Testimony
Senate Bill 2020—Department of Water Resources
Senate Appropriations Committee
Senator Brad Bekkedahl, Chairman
January 11, 2023

Good afternoon, Chairman Bekkedahl, and members of the Senate Appropriations Committee, I am Andrea Travnicek, Director of the North Dakota Department of Water Resources. As the director, I serve as head of the Department of Water Resources and Secretary to the State Water Commission.

In response to the specific requests included in your letter dated December 19, 2022, I offer the following testimony:

1. *Cite the North Dakota Century Code chapter(s) associated with the agency and list its major statutory responsibilities.*

The statutory authorities of the Department of Water Resources (DWR), and State Water Commission (SWC) are provided in North Dakota Century Code Title 61. The 67th Legislative Assembly passed HB 1353 which combined the SWC agency and the Office of the State Engineer into the DWR (or Department). The DWR is now a Cabinet agency that reports directly to the Governor. The Department serves as the primary funding entity for critical water infrastructure; appropriates the state's water resources; and is responsible for other water-related regulatory and management functions that ensure public safety and support the long-term sustainability and beneficial use of North Dakota's water resources. The overall mission of the Department is to responsibly manage North Dakota's water needs and risks for the people's benefit.

The SWC board still exists and consists of the Governor as chairman, the Commissioner of Agriculture, and eight members representing the state's major drainage basins who are appointed by the Governor to serve terms of six years each. The primary function of the SWC is to review and consider cost-share requests from project sponsors seeking financial assistance from DWR.

Water development and associated project funding are a function of the State Water Commission and include state projects such as the Southwest Pipeline Project, the Northwest Area Water Supply, and Devils Lake outlets and Tolna Coulee control structure used for flood control purposes. The State Water Commission promotes water development by providing cost-share assistance for many local projects such as flood control, water conveyance, water supply systems, and other general water management efforts. The DWR has a project management role for the state projects and reviews and recommends projects for funding approval by the Commission.

Regulatory functions fall under the responsibility of the DWR. Specifically, they include water appropriation or water rights, drainage, floodplain management, sovereign land management, and dam safety.

DWR also has an active role in public information and education regarding the nature and occurrence of the state's water resources. This includes public outreach and education related to Department functions.

2. *Explain the purpose of the agency's various divisions/programs – attach organizational chart.*

As illustrated by our organizational chart (see attached), DWR is comprised of 92 Full Time Equivalent employees (FTE), including 2 FTE approved by the Emergency Commission and Legislative Management's Budget Section in March 2022. One temporary employee was also approved at that time through the Budget Section. This is a temporary increase of 2 FTE from the previous biennium. The Department is requesting to permanently retain the 2 FTE approved through Budget Section as well as convert the temporary employee approved through the March 2022 Budget Section as an FTE for a total request of 3 FTE or 93 FTE overall.

As the director, I serve as the head of the Department of Water Resources, providing overall leadership and decision-making responsibilities and oversee the

State Engineer and DWR team members. In addition, as mentioned previously, I serve as the Secretary to the State Water Commission.

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

The Administrative Services Division, directed by Chris Kadrmas, provides agency operational support including accounting, budgeting, human resources, records management, and Water Commission meeting administrative support.

The Atmospheric Resources Division, directed by Darin Langerud, is responsible for the administration of cloud seeding activities in the state, conducts atmospheric research, provides student intern training opportunities, and performs weather-related data collection and analyses.

The Planning and Education Division, directed by Patrick Fridgen, maintains and updates a Water Development Plan for the State of North Dakota, and administers a cost-share program in support of that plan. Division staff also participate in numerous regional, state, local, and inter-office planning activities; manage the agency's water education programs; coordinate environmental reviews; manage the Drought Disaster Livestock Water Supply Assistance Program (when activated); and oversee public outreach and media relations efforts. This Division also ensures implementation of the Five-Year Strategic Plan.

The Regulatory Division, directed by Aaron Carranza, is responsible for the review and permitting of drain, dike, dam, and sovereign land applications; administration of North Dakota's Dam Safety Program; assisting communities with floodplain management through Federal Emergency Management Agency (FEMA)'s National Flood Insurance Program; administration of FEMA's Risk Mapping, Assessment, and Planning program; sovereign land management, including ordinary high water

mark delineations; general water resource district support; and the Silver Jackets Program that is in partnership with the U.S. Army Corps of Engineers.

The Water Appropriation Division, directed by Chris Bader, is responsible for the processing of water permit applications, water rights evaluations, hydrologic data collection, water supply investigations, and economic development support activities. This Division is also responsible for providing the technology infrastructure required to support the scientific and regulatory functions for the agency; the office and back-office automation functions to address workflow and integration requirements; and the development and maintenance of the data management infrastructure used to support agency water resource management initiatives such as PRESENS.

Finally, the Water Development Division, directed by Sindhuja S.Pillai-Grinolds, is responsible for preliminary engineering, construction, and maintenance of water resource projects; flood response and recovery; construction of Southwest Pipeline Project (SWPP); construction, operation, and maintenance of Northwest Area Water Supply project; and operation and maintenance of the Devils Lake outlets and Tolna Coulee control structure. Division staff also represent the agency nationally and internationally on Missouri River, Red River, and Souris River issues.

As discussed above, the State Water Commission is made up of eight Governor-appointed members representing the state's major river basins. North Dakota's current Water Commission members who represent the eight basins are Michael Anderson (Lower Red River), Connie Ova (James River), Richard Johnson (Devils Lake), Gene Veeder (Upper Missouri River), April Walker (Upper Red River), James Odermann (Little Missouri, Upper Heart, and Upper Cannonball Rivers), Jay Volk (Lower Missouri River), and Jason Zimmerman (Mouse River). Other members of the Water Commission include Governor Doug Burgum as Chairman, and Agriculture Commissioner, Doug Goehring.

3. *Report any financial audit findings included in the most recent audit of your department or institution and action taken to address each finding.*

DWR had one finding in the most recent operational audit dated May 19, 2022, regarding improper credits to appropriation. The dollar amount was $461,500. The sale of land was recorded as a reduction to expenditures when it should have been recorded as revenue. The department has implemented an additional review process to assist in identifying such errors.

4. *Discuss current biennium accomplishments and challenges and next biennium goals and plans.*

With regard to current biennium accomplishments, DWR:

- Continued to make progress on the Northwest Area Water Supply (NAWS) project that is planned to one-day serve up to 81,000 water users in North Dakota. Progress included completion of the Lansford Reservoir and Pump Station; service to the City of Bottineau; and continued advancements at the Biota Water Treatment Plant, Minot Water Treatment Plant, and other project elements.
- Completed a year-long effort to update the State Water Commission's Cost-Share Policy, Procedure, and General Requirements; as well as the Project Prioritization Guidance. The modification process included extensive public outreach and input from the water community and general public and was meant to modernize the Cost-Share Program in response to more contemporary project development needs.
- Continued to greatly improve North Dakota's ability to manage our state's water resources through innovation, including the monitoring of 368 locations by PRESENS (Pushing REmote SENSors) loggers across the state. PRESENS was developed in-house by DWR to collect environmental data such as water levels, precipitation, soil moisture, soil temperature, barometric pressure, and air temperature – at a fraction of the cost of more traditional means. Paul Moen, DWR Director of Information Systems, won the 2022

Pioneer Award, (Governor's Awards for Excellence in Public Service) for his work on developing the PRESENS system.

