

WATER

NORTH DAKOTA

April 2025



SECURING NORTH DAKOTA'S FUTURE: *THE VITAL ROLE OF THE RESOURCES TRUST FUND*



Dani Quissell
Executive Director
North Dakota Water
Education Foundation

Readers of this magazine know that North Dakota is a leader in developing and managing its natural resources, particularly water. Our ability to develop and manage water for the benefit of North Dakotans would not be possible without the Resources Trust Fund – a constitutionally established state fund that provides state funding for water projects across the state.

Established in the 1980s, the Resources Trust Fund was created with the foresight to address North Dakota's long-term needs by allocating a portion of oil and gas production taxes to fund essential projects. This fund has since become a cornerstone of the state's strategy to manage its natural wealth responsibly and ensure that future generations can thrive.

Through the Resources Trust Fund, the state can partner with locals to support vital infrastructure projects such as the development and maintenance of water supply systems, flood control initiatives, and irrigation projects. These investments not only protect our citizens from drought and flooding but also ensure that all North Dakotans have access to clean, reliable drinking water, regardless of where they live.

Since 1995, the Resources Trust Fund has received at least 20% of the oil extraction tax collected by the state. Since its inception, the fund has provided billions of dollars to make critical water infrastructure projects possible. Thanks to the Resources Trust Fund, and the allocation provided to the fund, North Dakota is the envy of other states when it comes to water development and management.



The allocation in the Resources Trust Fund is set to provide significant funding for water projects in the 2025-2027 biennium. The funding will support vital projects like the expansion of a water treatment facility for the Southwest Pipeline Project, which provides quality drinking water to more than 58,000 people. Significant investments are also being made in flood control projects to protect rural and city residents in Bottineau, McHenry, Renville and Ward counties. Funding is also available for irrigation development and agricultural drainage.

There's not a North Dakotan out there that doesn't benefit from the investment made through the Resources Trust Fund. As we look ahead, it is imperative that we continue to support the Resources Trust Fund. By doing so, we honor the vision of its founders and ensure that North Dakota remains a place where our children and grandchildren can enjoy the same opportunities and quality of life that we cherish today.

NORTH DAKOTA WATER

Volume 33 Issue 3

April 2025

North Dakota Water (ISSN 1085-8466) is published monthly except for February, May, August, and September by the North Dakota Water Education Foundation, 1605 E. Capitol Ave., Bismarck, ND 58501.

Board of Directors

Dennis Reep, Chair
Jen Murray, Vice Chair
Dave Lang, Treasurer
Ryan Ackerman
Doug Anderson
Duane DeKrey
Jeff Frith
Reice Haase
Ryan Jockers
Matt Odermann
Jean Schafer
Mike Tweed
Eric Volk

Staff

Dani Quissell, Executive Director
Julie Ellingson, Events
Miranda Hoffert, Office Manager
Robin Pursley, Editor and Graphic Design

SUBMISSIONS: *North Dakota Water* welcomes manuscript, photography and art submissions. However, the right to edit or deny publishing submissions is reserved. Submissions are returned only upon request. Letters to the Editor with name, address and phone number of the author are welcome. All letters are subject to editing.

SUBSCRIPTIONS: Yearly subscription rate is \$25 for one year. POSTMASTER: send address changes to *North Dakota Water* magazine, ATTN: Circulation, P.O. Box 2254, Bismarck, ND 58502, or contact at staff@ndwater.net, (701) 223-8332, or FAX to (701) 223-4645. Periodicals postage paid at Bismarck, ND and at additional mailing offices.

ADVERTISING: *North Dakota Water* accepts quarter-, half- and full-page ads. Contact our office for advertising rates.

The purpose of the North Dakota Water Education Foundation is to develop and implement water information and education programs to increase awareness, understanding and knowledge about water resource issues in North Dakota. The Foundation publishes the North Dakota Water magazine, sponsors summer water tours, and supports the Water Education Today (WET) for teachers and students. North Dakota Water is supported by several private, federal, state and local organizations and agencies.

The opinions and viewpoints expressed by the various authors and sponsoring entities in this magazine do not necessarily reflect the opinions and views of the North Dakota Water Education Foundation board and staff or other sponsoring entities.

Copyright 2025 North Dakota Water Education Foundation.
All rights reserved.

 North Dakota Water is printed on recycled paper.

Contents

Features

Quality Water for Southwest North Dakota.....	4
Miles of Pipeline, Decades of Dedication: Southwest Water Authority's Water Operators	5
Southwest Water Authority Recognized Among the Best at International Water Tasting	7
North Dakota Producers Win Prestigious Regional Conservation Award	8
North Dakota Conservationist Receives Hugh Hammond Bennett Award for Conservation Excellence	10
North Dakota Grazing Lands Coalition: Empowering Producers Through Education, Mentorship, and Sustainable Grazing Practices.....	12
Use It Or Lose It! North Dakota's Opportunity to Stake its Claim for Missouri River Water	14
 Garrison Diversion Conservancy District: Focused on North Dakota	25

Departments

Oxbow.....	16
From the N.D. Department of Water Resources	
Atmospheric Reservoir	18
From the N.D. Atmospheric Resource Board	
Spigot	20
From the N.D. Rural Water Systems Association	
Our Water: Keeping it Clean	22
From the N.D. Department of Environmental Quality	
The Timmer Chronicles.....	24
Observations and Contemplations by Scott Nelson	

On the Cover

"Rainbow" by Tom Krebs, Regent. This photo was the 1st Runner Up in the 2024 North Dakota Waterways Photo Contest, sponsored by the North Dakota Water Education Foundation.





