARGO	$0	$0	$0	$0	$0
MOUSE RIVER	$9,425,991	$76,100,000	$85,525,991	$85,525,991	$0
MOUSE RIVER HB 1431	$64,354,625	$0	$64,354,625	$64,354,625	$0
VALLEY CITY	$10,072,490	$0	$10,072,490	$10,072,490	$0
LISBON	$259,160	$0	$259,160	$259,160	$0
OTHER FLOOD CONTROL	$9,475,828	$1,577,022	$11,052,850	$11,052,850	$0
PROPERTY ACQUISITIONS	$57,573	$0	$57,573	$57,573	$0
WATER CONVEYANCE	$9,524,322	$211,755	$9,736,077	$9,736,077	$0
UNOBLIGATED FLOOD CONTROL	$651,667	$37,811,223	$38,462,890	$0	$38,462,890
TOTAL	$103,821,656	$115,700,000	$219,521,656	$181,058,766	$38,462,890
% Obligated		67.32%			
CAPITAL ASSETS					
SWPP CAPITAL ASSETS	$24,100,389	$88,638,203	$112,738,592	$112,738,592	$0
NAWS CAPITAL ASSETS	$36,181,771	$12,390,000	$48,571,771	$48,571,771	$0
DEVILS LAKE OUTLET	$0	$200,000	$200,000	$200,000	$0
UNOBLIGATED CAPITAL ASSETS	$0	$87,191,289	$87,191,289	$0	$87,191,289
TOTAL	$60,282,160	$188,419,492	$248,701,652	$161,510,363	$87,191,289
% Obligated		53.72%			
SUBTOTAL	$164,103,816	$304,119,492	$468,223,308	$342,569,129	$125,654,179

STATE WATER COMMISSION
FINANCIAL PROJECT SUMMARY: 2023-2025 BIENNIUM

	2021-2023 CARRYOVER	2023-2025 APPROP.	2023-2025 TOTAL	APPROVED	APPROP. BALANCE
TOTAL	**$285,241,386**	**$457,127,274**	**$742,368,660**	**$666,760,200**	**$75,608,460**
DISCRETIONARY FUNDING					
DISCRETIONARY FUNDING	$5,603,005	$7,425,861	$13,028,865	$13,028,865	$0
UNOBLIGATED DISCRETIONARY FUNDING	$0	$1,574,139	$1,574,139	$0	$1,574,140
TOTAL	$5,603,005	$9,000,000	$14,603,005	$13,028,865	$1,574,140
% Obligated		82.51%			
BASINWIDE PLAN IMPLEMENTATION					
BASINWIDE PLAN IMPLEMENTATION	$773,787	$0	$773,787	$773,787	$0
UNOBLIGATED BASINWIDE PLAN IMPLEMENTATION	$0	$0	$0	$0	$0
TOTAL	$773,787	$0	$773,787	$773,787	$0
% Obligated					
STATE FISCAL RECOVERY FUND					
STATE FISCAL RECOVERY FUNDS - SB 2345	$10,972,317	$0	$10,972,317	$10,972,317	$0
UNOBLIGATED STATE FISCAL RECOVERY FUNDS - SB 2345	$0	$0	$0	$0	$0
TOTAL	$10,972,317	$0	$10,972,317	$10,972,317	$0
% Obligated					
SUBTOTAL	$17,349,109	$9,000,000	$26,349,109	$24,774,969	$1,574,140

OBJECT EXPENDITURES
FOR BIENNIAL PERIOD ENDING JUNE 30, 2025

Permanent Salaries	$15,627,650
Temporary Salaries	$689,744
Overtime	$391,456
Fringe Benefits	$6,656,090
Total Salaries & Benefits	$23,364,940
Travel	$1,236,665
Supplies - IT Software	$123,243
Supply/Material - Professional	$122,661
Food and Clothing	$8,429
Bldg, Grounds, Vehicle Supply	$463,999
Miscellaneous Supplies	$125,468
Office Supplies	$29,906
Postage	$20,945
Printing	$18,495
IT Equipment under $5,000	$267,474
Other Equipment under $5,000	$311,297
Office Equip & Furniture-Under	$11,388
Utilities	$7,261,803
Insurance	$71,381
Rentals/Leases-Equipment&Other	$24,710
Rentals/Leases - Bldg/Land	$370,158
Repairs	$996,227
IT - Data Processing	$1,000,710
IT - Communications	$221,493
IT - Contractual Services and Repairs	$55,755
Professional Development	$239,257
Operating Fees and Services	$11,698,161
Professional Fees and Services	$15,657,501
Total Operating Expenses	$40,338,585
Land and Buildings	$125,436
Other Capital Payments	$73,306,411
Extraordinary Repairs/Deferred Maint.	$73,772
Equipment Over $5000	$1,967,952
Motor Vehicles	$77,559
IT Equip / Software Over $5000	$37,818
Total Capital Assets	$76,715,948
Grants, Benefits & Claims	$341,433,883
Transfers Out	$2,225,936
Total Grants, Refunds, & Transfers	$343,669,819
TOTAL EXPENDITURES	$484,089,292

2023-2025
Wrap Up & Trends

During the 2023–2025 biennium, the State of North Dakota approved $562.3 million in funding for water projects and reimbursed more than $381 million to project sponsors.

At the same time, a strategic shift toward improving investment income resulted in a substantial increase in revenue—from an estimated $14 million to $40.2 million.

Demand for water resources continues to grow, driven by both domestic needs and the expansion of economic development opportunities statewide. Correspondingly, project sponsors across North Dakota are increasingly looking to the state as a cost-share partner to help advance water infrastructure projects that support flood protection, municipal and rural water supplies, and other water management initiatives.

NORTH DAKOTA DWR

NORTH Dakota | Water Resources

Be Legendary.

1200 Memorial Highway

Bismarck, ND 58504-5262

701.328.2750

DWR@ND.Gov

www.DWR.nd.gov

www.facebook.com/NDWaterResources