- Construction on SWPP included treated water main transmission line upgrades, and strategic hydraulic improvements to provide citizens access to quality water.
- Operated the Devils Lake outlets to provide ongoing flood relief for areas surrounding the greater Devils Lake system. The outlets removed over 83,000 acre-feet of floodwater during the 2021 and 2022 operating seasons. Since outlet operations began 15 years ago in 2007, almost 1.4 million acre-feet of floodwater has been removed from the big lake.
- Over the course of the biennium so far, provided state funding support of approximately $282 million in Water Commission project approvals through the Cost-Share Program, including $181 million to support water supply efforts in 27 cities and 19 rural/regional systems, and $101 million for 98 different flood protection, water conveyance, and general water projects benefitting citizens across the state.
- Provided $4 million in reimbursements for 1,050 drought resiliency projects for our agriculture producers through the Drought Disaster Livestock Water Supply Assistance Program.
- Secured almost $5 million in FEMA grant funding for LiDAR data to complete a statewide map of high quality digital topography information to improve and modernize modeling and engineering design data inputs.
- Completed a water development planning process through extensive public outreach, cooperation, and coordination efforts involving water project sponsors and managers. The 2023 Water Development Plan (WDP) is being presented for the first time through an almost entirely electronic platform and new Dashboard. The new WDP Dashboard includes interactive charts, enables staff to make updates in response to changing conditions, and can be accessed at any time via phones and computers.
- Launched and operated a one-stop-shop online portal through WebGrants for water project sponsors seeking grant funding or loans through the state. This

new portal, known as Funding for Infrastructure in ND (FIND) within WebGrants was developed through a cooperative effort involving the Bank of North Dakota, Department of Environmental Quality, Public Finance Authority, and DWR. FIND has greatly improved and streamlined the application process for project sponsors.

With regard to next biennium goals and plans, DWR completed a Five-Year Strategic Plan last summer to guide the deployment of resources toward key objectives, goals, and tactics through June 2027. An Executive Summary of our new Five-Year Strategic Plan has been provided for your reference. In terms of specific areas of focus for the 2023-2025 biennium, DWR intends to:

- Effectively communicate with the public and stakeholders with a primary focus on collaboration and building partnerships;
- Develop world-class, sustainable, and resilient water development and management practices;
- Support beneficial use of Missouri River system water and other available water supply sources;
- Implement innovative ideas, technology, and grow analytic capabilities to improve efficiencies in water management and development;
- Improve the department's internal resilience and promote a positive culture;
- Improve Department responsiveness and continue to identify efficiencies;
- Advance innovative ideas and technology like PRESENS, aquifer recharge, and water reuse opportunities;
- Work toward Tribal Nation engagement, including memorandum of understanding development;
- Strive for Workforce enhancements, retention of talent, recruiting, and mentoring;
- Continue advancements on the Northwest Area Water Supply, including progress on Intake Contract II, Souris Reservoir and Pump Station, in-line booster pump stations, Minot Water Treatment Plant (WTP) Phase III, raw water line initialization, and Biota WTP Phase II.

- Make progress on Southwest Pipeline Project strategic hydraulic improvements, WTP expansion, and rural service additions; and
- Implement results of a capital improvement planning effort related to the West End Devils Lake Outlet.

5. *Compare the agency's request/recommendation totals, including full-time equivalent (FTE) positions, for the next biennium compared to the current biennium.*

Description	2021-23 Biennium Appropriation	2023-25 Biennium Governor's Recommendation	Variance
Salaries and wages	$20,537,867	$23,809,878	$3,272,011
Operating expenses	43,366,550	59,479,068	16,112,518
Capital assets	148,467,437	172,396,344	23,928,907
Water supply – grants	125,000,000	270,000,000	145,000,000
Rural water supply – grants	59,600,000	35,000,000	(24,600,000)
Flood control projects	48,000,000	115,000,000	67,000,000
General water -grants	14,227,275	14,233,275	6,000
Basinwide plan implementation	1,100,000	0	(1,100,000)
Discretionary funding	6,000,000	5,000,000	(1,000,000)
Mouse River flood control	74,500,000	0*	(74,500,000)
State Fiscal Recovery Funds	75,000,000	0	(75,000,000)
Total	$615,799,129	$694,918,565	$79,119,436
*Funding for Mouse River flood control is included in funding for flood control projects.			

The department had 90 FTE in the 2021-2023 biennium, and a request of 93 FTE is included in the Governor's recommendation for the 2023-2025 biennium. The three FTE are requested to assist with significantly reducing delays so constituents receive agency-issued permits in a timelier manner. These positions would include one for the Regulatory Division to assist with permitting and two for the Water Appropriation Division that would work on water appropriation and on PRESENS system support. We have included one-page summaries related to the three FTE we are requesting with metrics related to why each are necessary.

6. *Explain the funding included in each program/line item either in total or by division depending on the size of the agency.*

The major components of the DWR budget recommendation consist of:

Description	2021-23 Biennium Base	Base Adjustment Request	2023-25 Biennium Base Request	One-time Adjustment Request	2023-25 Biennium Governor's Recommendation
Salaries and wages	$20,537,867	$3,272,011	$23,809,878		$23,809,878
Operating expenses	43,366,550	13,259,373	56,625,923	$2,853,145	59,479,068
Capital assets	98,467,437	(7,740,789)	90,726,648	81,669,696	172,396,344
Water supply – grants	125,000,000		125,000,000	145,000,000	270,000,000
Rural water supply - grants	59,600,000	(24,600,000)	35,000,000		35,000,000
Flood control projects	48,000,000		48,000,000	67,000,000	115,000,000
General water -grants	14,227,275	6,000	14,233,275		14,233,275
Basinwide plan implementation	0			0	0
Discretionary funding	0			5,000,000	5,000,000
Mouse River flood control	0				0*
State Fiscal Recovery Funds	0				0
Total	$409,199,129	($15,803,405)	$393,513,904	$301,522,841	$694,918,565
FTE	90.00	3.00	93.00		93.00

*Funding for Mouse River flood control is included in funding for flood control projects see detail below.

a. Amounts included in the base budget and their purpose and use.

Salaries and Wages - The 2021-23 biennium totaled $20,537,867 and included salaries and fringe benefits for all employees, including employees that provide service for NAWS, SWPP, and the Devils Lake outlets.

Operating Expenses - The 2021-23 biennium totaled $43,366,550 and included operations for NAWS, SWPP and the Devils Lake pumps. This included funding of $19 million for professional services, which are primarily consultant engineering dollars, and $8.7 million for utility costs, primarily to operate the Devils Lake outlets and NAWS.

Capital Assets - The 2021-23 biennium totaled $98,467,437 and consisted mostly of projects for NAWS and SWPP, which are both state owned. Specifically, $38.2 million is for SWPP, and $59.8 million is for NAWS.

For the 2021-23 biennium, the remaining dollars were in the five purpose funding buckets. They included $125 million for Water Supply; $59.6 million for Rural Water Supply; $48 million for flood Control; and $14.2 million for General Water projects.