Quality Water for Southwest North Dakota

There are a lot of reasons continuing the construction of the Southwest Pipeline Project makes sense. For one, it makes economic sense, not only for the region, but for the state of North Dakota. It helps ensure a quality of life for the thousands of people working and living in rural southwest North Dakota. It keeps communities, family farms and ranches viable for generations. Clean, reliable, quality water for drinking and household use is one of life's necessities, and the Southwest Pipeline Project has hundreds of people who continue to wait. That's why we are not done!



swwater.com

Miles of Pipeline, Decades of Dedication: Southwest Water Authority's Water Operators

The Southwest Pipeline Project and Southwest Water Authority (SWA) service area covers more than 15,000 square miles and has more than 5,000 miles of pipeline system wide. It would not be possible to operate or maintain without dedicated water distribution operators stationed across southwest North Dakota to keep things flowing as the Project keeps growing.

Nineteen Years and Counting: Justin Kohanes' Journey

Justin Kohanes is one of those operators. Starting with Southwest Water Authority in 2006, Justin was the first operator assigned to the newly constructed Southwest Pipeline Project from Fryburg to Beach and all of Golden Valley County. His service area is more than 150 miles away from the water source at Lake Sakakawea. Working out of the SWA satellite office in Sentinel Butte, Justin is currently a Level III operator.



Justin spent 13 years hauling water to his home before Southwest Water Authority arrived. He knew firsthand the challenges of unreliable water access and the necessity of a dependable system. That experience led him to advocate for rural water development, testifying before the North Dakota legislature alongside SWA leaders, carrying with him a

sample of the poor-quality water his family had relied upon. His efforts, along with those of many others, helped secure funding to expand the Southwest Pipeline Project (SWPP). When the opportunity arose to work for SWA, Justin saw it as a chance to ensure no one else had to haul water like he had.

His daily work involves everything from system maintenance to emergency repairs. "Every day, there are 'locates' to do – marking underground lines before any digging can happen," he explains. Monthly and annual maintenance on pump stations, pressure-reducing valves, and meters keep the system functioning properly. "Leaks happen, and you never know what you're going to find, a broken coupler, a pull-apart, or a curb stop that blew off. And being first in, you're always in the mud up to your knees." The job requires problem-solving skills and the ability to react quickly to unexpected issues. His work truck has seen its share of miles, too. "This is my seventh pickup, so I've probably put on more than 750,000 miles."

Over the years, Justin has witnessed SWA's growth firsthand. "When I started, I was the lowest man on the pole. Now the only guy who's been here longer than me is one of our managers," he reflects. "We keep expanding, pumping more water all the time, and learning new things every day."



The system has grown tremendously, expanding service to more communities and increasing water output, with 2.4 billion gallons of water pumped from Lake Sakakawea in 2024.

SWA must employ appropriately certified water distribution and treatment operators at a grade corresponding to the class of facility being operated, based on the population served. SWA's distribution system is a Class III system requiring operators to maintain certification from the North Dakota Department of Environmental Quality (NDDEQ) for public water systems. Certification credits are earned by attending training programs, seminars, workshops, and schools established or recognized by the NDDEQ.

In order to maintain his certification, Justin must complete 12 training credits every three years through the NDDEQ. "Rural water helps put on classes, and there's the Water Expo

every year," he says. "If you go below your required credits, they take your license away, and you have to start all over." The certification process ensures operators stay informed about the latest industry advancements.

Despite the challenges of the job – whether it's the harsh weather or navigating remote areas – Justin takes pride in keeping water flowing to communities and the independence of his job. "I work out of a satellite office, which suits me. I like people, but I don't want to work with a bunch of them every day," he jokes. While he values the solitude, he also acknowledges the camaraderie among SWA operators. "I learned a lot from the guys before me. They're always willing to share knowledge—you just have to pay attention. People are appreciative. Out here, we had some pretty bad water before Southwest Water came. The second they offered to let me hook onto the pipeline, I was on it."

A Fresh Perspective: Bryce Rohr's First Year on the Job

While SWA values experienced operators like Justin, it also invests in new talent. Bryce Rohr is one of the newest faces on the team, six months into his role. His territory covers the Lefor-Mott-Scranton area, and he's quickly adapting to the job.

"I had no experience in this field before," Bryce admits. "I did some research on how the pipeline works and what it takes to maintain it, and it seemed like a good fit." He's been learning from seasoned operators in Dickinson who have guided him through the ins and outs of distribution operations.

Bryce's daily tasks include maintaining valves, checking meter pits, installing automatic metering equipment and ensuring proper water flow. "Every day is different, but I like learning everything," he says. His job requires a lot of travel. "Some days it's 30 miles, other days it's 200," he notes. Fortunately, he just received a new work truck—a 2025 Ford F-250, which suits him just fine. "I'm a Ford guy," he laughs.

While he's still working toward certification, Bryce enjoys the sense of accomplishment his role brings. "I'm proud to help keep the pipeline going and supply water to everyone," he says. "I've had pretty good customers so far."

"When you're giving somebody something they want, they're easier to get along with," Justin says. "Most people are patient if we have a leak and need to get it fixed. We try to get them fixed as quickly as possible. And sometimes, I'd like to thank a few of them for pulling me out of the ditch when I've been stuck, too."



Rohr flushing water at a cleanout.

