

2023: A YEAR IN REVIEW

The North Dakota Department of Water Resources (DWR) had a productive year in 2023. The department made significant progress on several projects, put enhanced policies in place, captured millions of data points, and continued to strive toward their goal to responsibly manage North Dakota’s water needs and risks for the people’s benefit. Each of the divisions (Water Development, Appropriations, Regulatory, Planning and Education, Atmospheric Resource Board (ARB), and Administration) had significant achievements in 2023.

WATER DEVELOPMENT

DWR made significant progress on the Northwest Area Water Supply (NAWS) Project and Southwest Pipeline Project (SWPP). NAWS progress included service to the city of Westhope, advancements at the Biota Water Treatment Plant and Minot Water Treatment Plant, and modifications to the Snake Creek Pumping Plant. On the SWPP, progress was made on increasing hydraulic capacity in four different areas: New Hradec, Fairfield, Twin Buttes, and Killdeer Mountain Service Area. Advancement was also made towards the migration of the treatment plant capacity at Dickinson by procuring the necessary equipment for the expansion.

The department also operated the Devils Lake outlets to provide ongoing flood relief for areas surrounding the greater Devils Lake system. The outlets removed approximately 88,000 acre-feet of floodwater during the 2023 operating season. Since outlet operations began 16 years ago in 2007, over 1.4 million acre-feet of floodwater has been removed from the lake.

Additionally, the Western Area Water Supply Project was brought under the State Water Commission following the 2023 Legislative Assembly, and the NAWS Advisory Committee was elevated to a NAWS Authority.



Biota Water Treatment Plant near Max, ND.



Oliver-Mercer-North Dunn Water Treatment Plant.

PLANNING AND EDUCATION

DWR completed a Basic Asset Inventory Assessment (BAIA) and Capital Improvement Planning (CIP) guidance document and fillable electronic workbook. It will be a requirement for water supply construction project sponsors to submit BAIA and CIP with their cost-share applications beginning July 2024. By conducting BAIA and CIP, sponsors are better positioned to raise or save capital to support their infrastructure maintenance and replacement needs for the foreseeable future.

DWR worked cooperatively with North Dakota's Tribal Nations, Indian Affairs Commission, and other North Dakota water user groups on the passage of HB 1385. HB 1385 allows for the State Water Commission to enter into agreements with Tribal Nations – allowing them to access the Department of Water Resources and Water Commission Cost-Share Program to advance critical water infrastructure in Tribal communities.

Over the course of the last year, the DWR provided state funding support of approximately \$277 million (M) in Water Commission project approvals through the Cost-Share Program. This included \$263M for water supply projects in 24 cities and 18 rural/regional systems, where approximately 4,500 new water users can be supported; and \$14M for 61 different flood protection, water conveyance, and general water projects benefiting citizens across the state.



DWR Dollars At Work signage.

REGULATORY

In 2023, the DWR requested and received over \$2M from the State Water Commission (SWC) to partner with the United States Geological Survey (USGS) to update over 250 stream gage data with state of the practice methodology, update characteristics in USGS's Stream Stats platform, and update the regional regression equations for the state.

The North Dakota Dam Safety Standards were released for public comment in Fall 2023, resulting in over 300 comments to help enhance the standards before final publication. This will be finalized in early 2024.

The DWR was successful during the 2023 Legislative Session in advancing five Red Tape Reduction bills, including providing clarity when a construction permit is required for the construction of a dike in North Dakota.



Belfield Dam.



Ring dike in Red River Valley.

APPROPRIATION

The Water Appropriation Division continued to expand the role of the PRESENS (Pushing REMote SENSors) data collection platform during 2023. The division deployed a total of 536 PRESENS sites through the 2023 field season, of which 35 now include precipitation data and 34 include soils data. The division plans to expand this network over the next couple of field seasons to include more than 1,200 sites across the state. In addition to expanding the number of PRESENS sites, many of the existing sites are currently being evaluated for purposes of expanding data collection to include soils and/or precipitation.

The Water Appropriation Division also responded to the industrial demand for surface water in western North Dakota while balancing this demand with the protection of the resource and prior appropriators. Throughout the state in 2023, the division issued a total of 528 temporary water permits, including 42 for irrigation, 56 for road construction, and 366 for industrial water depots. Additionally, 41 conditional water permits were approved and 63 permits were perfected. The number of both temporary and conditional permits issued increased compared to 2022.



DWR staff installing a PRESENS unit.



DWR drilling rig in Sioux County.

ARB

DWR extended its collaboration with the South Korean Meteorological Administration (KMA) regarding cloud seeding research and operations. The DWR and KMA believe there are long-term mutual benefits in expanding their partnership in the future.



ARB team members with Koren delegation.

ADMINISTRATION

Administrative team members led efforts in conceptualizing and executing the DWR's personnel policy manual. Additionally, the DWR pioneered a streamlined onboarding and offboarding process for team members and successfully transitioned from traditional paper-based annual reviews to a more efficient online annual review system.

DWR collaborated with the Bank of North Dakota to optimize investment income potential for funds mandated to be deposited at the bank.

Administration also orchestrated the relocation of the agency from the State Office Building to Job Service on a temporary basis for two months, culminating in the establishment of a permanent base at the Bank of North Dakota. The Administrative Division adeptly managed the movement of furniture to the Bank or Surplus Property, transferred agency publications to the Historical Society, maintained rigorous record management practices, and coordinated the remodel of the department's shop location to permanently house team members - all accomplished seamlessly without any interruption to agency operations.