General Water included funding for dam repairs and rehabilitations, feasibility studies, irrigation projects, as well as other general water management efforts.

b. *Amounts included in the request/recommendation and justification for the change from the base budget. Discuss changes relating to:*

(1) Salaries and Wages - increase from the base budget of $3,272,011 as follows:

- Cost to continue adjustment of $138,098.
- Performance-based raises of 6% for the first fiscal year and 4% for the second fiscal year of the biennium as recommended in the Executive budget of $1,805,562.
- Increase of 3 FTE of $751,742 to significantly reduce delays so constituents receive agency-issued permits in a more timely manner. The FTE are for the Regulatory Division, Water Appropriation, and PRESENS system support.
- Increased funding for temporary salaries of $576,609, of which $170,000 is to provide one full time temporary position to support NAWS, $345,000 is to provide funding for temporary positions for installation and support of the PRESENS system, and $61,609 is to provide a full benefits package to DWR's Silver Jackets Program Coordinator - who for years has been a long-term temporary employee.

The DWR is in support of the Governor's recommendation included in SB 2015 regarding market equity funding for agencies, which included $645,000 for the DWR.

(2) Operating Expenses – Includes a $16,112,518 increase, of which $13,259,373 is ongoing and $2,853,145 is one-time, major changes are as follows:

- Shifted base level funding from capital assets and salaries and wages to operating expenses in the amount of $7,744,789 to account for consultant engineering expenses related to state owned

projects and utility costs primarily to operate the Devils Lake and NAWS projects. These changes were made based on anticipated needs for planning of projects and operating costs.

- $5,615,764, of which $1,532,980 is one-time funding for IT standardization, applications, and security. The funding is to consolidate and standardize IT services under one umbrella, and to support ongoing costs for services and management to include: file services; computational infrastructure for scientific applications; big data development/production for various data types; big data administrative costs for over 2,000 terabytes of data, which places the Department as one of the largest users of data storage with NDIT at 2,000 terabytes, and the Department of Health and Human Services at 1,650 terabytes; costs associated with additional FTE for NDITD; business analysis; project management; and project oversight.
- $1,227,800 to expand the PRESENS footprint and data collection types/sensors to improve forecasting, modeling, and overall water management – at a fraction of the cost of traditional data collection methods.
- $100,000 in additional federal funds spending authority for the Regulatory Division.
- $80,000 for professional development.
- $94,665 for scientific software which includes one-time funding of $72,665.
- $21,320 in operating expenses related to the 3 FTE positions which include one-time funding of $19,320 for IT equipment and $2,000 in ongoing funding for travel.
- One-time funding of $750,000 for Airborne Electromagnetic Surveying (AEM) to expand use of AEM technology to better understand the extent and availability of ground water, particularly in glaciated regions - at a fraction of the cost of traditional methods.

- One-time funding of $298,180 for inflationary increases related to motor pool rates of $118,180 and drilling supplies of $180,000.
- One-time funding of $180,000 to support a study involving navigability determinations for the Red, Missouri, Yellowstone, Bois de Sioux, and Mouse Rivers, and Upper Des Lacs Lake as directed by HB 1202 (66th Legislative Assembly). Due to staff time limitations, little movement has been achieved on this effort since 2019.

(3) Capital Assets changes to provide a total of $172,396,344 as follows:

- Base decrease of ($7,740,789) primarily to shift funding from capital assets to professional fees in operating expenses to pay engineering fees related to state owned water projects.
- One-time increase of $77,869,696 for state owned water projects, to provide a total of $167.6 million, of which $117.9 million is for SWPP and $49.7 million is for NAWS.
    i. Total project funding for state owned water projects includes funding in operating expenses in combination with capital assets due to the classification of expenses related to contracted engineers and consultants. Total state owned project funding of $192.6 million includes $131.6 million for SWPP from the resources trust fund and $61 million for NAWS, of which $25 million is from the resources trust fund, $11 million is from reimbursements from Minot, and $25 million in federal funds.
- One-time increase of $1,800,000 to replace the original Bowman radar system to provide enhanced surveillance and ensure the capability of continual operations long into the future. The Bowman radar has filled a gap in radar coverage in southwest North Dakota since 1997 – using 1970s equipment.
- One-time increase of $1,800,000 to replace DWR's 15-year-old drill rig with a top-head drive drilling rig that provides finer control over

the drilling operation and safety features that are superior to the current drill rig.

- One-time increase of $200,000 for office modifications due to the DWR being required to evacuate the State Office Building due to environmental hazards. Funding is requested to address office modifications that may be necessary at the agency's current long-term, yet temporary location.

(4) Grants for water projects changes are as follows:

- Water supply increase of $145,000,000 to provide $270,000,000.
- Rural water supply decrease of ($24,600,000) to provide $35,000,000.
- Flood control increase of $67,000,000 to provide $115,000,000.
- General water increase of $6,000 to provide $14,233,275.
- The addition of discretionary funding in the amount of $5,000,000. Discretionary funding is for flexibility to provide additional funding either in the buckets, unaccounted for events such as flooding, and to address unknown costs associated with the Department's move from the State Office Building to the Bank of North Dakota.

(5) We did have special line items in the 2021-2023 biennium, where $1,100,000 was appropriated for basinwide plan implementation, but no funding for this item is being included in the 2023-25 biennium budget.

(6) Our estimated income for special funds is $684 million, which included Resource Trust Fund oil extraction tax deposits of $605.8 million, of which $120 million is from the Water Project Stabilization Fund for Red River Valley Water Supply from the water supply bucket and $30 million was included from the Water Project Stabilization Fund for the repayment of a WAWS loan. The balance is made up of capital repayments from SWPP, NAWS payments from the City of Minot, payments from counties for cloud seeding, CD interest, and available balance of the Water Commission fund.

(7) Our estimated income for Federal funds is $35 million of which $25 million is for NAWS and the balance is for operations of our Regulatory Division, and other grants related to the Atmospheric Resources Division and Water Appropriation Division.

(8) We have no general fund dollars in our budget. The last time the department received a general fund appropriation was during the 2011-13 biennium for some operations of the Department.

(9) Our legislatively authorized base FTE is 90, and we were authorized 2 additional FTE positions in March 2022 from the Emergency Commission and Budget Section to support the administration and management of the state's water resources. Our request is for an increase of 3 FTE to retain the 2 approved by Budget Section and for 1 additional FTE authorization that was presented to Budget Section in March, but they had only approved funding for a temporary employee who we would like to retain.

7. *Discuss the purpose and use of any one-time funding items for the current biennium.*

We had two one-time funding items in our 2021-2023 appropriation bill.

- The $50 million line of credit has not been utilized to date. The intent was for this to be used if needed for NAWS. After the end of the 2021 session the DWR received an additional $30 million in federal funding for NAWS that was not anticipated further reducing the need for the $50 million line of credit at this time. The DWR is not seeking the authority for a line of credit for the 2023-25 biennium at this time.
- Funding of $1.1 million was provided for the pilot project for basinwide plan implementation, with $246,075 expended to date.
- Funding of $4 million for discretionary water projects was approved by the SWC to be used as follows:
    - $2 million for the Agriculture Department's Emergency Livestock Water Supply Program of which $110,559 has been expended to date.

- $2 million for DWR's Drought Disaster Livestock Water Supply Assistance Program. This funding is in addition to funding approved from the general water bucket, which together provided over $6.1 million for the program. Over $4 million has been expended to date.