Keeping Water Flowing for the Future

Whether in their first year or their twentieth, SWA's distribution operators play a critical role in keeping the water flowing. As the system continues to grow, experienced hands like Justin and fresh talent like Bryce share a common mission: delivering quality water to the people who depend on it. Their expertise, adaptability, and commitment ensure that the water supply in rural communities in southwest North Dakota continues to be reliable and remains steady for years to come—no matter the obstacles.

Southwest Water Authority Recognized **AMONG THE BEST** at International Water Tasting

Southwest Water Authority (SWA) recently earned fourth place in the Municipal Water Category at the 35th annual Berkeley Springs International Water Tasting in West Virginia. The event featured entries from four continents, recognizing excellence in water quality.

Judges evaluated water entries based on appearance, aroma, taste, mouthfeel, and aftertaste. Competing against municipal water providers worldwide, SWA's strong placement highlights its commitment to delivering safe, high-quality drinking water.

"Great water doesn't happen by chance—it takes dedication, expertise, and a commitment to excellence," said Jen Murray, SWA Manager/CEO. "We are incredibly proud of this recognition and the team that makes it possible. It's an honor to be ranked among the best in the world."



Project Features

5.2K+

Miles of Pipeline

3 Water Treatment Plants

35 Booster Pumping Stations

32 Water Storage Tanks & Reservoirs

58K People Served



Shared Lake Sakakawea Intake with Basin Electric



North Dakota Producers Win Prestigious Regional Conservation Award



Lewis and Sherry Heaton

BISMARCK, N.D. – Lewis and Sherry Heaton, dedicated producers from North Dakota, have been named the 2024 recipients of the National Conservation Planning Partnership (NCP) Hugh Hammond Bennett Northern Plains Regional Producer Award. This prestigious honor recognizes their decades-long commitment to conservation, sustainability and innovative agricultural practices.

“Congratulations to Lewis and Sherry Heaton on this well-deserved recognition,” said Dan Hovland, state conservationist for the USDA’s Natural Resources Conservation Service (NRCS) in North Dakota. “Their steadfast support of conservation and their dedication to improving the land for future generations embody the principles of this award. They serve as an inspiration to our entire agricultural community.”

From the outset of managing their farm, the Heaton family has embraced practices that prioritize sustainability and soil health, aiming to leave their land better than they found it. They have been no-till farming since the late 1990s, increasing soil organic matter and reducing erosion. They’ve incorporated cover crops, minimized insecticide use and prioritized planting neonicotinoid-free seeds for their wheat and soybean crops, all aimed at enhancing soil health and biodiversity.

Their cattle operation demonstrates the same commitment to conservation. The Heaton family utilizes an extensive managed grazing system, rotating their cattle across more than 50 pastures every three to 20 days based on paddock size, location and water availability. This approach not only promotes soil health but also optimizes the land’s productivity. Additionally, their decision to graze cattle on corn stalks during winter reduces input costs and enhances soil fertility through natural manure distribution.

The Heaton family has also participated in multiple NRCS conservation programs, including the Environmental Quality Incentives Program (EQIP) and Conservation Stewardship Program (CSP), and have enrolled land in the Wetlands Reserve Easement (WRE) and Conservation

Reserve Program (CRP). More information about NRCS programs can be viewed here: www.nrcs.usda.gov/conservation-basics/conservation-by-state/north-dakota/programs-north-dakota.

Their business model reflects a careful balance of risk management and diversification. The Heatons maintain a one-year drought buffer and offset potential losses by diversifying between agriculture and cattle operations.

“The Heatons exemplify what it means to be conservation leaders,” Hovland added. “Their innovative approach to land stewardship and commitment to sustainability sets a standard for producers across the Northern Plains and beyond.”

For more information about conservation programs and the NCPP Hugh Hammond Bennett Award, visit [Hugh Hammond Bennett Awards | National Conservation Planning Partnership](#).



Land belonging to the Heatons.



North Dakota Conservationist Receives Hugh Hammond Bennett Award for Conservation Excellence



Darrin Olin with acting chief Louis Aspey and North Dakota State Conservationist Dan Hovland.

BISMARCK, N.D. – Darrin Olin, a district conservationist with the Natural Resources Conservation Service (NRCS) in Mott, North Dakota, has been named the recipient of the prestigious National Conservation Planning Partnership (NCP) Hugh Hammond Bennett Award for Conservation Excellence. This award recognizes his outstanding achievements in conservation planning and his unwavering commitment to protecting natural resources across the state.

Named after Hugh Hammond Bennett, widely regarded as the father of soil conservation, the award honors conservation planners and producers who have demonstrated exceptional dedication to developing and implementing effective conservation practices. Olin's nearly 30-year career with NRCS has been marked by remarkable accomplishments in conservation planning, innovative practices, and fostering strong relationships with producers and partners.

"Darrin's ability to connect with producers, understand their needs, and develop tailored solutions is truly exceptional," said Dan Hovland, NRCS North Dakota state conservationist. "He embodies the spirit of conservation that Hugh Hammond Bennett stood for, and we're incredibly proud to have him represent North Dakota on a national stage."

Olin's accomplishments are vast, with conservation practices implemented on more than 417,000 acres of upland wildlife habitat,

94,000 acres of conservation crop rotation and 86,000 acres of no-till management. His hands-on approach and dedication to fieldwork have earned him a reputation as a trusted partner among farmers, ranchers and conservation organizations alike.

Hovland highlighted Olin's significant contributions to advancing conservation practices in North Dakota, noting his role in training NRCS staff and fostering partnerships with organizations like North Dakota State University, Pheasants Forever and local soil conservation districts. "Darrin has been instrumental in shaping the next generation of conservationists and has left a lasting legacy on countless producers across the state," Hovland said.