8. *Identify and justify the need for any one-time funding being requested/recommended.*
   - One-time funding of $77,869,696 for state owned water projects.
   - One-time funding of $212 million for water project grants for the buckets.
   - One-time funding of $5 million for discretionary funding for flexibility to provide additional funding either in the buckets, unaccounted for events such as flooding, and to address unknown costs associated with the Department's move from the State Office Building to the Bank of North Dakota.
   - One-time funding of $1,532,980 for IT standardization, applications, and security.
   - One-time funding of $1.8 million to replace the original Bowman radar system to provide enhanced surveillance and ensure the capability of continual operations long into the future. The Bowman radar has filled a gap in radar coverage in southwest North Dakota since first being deployed in 1997, using 1970s equipment.
   - One-time funding of $1.8 million to replace DWR's 15-year-old drill rig with a top-head drive drilling rig that provides finer control over the drilling operation and safety features that are superior to the current drill rig.
   - One-time funding of $200,000 for office modifications due to the DWR being required to evacuate the State Office Building due to environmental hazards.
   - One-time funding of $750,000 for Airborne Electromagnetic Surveying (AEM) to expand use of AEM technology to better understand the extent and availability of ground water, particularly in glaciated regions - at a fraction of the cost of traditional methods.
   - One-time funding of $298,180 for inflationary increases related to motor pool rates of $118,180 and drilling supplies of $180,000.

- One-time funding of $180,000 to support a study involving navigability determinations for the Red, Missouri, Yellowstone, Bois de Sioux, and Mouse Rivers, and Upper Des Lacs Lake as directed by HB 1202 (66th Legislative Assembly). Due to staff time limitations, little movement has been achieved on this effort since 2019.
- One-time funding of $72,665 for scientific software.
- One-time funding of $19,320 to provide computers and other necessary equipment for 3 new FTE positions.

9. *Discuss agency collections that are deposited in the general fund or special fund, and any anticipated changes from 2021 legislative session estimates during the 2021-2023 biennium and estimated changes for the 2023-2025 biennium.*

We have very minimal deposits going into the General Fund. They include open records requests, land lease revenue, water report late fees, and illegal water usage fees. The main Special Fund deposits are from the Resource Trust Fund. This makes up 93% of our revenue. Other Special Fund deposits include SWPP capital repayments, NAWS payments from the City of Minot, payments from counties for cloud seeding, and CD interest.

10. *Discuss the need for any other sections that are included or are requested/recommended to be included in the agency appropriation bill.*
    - Additional income appropriation section for additional amounts in the resources trust fund for defraying the expenses of the Department.
    - Exemption section providing authority to carryover funding related to water projects. As of when the budget was developed and submitted to the OMB, carryover was estimated to be roughly $237 million but we anticipate the range could be between $240 million and $320 million. Carryover will need to be adjusted as we get closer to the end of session as approvals during session impact the estimate.

- A section appropriating $30 million from the Water Project Stabilization Fund to the DWR for the purpose of repayment of loans issued by the Bank of North Dakota to the Western Area Water Supply Authority.
- A section identifying the purpose of the discretionary funds to be used for water project grants and capital assets.
- A section providing authority for line item transfers. Due to the fact the DWR has state owned projects which require expenditures from both capital assets and operating expenses, line item transfer authority between those two line items would ensure we can shift funding when needed for payments to engineers and other consultants for those projects. This would be similar to the transfers between line items the Department of Transportation makes for road projects.

11. Discuss any other bills being considered by the Legislative Assembly and their potential budgetary impact on the agency.

SB 2015: Relating to the Office of Management and Budget regarding internal equity and external market factor funding for agencies, of which the DWR would receive $645,000 along with funding of $451,000 to demolish the Office Building.

SB 2097: Relating to wild and scenic river designations.

HB 1070: Relating to the establishment and administration of a hazard mitigation revolving loan fund.

HB 1072: Relating to the powers and duties of the department of water resources; and to repeal section 61-04.1-35 of the North Dakota Century Code, relating to the required bond, cash, or negotiable securities required when bids are submitted to the atmospheric resources board.

HB 1073: Relating to the department of water resources authority to require operating plans for dams.

HB 1074: Relating to informational hearings for water permit applications.

HB 1075: Relating to comments on the cancellation of water rights; and to amend and reenact sections 61-04-24 and 61-04-25 of the North Dakota Century Code, relating to the notice and hearing process for the cancellation of water rights.

HB 1076: Relating to the department of water resources authority regarding water permit thresholds for dikes, dams, and other devices; and to provide a penalty.

HB 1077: Relating to water storage contracts.

12. *Provide a one-page itemized listing of the changes your agency is requesting the committee to make to the executive recommendation.*

We are not requesting any adjustments to the Executive recommendation.

13. *Provide a comparison of your agency's optional adjustment requests to those recommended in the executive budget.*

We support the Executive budget recommendation.

14. *Identify the purpose and amount of federal state fiscal recovery funding appropriated to your agency during the November 2021 special legislative session, the amount of funds spent to date, the timeline for obligating and spending the remaining funds, and any amounts that will not be obligated by December 2024.*

The DWR was appropriated $75 million from the State Fiscal Recovery Fund as authorized by SB 2345 during the 2021 special session for water infrastructure projects. This funding was to be expended before funds from the resources trust fund when possible. The DWR anticipates carryover of roughly $13 million.

15. *Identify the amount of federal funding available to your agency for the 2023-25 biennium, the purpose of the funding, federal deadlines for spending the funds, and your agency's plan for spending the funds.*

The department's budget includes federal funding of $36,053,261 as follows:

- MR&I funding of $25,008,161 for construction of NAWS. There is no deadline for spending.
- Dam safety funding of $295,267
- Water Education Today (WET) non-point source program $340,324
- FEMA Cooperating Technical Partners funding of $438,252

- FEMA Risk Mapping, Assessment, and Planning funding of $7,946,168
- FEMA Community Assistance Program – State Support Services Element funding of $275,089
- Weather modification research and development federal authority of $1,500,000 for research grants that may become available.
- USGS national grants of $250,000, which is a pass-through grant.

16. Provide additional information as necessary.

Each biennium, the DWR completes a Water Development Plan to provide an overview of North Dakota's ongoing and anticipated water development projects across the state. In the past, DWR has produced and printed that information in a detailed Water Development Plan. For the 2023-2025 biennium, DWR and the State Water Commission are providing that same information electronically through a Water Development Plan Dashboard (Dashboard) - along with highlights in a printed Executive Summary that has been provided for your reference.

The Water Development Plan Executive Summary outlines funding recommendations for critical water supply, flood protection, and other general water management projects; a prioritized summary of water development financial needs that were collected directly from project sponsors; and summaries of revenue streams that support projects. In addition to the aforementioned information, the Dashboard includes large project overviews (that have also been included in your packets), long-term funding needs, aging water supply infrastructure survey results, current purpose funding tracking, and more. To see all of the information that's available on the Dashboard, go to our homepage at www.dwr.nd.gov and click on the Water Development Plan Dashboard link.

Overall, the Department continues to work towards improving agency responsiveness and efficiencies; advancing innovative ideas and technology; supporting the development of critical water infrastructure; and prioritizing workforce enhancement, retention of talent, recruiting and mentoring.