Olin's innovative work, which includes developing solutions for soil pH, soil salinity, wetland restoration, wildlife conservation, and rangeland management, has positioned him as a leader among his peers. His achievements underscore NRCS's mission of helping people help the land, and his recognition with the Hugh Hammond Bennett Award serves as a testament to his tireless dedication.

For more information about conservation programs and the NCPP Hugh Hammond Bennett Award, visit [Hugh Hammond Bennett Awards | National Conservation Planning Partnership](#).



Darin Olin with Curtis Elke, regional conservationist.

North Dakota Grazing Lands Coalition: *Empowering Producers Through Education, Mentorship, and Sustainable Grazing Practices*

The mission of the North Dakota Grazing Lands Coalition is to improve stewardship by providing education and technical assistance to producers regarding regenerative and profitable grazing management and building conservation awareness by educating citizens and policy makers.

The Coalition promotes the health and stewardship of North Dakota grazing lands through:

- Promotion of voluntary actions.
- Respect for private property rights.
- Education of the values and benefits of well-managed grazing lands.
- Strengthening partnerships between grazing land managers and others who support the purposes of the Coalition.
- Regeneration of the economic, social and environmental stability of land, livestock and people.

MENTOR NETWORK

At the heart of the Coalition mission is a statewide mentor network. Thirty-eight producers provide guidance and counsel on grazing management issues like grazing rotations, cropland aftermath grazing, grass finishing, and winter grazing strategies. In addition to providing one-on-one consultation, Coalition mentors speak at educational events across the state. An interactive map of these mentors and their areas of expertise is available at ndglc.org/mentor-network. If you would like assistance connecting with a mentor, contact field representative Trish Feiring at fieldrep@ndglc.com.



Coalition mentors represented North Dakota at the National Grazing Lands Conference in December 2024.

EDUCATIONAL EVENTS

The Coalition hosts its Grassroots Grazing Summit in January and the Leopold Conservation Award Tour during the summer. In addition, it hosts a biennial Mentor-Guided Workshop. In 2024, the Coalition launched Grazing Logic, a series of events co-hosted with soil conservation districts and other partners on topics of interest to their communities. So far in 2025, the Coalition brought Grazing Logic to Golden Valley, Elgin and Maddock. If you are interested in bringing Grazing Logic to your community, contact administrator Lesley Icenogle at contact@ndglc.com.

NORTH DAKOTA GRAZING EXCHANGE

The Coalition has created an online map connecting landowners who do not have grazing animals to livestock owners with animals that can provide grazing management services. The tool is simple to use:

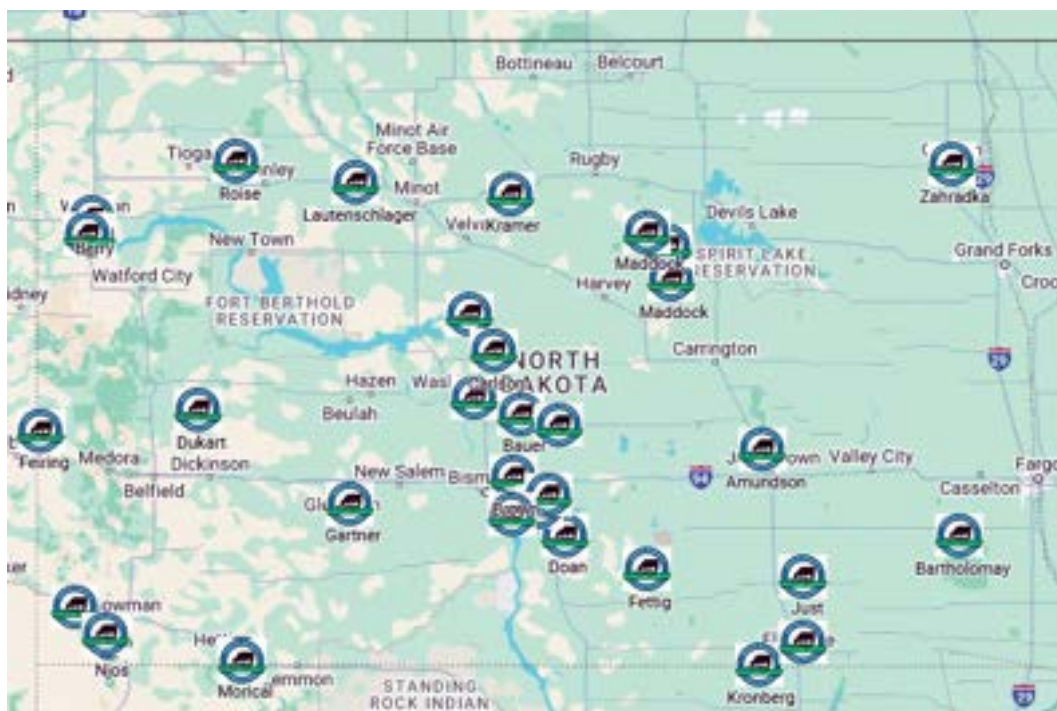
1. Create a free account at [NDGrazingExchange.com](https://ndgrazingexchange.com).
2. Register a pin by entering information about the animals you have available for grazing or land that you are looking to have grazed.
3. Make the match and start grazing! Connect with other users in your area. Details like compensation, fencing and water supply are up to the individuals.



Coalition mentor Rob Kramer speaks at Grazing Logic in Denbigh, N.D.

YOUTUBE CHANNEL

The North Dakota Grazing Lands Coalition YouTube channel (@ndgrazinglandscoalition6907) has a wealth of educational content, including a 40-video series on holistic management and nine sessions from the 2024 Mentor-Guided Workshop. Videos from the 2025 Grassroots Grazing Summit will be posted soon.



Map of Coalition mentors across North Dakota.



PO Box 1091
Bismarck, ND 58502

701-355-4458
contact@ndglc.com

[NDGLC.com](https://ndglc.com)

Like and Follow Us
facebook.com/NDGLC

Use It Or Lose It!

North Dakota's Opportunity to Stake its Claim for Missouri River Water

Two years ago, the Colorado River reached nearly historic low flows, putting domestic, industrial and irrigation water supplies at peril throughout California, Wyoming, Nevada, Arizona, Utah, New Mexico, Colorado, tribal nations, and Mexico. The Colorado River provides a water supply to 40 million people, so the drought and low water levels in the Colorado River sounded the alarm to both state and federal leaders in those states.

Ironically, despite having a century of state-to-state legal agreements, water compacts and legislative acts addressing various rights to Colorado River water, the reality of who gets water in dire times has little to do with what was agreed to on paper over the past century. Political machines engage, leaving water security as a topic to be wrangled in the halls of Congress, the White House and frequently the court system.

While the Colorado River is thousands of miles from North Dakota, the lessons being learned in the Southwest should not go unnoticed. North Dakota will inevitably find itself in a similar defensive posture, trying to optimize and protect its right to use the Missouri River. In fact, North Dakota has defended lawsuits from Missouri almost continuously since 2002 over its right to use Missouri River water for the Northwest Area Water Supply Project (NAWS) and the Red River Valley Water Supply Project (RRVWSP). While no one can predict the climatic conditions in the coming decades, the Federal RRVWSP Environmental Impact Statement predicted a 1930s-type drought in North Dakota by 2050, so we may find ourselves in a similar situation sooner than later.

Water leaders must strategically position the state in the best defensive posture for the inevitable water wars to come, since many water users on the Colorado River are eyeing the Missouri River as an option to solve their water crisis. It should come as no surprise, since the Missouri River is the longest river in the country, with a drainage basin comprising one-sixth of the continent, including 10 states, two Canadian provinces and 25 Native American reservations.

With six dams, the Missouri River contains the largest system of reservoirs in the country, making it a natural option for drought-stricken states seeking to supplement

their water supplies. Large water supply projects in eastern and western South Dakota are in the planning stages. The Bureau of Reclamation studied the feasibility of building a 90-inch diameter pipeline to bring Missouri River water to Denver, Colorado, communities and users on the Colorado River. The Kansas Aqueduct Project seeks to import Missouri River water to recharge the declining Ogallala Aquifer. California and Arizona have discussed partnering on a 1,000-mile pipeline to supplement their water needs with Missouri River water. Certainly, these infrastructure projects would be expensive, but given the Congressional voting power held by the southwestern states, federally subsidized studies seeking options are not out of the question.

North Dakota communities rely heavily on the Missouri River for water needs throughout the state. The Southwest Water Authority delivers Missouri River water to Dickinson and other southwest North Dakota communities. The Western Area Water Supply Authority pipes Missouri River water throughout the Bakken region in northwest North Dakota. After 17 years of litigation between 2002-2019, NAWS is moving forward, and will ultimately bring treated water to Minot and a wide network of cities and rural water systems in north-central North Dakota. From 2020 through summer 2023, Garrison Diversion successfully defended a lawsuit and appeal brought by Missouri to halt the Red River Valley Water Supply Project, which will bring Missouri River water to areas of central and eastern North Dakota that include almost 50 percent of the state's population. North Dakota water leaders, legislators and communities have invested heavily in water projects to put Missouri River water to beneficial use within the state. These types of critical investments in new infrastructure need to continue, building out the system to provide water to all North Dakota communities, as well as providing a readily available, reliable water source for new economic development initiatives crucial to the state's future.

In order to position the state as a leader in oil and gas



TAMI NORGARD
Vogel Law Firm

production, ag processing, manufacturing, hydrogen, and more, ample sources of water are needed to feed those industries. Once overt pressure begins on Missouri River states to conserve water, we may find we have hit a glass ceiling for the total water use North Dakota is allowed to take from the Missouri River. If the Missouri River becomes depleted or if southwestern states achieve a Missouri River diversion to supplement the Colorado River system, a few legal remedies exist that ultimately set limits on the volume of water each state can appropriate, as has been done with the Colorado River. Given the extended time it takes to plan and build projects, North Dakota leaders would be well advised to implement a strategy now to maximize its future water appropriation should the dire situation in the southwest be repeated in the Missouri River basin. At that point, North Dakota's attention may turn to what conservation measures or use restrictions can be put in place to make the most of the water we are entitled to take off the Missouri River. North Dakota leaders would be well advised to develop and expand water projects sooner rather than later to raise the ceiling for the amount water being put to beneficial use now. We may need to live with that amount of water withdrawals into the future once the Missouri River experiences pressure.

North Dakota water projects are funded by oil extraction taxes, which flow to the Resources Trust Fund. The Department of Water Resources administers these funds for the benefit of water projects across the state. The State Legacy Fund balance, also funded by oil taxes, should reach \$9 billion in 2024. The Legacy Fund balance escalated quickly as legislators expended funds conservatively, which should be applauded. That said, I can think of no better legacy to leave to future generations than to invest in efforts to put as much water to beneficial use as possible to optimize the amount of water North Dakotans are able to protect in future drought conditions.