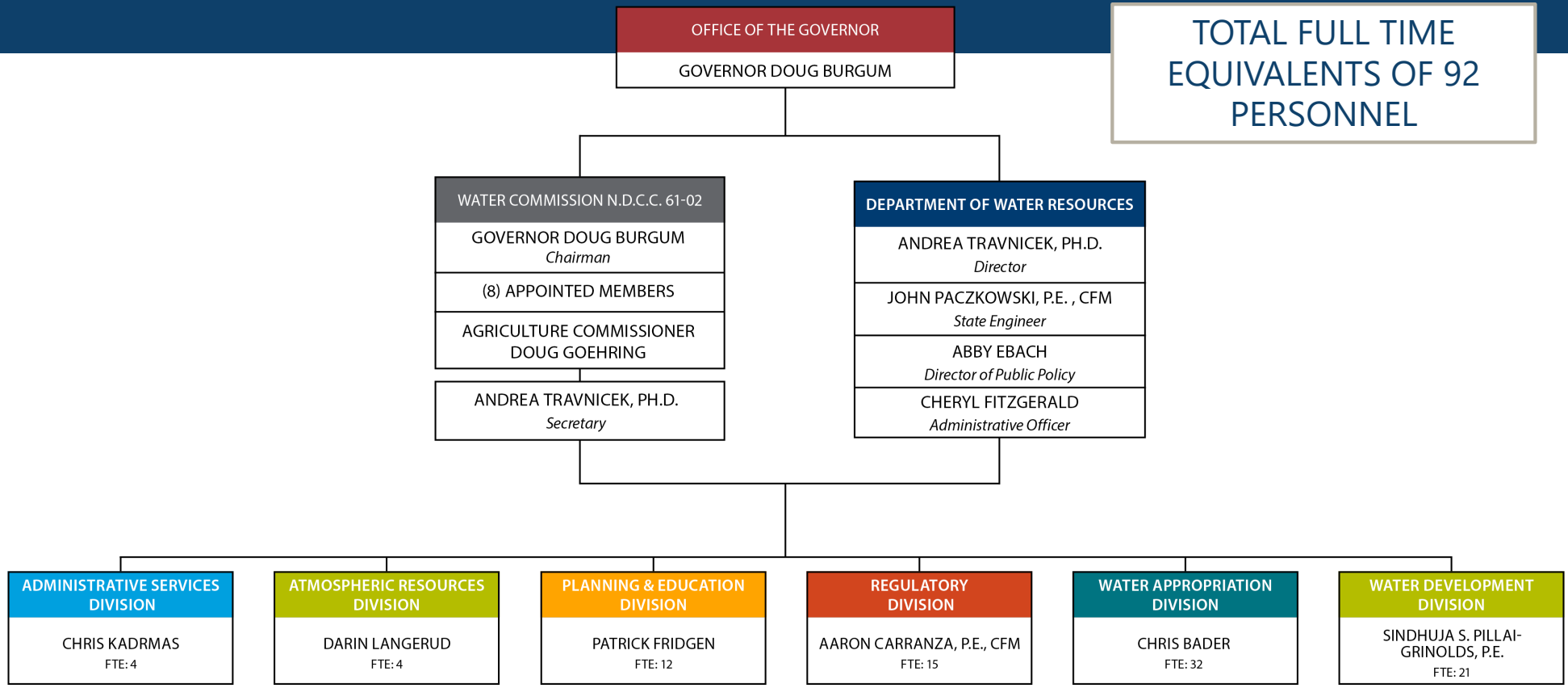
Mr. Chairman, this concludes our agency overview and testimony relative to Senate Bill 2020. If there are any questions from you or other committee members, I will try to answer them at this time.

ATTACHMENTS

1. State Water Commission and Department of Water Resources Organizational Chart
2. 2023-2025 State Water Commission and Department of Water Resources Five Year Strategic Plan Executive Summary
3. One-page overviews of requested FTE
4. 2023 Water Development Plan Executive Summary

DWR ORGANIZATIONAL CHART

TOTAL FULL TIME EQUIVALENTS OF 92 PERSONNEL



5-YEAR STRATEGIC PLAN

NORTH DAKOTA DEPARTMENT OF WATER RESOURCES

PURPOSE

DWR developed a five-year strategic plan to guide the deployment of resources toward key objectives, goals, and tactics that will remain a focus from July 1, 2022 through June 30, 2027. This plan is also intended to help create awareness among the public and stakeholders about DWR priorities.

BACKGROUND

116 Surveys Completed

77 Personal Interviews

2 Focus Groups

The North Dakota Department of Water Resources (DWR) was created in 2021 by legislative action through House Bill 1353. DWR was previously called the State Water Commission, which itself was created by legislative action in 1937 for the specific purpose of fostering and promoting water resources development throughout the state. The 2021 legislation also moved functions of the Office of the State Engineer (OSE) within the DWR, and allows the Governor to appoint a DWR Director subject to approval by the State Water Commission.

DWR has the authority to investigate, plan, construct, regulate, provide water appropriations, develop water-related projects, and serves as a mechanism to financially support those efforts throughout North Dakota. There are currently six divisions that make up the DWR: Administration, Atmospheric Resources, Planning and Education, Regulatory, Water Appropriation, and Water Development.

In developing this plan, DWR commissioned a third-party vendor, Odney Inc., to engage DWR team members and stakeholders to gather input for the development of objectives, goals, tactics, and metrics.

MISSION STATEMENT

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

VISION STATEMENT

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

VALUES STATEMENT

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.

STRATEGIC INITIATIVES

The DWR Strategic Plan furthers the implementation of Governor Doug Burgum's strategic initiatives: Main Street Initiative; Tribal Engagement; Reinventing Government; Behavioral Health and Addiction; and Transforming Education.

OBJECTIVES

The DWR Strategic Plan outlines five key overarching objectives to be accomplished with establishment of goals and tactics for each objective.

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.

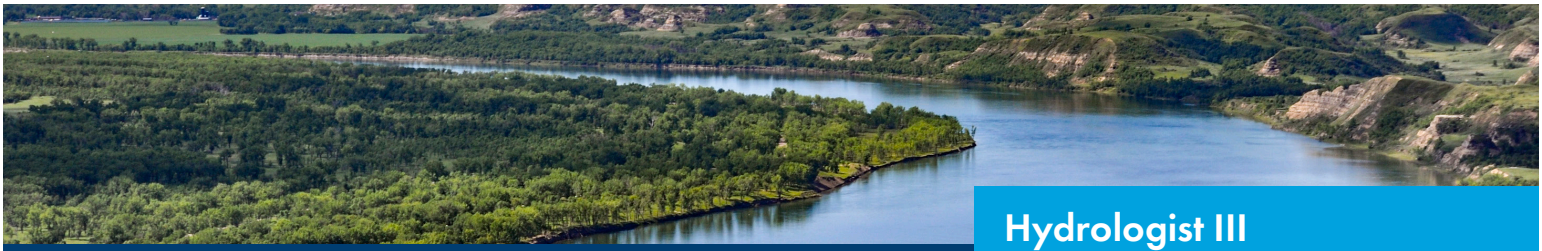
3. Support beneficial use of Missouri River system water and other available water supply sources.

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.

NORTH Dakota Be Legendary. | Water Resources

NORTH DAKOTA DWR



WATER APPROPRIATION DIVISION

Hydrologist III (1 FTE)

The Water Appropriation Division (WAD) is experiencing an unprecedented backlog of work that is adversely impacting the ability of the division to respond to permit application requests and other permitting processes tied to the management of North Dakota's water resources. Historically, there has always been some variation in workload within the division, but over the past 10 years, there have been significant increases in the tasks that are clearly not cyclical and there are no indications that this will be mitigated moving forward without more staff resources to address increased workload.