Granted, this article contemplates doomsday scenarios that may never come to fruition. But what if they do? Given the time it takes to plan, approve and build projects, now is the time to invest in the expansion of water systems to deliver municipal, rural and industrial water to rural

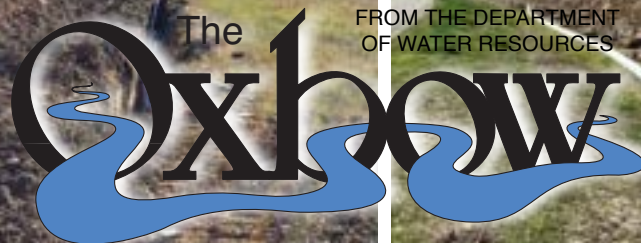


communities in the state. Now is the time to invest in the Red River Valley Water Supply Project infrastructure in a way that will make it affordable, not just for the larger cities, but also for small systems and rural communities so they, too, can participate and reserve sufficient water capacity for future growth and economic development. Now is the time to invest in a water supply that will spark future development of oil, gas, hydrogen, ag-related and other industries throughout

the state. Now is the time to invest in the development and expansion of irrigation systems to prop up agricultural production. If not now, the ability to expand our use of Missouri River water may evaporate if drought conditions continue.

As a final note, consider the positions of Arizona, Colorado and California today, lobbying for billions of federal dollars to explore potential projects to meet their realistic concerns about future water security. If these states had the Missouri River flowing through them, coupled with a \$9 billion Legacy Fund for the benefit of future generations, I suspect there would be aggressive campaigns to put that surface water to beneficial use while preserving or recharging groundwater resources as much as possible to use as a backup water supply. With the current push from these arid states to tap the Missouri River to solve their water scarcity issues, North Dakota must do more than just wait to play defense when conflict arises. Frankly, the arid southwest states have a lot more votes in Congress than the Missouri River upper basin states, so any Congressional solutions discussed may not be negotiated in North Dakota's favor. As such, an aggressive strategic plan to put as much water as possible to beneficial use throughout the state would be the best way to optimize and protect a water supply for future generations. This is a clear case of "use it or lose it."

Tami Norgard has practiced law at the Vogel Law Firm since 1999, assisting clients such as Garrison Diversion Conservancy District and the Western Area Water Supply Authority with water supply project development.



THE IMPACT OF HB 1385

A MILESTONE FOR TRIBAL WATER INFRASTRUCTURE

In April, North Dakota marks a significant milestone – the one-year anniversary of the first tribal water projects funded under House Bill 1385. Passed during the 2023 Legislative Assembly, HB 1385 represents a historic shift in water infrastructure funding by allowing the State Water Commission (SWC) to enter into cost-share agreements with federally recognized tribal nations that share geography with North Dakota. Before HB 1385, North Dakota Century Code previously allowed the SWC to enter into cost-share agreements only with North Dakota political subdivisions, the federal government, other state political subdivisions, and Canadian provinces. Tribal nations were not identified as an eligible partner for funding assistance. For that reason, tribal nations had to establish agreements with eligible political subdivisions to serve as sponsors of the tribal projects.



The passage of HB 1385 ensures that tribal nations can participate in funding programs alongside counties, cities and water resource districts, supporting their efforts to pursue essential water infrastructure projects.

Over the past year, HB 1385 has had a tangible impact. Among the first tribal projects approved under the new law, the Fort Berthold water treatment plant, intake and raw water line project received \$1.35 million in preconstruction funding, while the Turtle Mountain Highway 43 Corridor expansion project was awarded \$4 million in construction funds. These initiatives demonstrate the law's broad reach, supporting critical infrastructure and development in tribal communities. With an estimated total cost of \$30 million, the Fort Berthold project will be the largest tribal initiative ever considered for SWC cost-share funding. Mandan, Hidatsa and Arikara (MHA) Nation Councilman Robert White described HB 1385 as a game-changer, stating that it allows tribal communities to secure funding just like every township and county in North Dakota. The Turtle Mountain project, meanwhile, aims to support new uses and enhance service quality.



Turtle Mountain Highway 43 Corridor Project

Since last year, multiple tribal nations projects have received SWC cost-share approvals. The following are the four key projects that have been funded since the passing of HB 1385, showcasing its impact over the past year:

FORT BERTHOLD RURAL WATER

SPONSOR:
Fort Berthold Rural Water

PROJECT:
Four Bears Water Treatment Plant (WTP), Intake, and Raw Water Line

APPROVALS:
April 11, 2024, February 13, 2025

SUMMARY:
The Four Bears WTP, Intake, and Raw Water Line project aims to replace an aging water facility serving the Four Bears Segment of the Fort Berthold Reservation. This project includes a new raw water intake, water line, and treatment plant, ensuring continued reliable water service. The new facility will be constructed approximately two miles west of the existing building.

STATE COST-SHARE:
\$1,354,500 (preconstruction)
\$3,750,000 (construction)

FORT BERTHOLD RURAL WATER

SPONSOR:
Fort Berthold Rural Water

PROJECT:
Parshall to White Shield Regionalization

SWC APPROVAL:
June 13, 2024

SUMMARY:
The Parshall to White Shield Regionalization project will connect the White Shield Segment of Fort Berthold Rural Water to the Parshall-Lucky Mound Water System in McLean County. This project includes the construction of a new pump station, approximately 7.6 miles of water mains, and two pressure relief valves.

STATE COST-SHARE:
\$341,250 (preconstruction)

TURTLE MOUNTAIN BAND OF CHIPPEWA (TMBC)

SPONSOR:
TMBC

PROJECT:
Highway 43 Corridor Expansion Phase V

SWC APPROVAL:
April 11, 2024

SUMMARY:
The Highway 43 Corridor Expansion Phase V project, led by the TMBC, aims to extend water services to 50 new residential users and the U.S. Customs Station at St. John in Rolette County. The project will also include looping improvements to enhance water pressure and quality. Phase V involves the installation of approximately 29 miles of new water main. To help offset costs, TMBC has secured a \$3.5 million grant from Indian Health Services.

STATE COST-SHARE:
\$4,033,767 (construction)

TURTLE MOUNTAIN BAND OF CHIPPEWA (TMBC)

SPONSOR:
TMBC

PROJECT:
Highway 3 Corridor Improvements

SWC APPROVAL:
December 13, 2024

SUMMARY:
The Highway 3 Corridor Improvements project, led by the TMBC, aims to expand water services to seven users at the International Peace Garden and U.S. Customs Border Station, as well as 25 additional residential users in Rolette County. The project includes installing approximately 12 miles of new water main along key roadways and constructing a new booster station. To help offset costs, the sponsor expects to receive grant funding through the USDA Rural Development Native American Set-Aside program.

STATE COST-SHARE:
\$3,120,800 (construction)

PROBABILITY OF PRECIPITATION EXPLAINED

By Mark D. Schneider

Have you ever wondered why it rained more on a day when the National Weather Service (NWS) forecasted a 30% chance of rain than on one with a 90% chance?

To understand these percentages, let's first look at the NWS definition for Probability of Precipitation (PoP): The chance or likelihood of an event occurring at some point in the forecast area over a certain period of time. When NWS forecasters multiply the probability that precipitation will occur somewhere in the forecast area by the percent of area that will receive measurable precipitation (one one-hundredth of an inch or greater), the result is the percentage used in their forecast products for the public. For example, on a particular day a forecaster thinks that there will be a 60% chance that it will rain and that about 70% of the forecast area will receive at least one one-hundredth of an inch of precipitation. Multiplied out, 0.60×0.70 is equal to 0.42, which would be rounded to 0.40 or 40%. The overall chance of precipitation would be 40%.

Because North Dakota has 53 counties and Walsh County is split into east and west areas, there are 54 "zones" that the Bismarck and Grand Forks NWS offices use in their forecast products. Within each zone there are now 2.5-kilometer grids that are used for site-specific forecasts and for automatic forecast verification. Rain and snow measurements collected by rain gauges and radar-estimated precipitation amounts are compared to each 2.5-kilometer grid box to determine the accuracy of forecasts. Gone are the days when a forecaster could make a general forecast for a large area of the state.

According to Chauncy Schultz, science operations officer for the NWS Forecast Office (WFO) Bismarck, "One of our goals in becoming more accurate with our PoP forecasts is to ensure they are calibrated. In a perfectly calibrated PoP forecast, that would mean that at your location, if there is a 70% chance of precipitation, it would occur 7 out of 10 times when that probability was forecast. Similarly, a perfectly calibrated 30% chance of precipitation would mean that moisture is received at a location 3 out of 10 times when a similar weather pattern occurs. We're making good progress on achieving that, but forecasters at the NWS offices are always striving to do better by reviewing past forecasts, weather patterns, and harnessing all of the latest and greatest weather modeling data to improve the precipitation probability forecasts."



The image used in this article illustrates a specific forecast grid located northwest of Fargo (green shaded box) that may have a completely different probability of precipitation on a given day than the city of Fargo. Schultz summarized that, "We're constantly striving to improve forecasts, and that includes adding more specificity and accuracy to the PoP forecasts. In fact, you can find site-specific information for the next seven days, and even hourly PoP forecasts for the next 24 hours, on the NWS websites at weather.gov/bis and weather.gov/fgf."



p: 701.222.4000
imageprinting.com



Professionals You Need, People You Trust.

Founded in 1976, Interstate Engineering provides innovative engineering, surveying, and planning solutions throughout the Great Plains Region.