Why An FTE Is Necessary

The increased workload can be tied to three independent drivers that have resulted in notable changes to division work processes, workflow, and workload. These include the following:

- Industrial Oil Field Production (Hydraulic Fracturing)
- Performance Audit
- Maturity of North Dakota Ground and Surface Water Systems

Hydraulic fracturing has profoundly changed the landscape, economics, and water demands in western North Dakota. Hydraulic fracturing requires substantial volumes of fresh water, and the associated demand for water in western North Dakota to facilitate the growth and expansion of the Bakken has placed overwhelming demands on WAD staff. The nature and the type of use related to delivering water for the development of the Bakken play has led to considerable increases in the number of Conditional and Temporary Permit applications as well as exceptional increases in the quantity of water that is requested.

Metrics - Temporary Permit Applications (also see bar charts)

2.5X Temporary Water Permit Application Requests

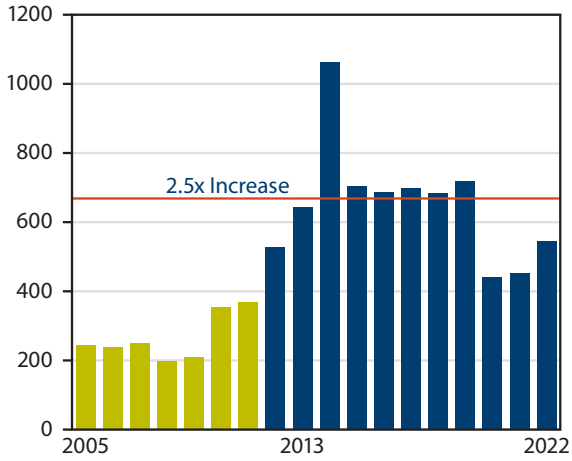
10X Volume Of Water Requested

Metrics - Conditional Permit Applications

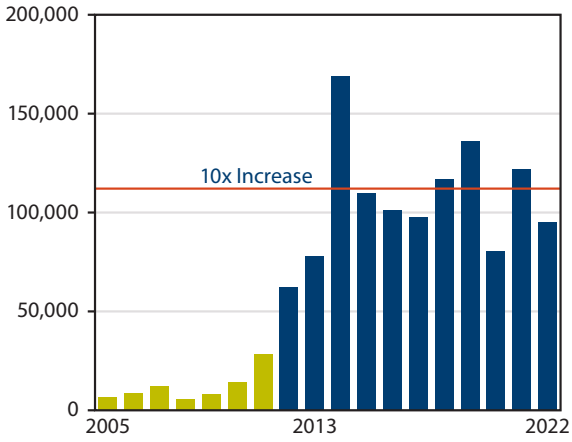
51 Conditional Permits Issued Per Year, But 72 Are Received (Avg. 2000-Present) - Resulting In Growing Backlog

501 Current Conditional Permit Backlog

Temporary Permit Applications (Annual)



Approved Acre-Feet Temp. Permits (Annual)



NORTH Dakota | Water Resources

Be Legendary.

DATA & TECHNICAL SERVICES DIVISION

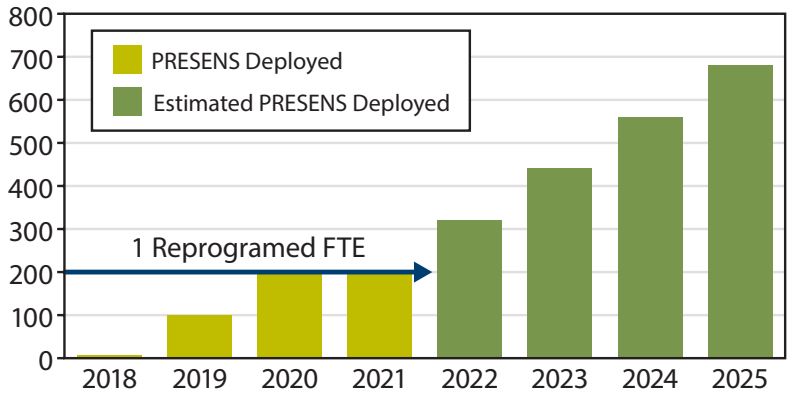
Natural Resources Services (PRESENS) 1 FTE

DWR has always been a leader in data collection related to water resources, but has not had near real-time access to its data sources. The PRESENS (Pushing REmote SENSors) datalogger was designed in-house to fill that gap and provides near real time data so decisions and actions can be made based on current data. The PRESENS program was created by leveraging the talent of internal staff with the scientific background and knowledge of data needs of the DWR. The PRESENS program so far has been a resounding success. It has proven to be more valuable than originally hoped as staff have continued to adapt PRESENS to record new data, such as precipitation, soil temperature, and soil moisture. The program currently is in its infancy and is now ready to move into production.

Why An FTE Is Necessary

Reprogrammed staff have been responsible for picking up the extra work associated with developing and managing the PRESENS program. To add more devices and to move the PRESENS program into a production system, an additional FTE devoted to PRESENS is required.

Goal Is 2,000 PRESENS Units



Other Considerations

PRESENS is a game-changing technology in environmental data collection that is the envy of other states and provinces.

Metrics

368 Locations Measured Using PRESENS

$1,200 Average Cost Per Unit ~ $450 - $2,000 (Sensor Dependent)

680 Units By 2025 (18 Million Measurements/Year)

75% Less Staff Visits at PRESENS Sites VS Non-PRESENS Sites

PRESENS can perform real-time measurements beyond what any number of personnel could accomplish, including data not previously collected such as temperature and barometric pressure.

Typical Well

1 FTE VS **1 PRESENS**

1 Meas./Mo. | 44,000 Meas./Mo.

NORTH Dakota Be Legendary. | Water Resources

REGULATORY DIVISION

Permitting Engineer (1 FTE)

In recent years, North Dakota's water projects have increased in project complexity and project volume, which in part is correlated closely to the increased funding for flood control and surface water projects. Additionally, the litigious nature of water-related issues such as drainage and water resource board decisions has also increased, thereby increasing the complexity of reviews and lengthening review timelines. The DWR Engineering & Permitting Section (E&P) staff have been at the forefront of these increases, attempting to keep pace with incoming permit applications while still prioritizing permit reviews for construction season dependent projects.

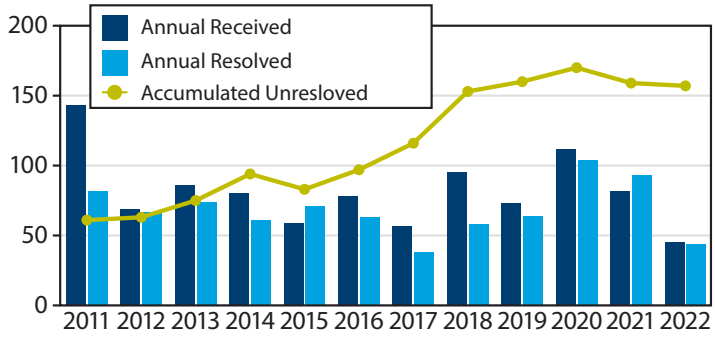
Why An FTE Is Necessary

- The E&P staff are unable to keep pace with the current trend in the complexity and volume of flood control and drainage project permit applications and complaint appeals.
- Major flood control projects, such as the Fargo-Moorhead Diversion Project and Mouse River Enhanced Flood Protection Project as well as other flood control projects for Grafton, Valley City, and Lisbon entailed more complex reviews requiring more staff time, thereby shifting workload priorities away from a growing backlog.
- The functions of E&P are core agency functions that are required to be completed by Century Code and Administrative Code, requiring adequate resources to fulfill.
- Other priorities, such as project or site inspections, field visits, database improvement, and education and outreach, are not currently occurring due to limited staff availability.

Other Considerations

Several attempts have been already made to harvest efficiencies with an existing E&P staff of 5 FTEs to process all applications, determinations, and appeals. These efforts already completed include leveraging of technology for electronic project management routing, reorganization of dam construction permits to the Dam Safety Section, and the publishing of 3 new agency policies that address common litigious issues with drainage and construction permitting, thereby streamlining aspects of the drain permitting and construction permitting processes. While these attempts were successful to some degree, incoming, time-sensitive applications take priority at the expense of a growing review backlog and other priorities.

Trends In Applications And Reviews



Metrics

5+ Major flood control project reviews since 2015, three of which are ongoing - ex. FM Diversion

28 Unprecedented emergency drain permit applications in 2019 and 2020 flood fighting season, diverting other review priorities

1 Only known project-related inspection or field visit completed since 2019 due to prioritization of review backlog

13 Complaint appeals pending review (the most complicated and time intensive reviews averaging only 1.5 per year completed)

Goals For Reviews Continue To Fall Short

Work Load Analysis (Days)	Review Type	Goals For Average Processing Time
811	Construction Permits	3 - 4 months
790	Statewide Significance Drain Permits	3 - 4 months
670	Complaint Appeals	4 - 6 months
605	Stream Crossing Determinations	1 - 2 months
437	Watercourse Determinations	1 - 2 months
344	Assessment Appeals	1 - 2 months
102	Non-Statewide Surface Drain Permits	< month
40	Emergency Permits	< 2 weeks

NORTH Dakota | Water Resources
Be Legendary.

2023 EXECUTIVE SUMMARY WATER DEVELOPMENT PLAN

CHECK OUT the Dashboard!

www.dwr.nd.gov

419 Project Forms Submitted

8 Commissioner Hosted Basin Meetings

$1.7B Total Needs Identified

$605M Executive Purpose Funding Recommendation

Those involved in water project development know that existing projects evolve, and new projects are continuously being considered by local water managers. For that reason, it is necessary for the state to assemble updated water project information on a biennial basis to coincide with the state's budget cycles. In the past, the Department of Water Resources (DWR) has produced and printed that information in a detailed Water Development Plan. Today, DWR and the State Water Commission are providing that same information electronically through a Water Development Plan Dashboard (Dashboard) - along with highlights included in this printed Executive Summary.

The following information outlines funding recommendations for critical water supply, flood protection, and other general water management projects; a prioritized summary of water development financial needs that were collected directly from project sponsors; and summaries of revenue streams that support projects. In addition to the aforementioned information, the Dashboard includes large project overviews, long-term funding needs, aging water supply infrastructure survey results, current purpose funding tracking, and more!

WATER DEVELOPMENT GOALS & PRIORITIES

GOAL 1

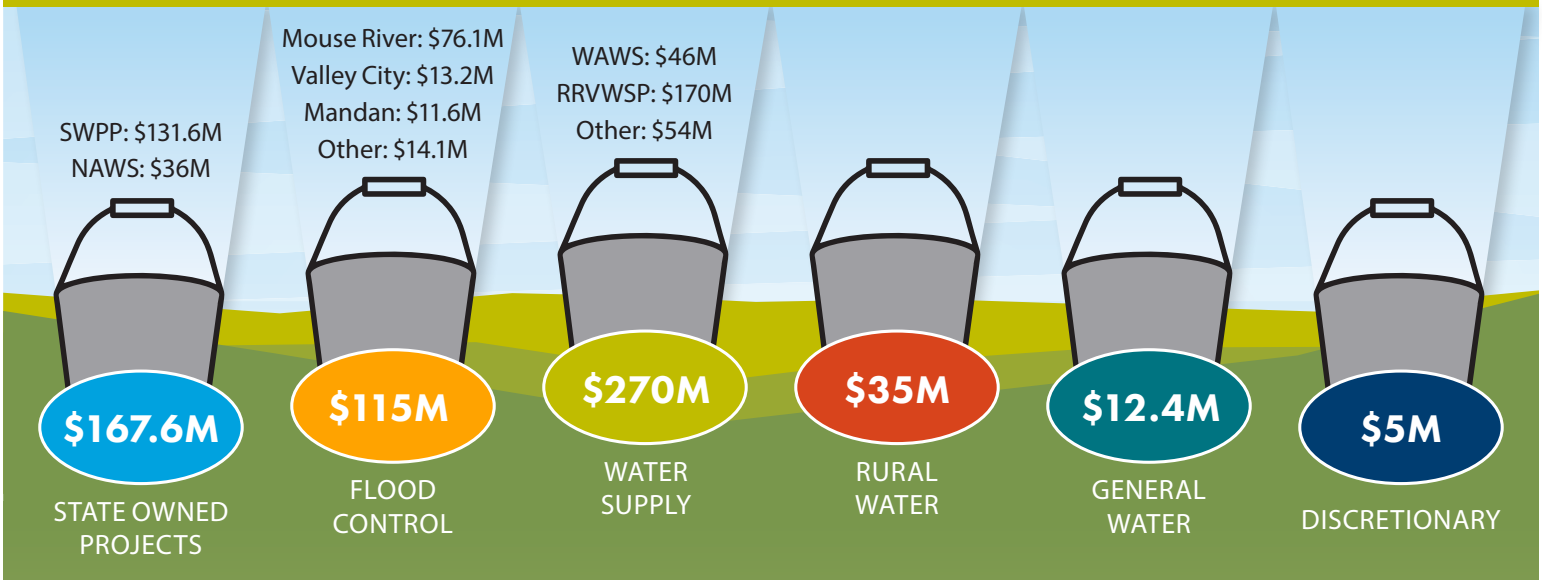
Improve resiliency and protect North Dakota's citizens and economy from negative water-related impacts.

GOAL 2

Improve resiliency and provide safe and reliable water supplies for the health and prosperity of North Dakota's citizens and economy.

Each Goal has associated high priority initiatives that can be viewed on the Dashboard.

2023-2025 DWR PROJECT & PURPOSE FUNDING RECOMMENDATIONS



Northwest Area Water Supply (NAWS) | Southwest Pipeline Project (SWPP) | Red River Valley Water Supply Project (RRVWSP) | Western Area Water Supply (WAWS)

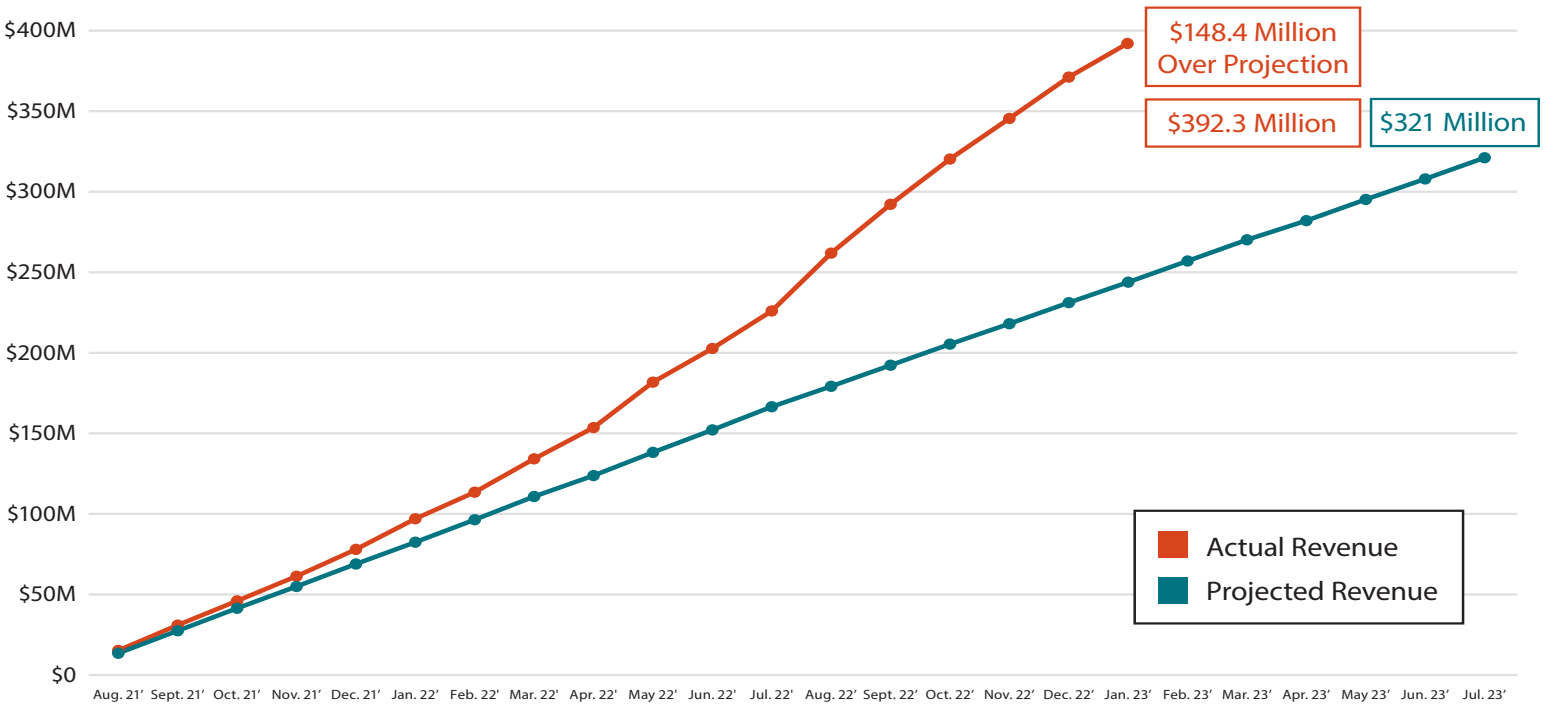
2023-2025 PROJECT FINANCIAL NEEDS SUMMARY
(ESTIMATED DWR SHARE)




PROJECT PURPOSES	WATER DEVELOPMENT PLAN INVENTORY PROJECT NEEDS			DESCRIPTION OF FINANCIAL NEED: 2023-2025
	High Priority	Moderate Priority	Low Priority	
Flood Control (Total = $210M)	$120.4	$47.2	$42.4	Heart River Flood Control (Mandan), Mouse River Enhanced Flood Protection, Other Flood Control, Valley City Permanent Flood Protection, and Water Conveyance.
F-M Area Diversion	-	-	-	Total state commitment of $850M addressed during 2021 Legislative session with $435.5M provided through HB 1431.
Mandan Flood Risk Reduction	$11.6	-	-	Floodwall replacement, levee raises, and interior drainage improvements.
Mouse River Enhanced Flood Protection	$76.1	-	-	Funding scenario based on $76.1M over 5 biennia. Includes property acquisitions in Minot and rural areas, additional levee design, and construction on the Maple Diversion and in-town levees.
Other Flood Control	$19.5	$0.7	$0.2	Community flood protection projects, levee certifications, flood reduction studies, and rural ring dikes.
Valley City Permanent Flood Protection	$13.2	-	-	Phase 6 - Permanent concrete flood walls, removable flood walls, clay levees, storm water pump stations, and bioengineered stream bank restorations.
Water Conveyance	$0.0	$46.5	$42.2	New drainage, drainage improvements, bank stabilizations, and snagging and clearing.
General Water Management (Total = $48.1M)	$2.5	$42.4	$3.2	Dam remediations, repurposing, rehabilitations, and repairs; irrigation; watershed plans; and water retention and detention.
Rural Water Supply (Total = $109.7M)	$13.7	$18.8	$77.2	Community regionalizations, system expansions, storage improvements, transmission line installations, and water treatment plant (WTP) improvements.
Water Supply (Total = $679.9M)	$467.9	$1.6	$210.4	Municipal water supply projects, Northwest Area Water Supply, Red River Valley Water Supply, Southwest Pipeline Project, and Western Area Water Supply.
Municipal Water Supply	$0.0	$1.6	$210.4	Water distribution, storage, and treatment expansions; improvements; and replacements.
Northwest Area Water Supply	$36.0	-	-	Intake Contract II, Bottineau and Souris Reservoirs and Pump Stations, In-line Booster Pump Stations, Minot WTP Phase III, Raw Water Line Initialization, and Biota WTP Phase II.
Red River Valley Water Supply	$254.3	-	-	Pipeline construction, Eastern North Dakota Alternative Water Supply design, McClusky Canal Intake preliminary design, and Biota WTP and Main Pump Station design.
Southwest Pipeline Project	$131.6	-	-	Strategic hydraulic improvements, WTP expansion, rural service additions, and DWR operations.
Western Area Water Supply	$46.0	-	-	Rural water service area expansions to new users and Williston WTP expansion.
TOTAL ($1.05B)	**$605**	**$110**	**$333**	

RESOURCES TRUST FUND - State funding provided through DWR for water development has historically come from several sources including the General Fund, Resources Trust Fund (RTF), and Water Development Trust Fund. Today, the primary source of funding is the RTF. The RTF is funded with 20.5 percent of revenues from the oil extraction tax.

2021-2023 RESOURCES TRUST FUND REVENUE TRACKING



2023-2025 PROJECTED REVENUE TO SUPPORT PURPOSE FUNDING RECOMMENDATIONS

$485M Special Funds + **$120M** Water Projects Stabilization Fund* = **$605M TOTAL** Executive Budget Recommendation

* Created by SB 2345 during the 2021 Special Legislative Session. Funded with Resources Trust Fund revenues from oil extraction taxes that surpass budget projections.

CONTACT US

Andrea Travnicek, Ph.D.
DIRECTOR
atravnicek@nd.gov
701.328.4942

John Paczkowski, P.E.
STATE ENGINEER
jpaczkowski@nd.gov
701.328.3446

Chris Kadrmas
ADMIN. DIRECTOR
ckadrmas@nd.gov
701.328.1956

Patrick Fridgen
PLANNING DIRECTOR
pfridgen@nd.gov
701.328.4964

NORTH DAKOTA DWR

NORTH Dakota Be Legendary. | Water Resources

1200 Memorial Highway
Bismarck ND 58504