Learn more at www.interstateeng.com



ENGINEERING



SURVEYING



PLANNING

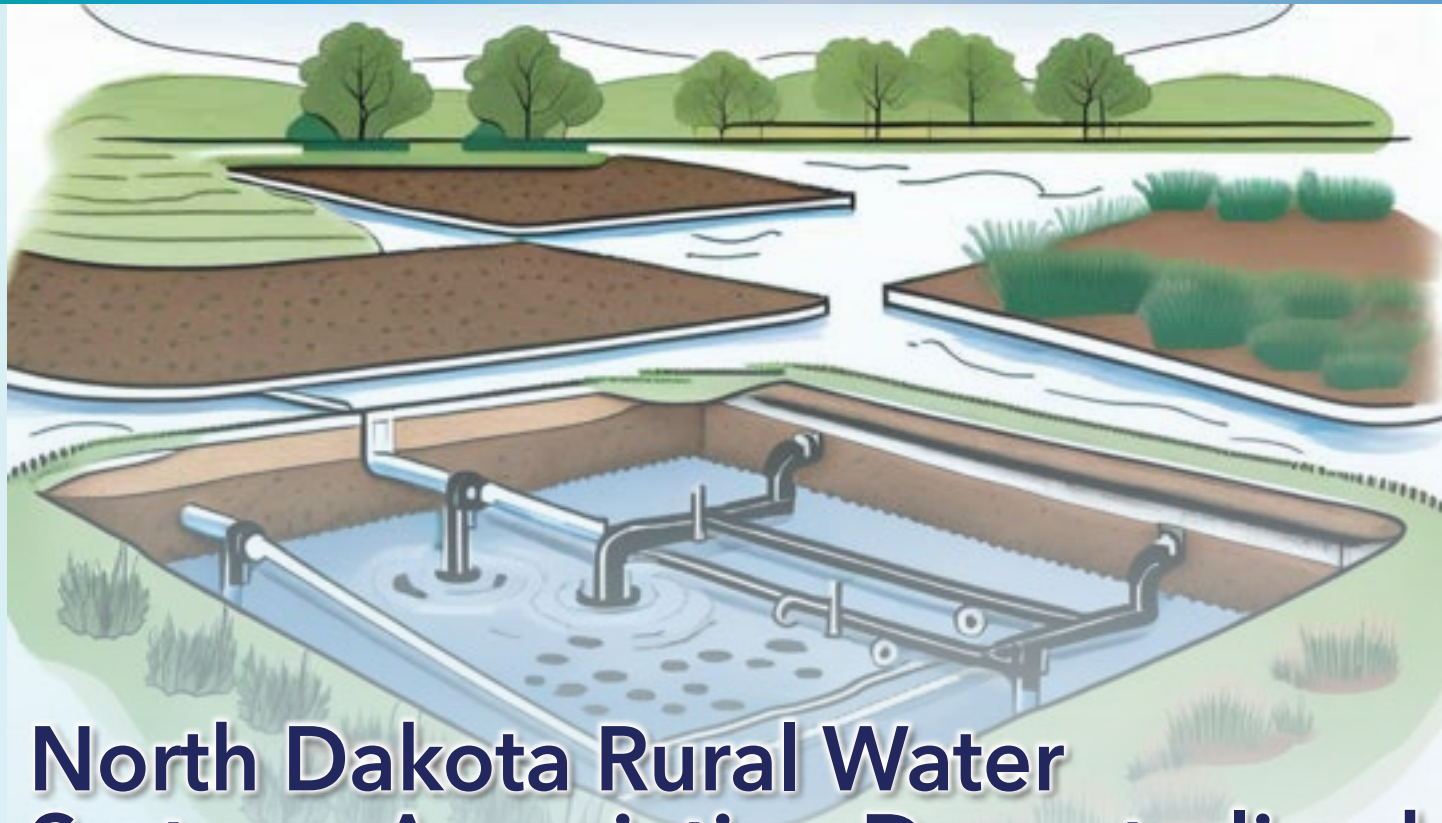
ADVOCATES. EXPERTS.

We know you take pride in your community, but keeping up with aging infrastructure and complex water systems can be a tall order. That's where we come in. Think of the Ackerman-Estvold team as your *advocates*, providing personal service and *experts*, designing and implementing cost effective engineering solutions.



CIVIL ENGINEERING & ARCHITECTURE
WWW.ACKERMAN-ESTVOLD.COM
MINOT, ND | FARGO, ND | WILLISTON, ND | BOISE, ID





North Dakota Rural Water Systems Association Decentralized Wastewater (DcWW) Program

By Daniel Overmoe

General Information

The National Rural Water Association (NRWA), through a Technical Assistant grant from the United States Department of Agriculture (USDA), deployed Water Quality Action Specialists (WQAS) to address the technical, managerial and planning needs of rural, small, and disadvantaged communities, particularly those in traditionally underserved and economically challenged areas, that rely on onsite decentralized wastewater systems. NRWA was awarded the cooperative agreement in early 2023 and is working through its 19 state affiliates, including the North Dakota Rural Water Systems Association.

What is a Decentralized Wastewater System?

Decentralized wastewater cluster systems are a type of wastewater treatment technology that can serve small and rural communities that lack access to centralized sewer systems. They consist of collecting and treating wastewater from a group of homes or businesses near the source, rather than transporting it to a distant treatment plant.

Decentralized wastewater cluster systems can offer several benefits, such as reducing environmental impacts, increasing water reuse potential and lowering costs and energy use. Some examples of decentralized wastewater cluster systems are low pressure pipe systems, mound systems and recirculating sand filters. These systems require proper design, operation and maintenance to ensure public health and water quality standards are met.



CENTRALIZED



DECENTRALIZED

Centralized wastewater treatment is a method of treating wastewater from homes, businesses, and industries in a single location. The process involves collecting wastewater through a network of sewers and pipes, then treating it at a central facility such as a wastewater treatment plant or lagoon system. Treated water is then either reused or released into surface or ground water.

What Kind of Assistance is Available?

The DcWW provides a host of technical assistance meant to empower communities, including but not limited to:

- On-Site Technical Assistance
- Permit Application
- Plan Studies and Assessments
- Rate Study
- Site Assessments
- Sludge Depth Testing
- Smoke Testing
- Sewer Camera Televising
- Asset Inventory Report Form
- Funding Sources
- Best Management Practices
- Develop Operations Manual
- Compliance Issues

- Reporting
- GIS Mapping
- Aerial Drone
- Poly-Pigging
- Emergency Response Planning
- Wastewater System Troubleshooting
- Training

Through this program, a wastewater system assessment will be completed for your system/city and will be presented when completed. Assessments will be completed on the system's sewer mains, manholes, lift stations, septic tanks and lagoon, and many of the items listed above will be used or reviewed as part of the assessment.

Who Qualifies For This Wastewater Assessment?

Any system/city that has a population of less than 2,500 residents and has a Single Non-Metropolitan Medium Household Income (SNM MHI) of less than 80% qualifies. To see if you qualify for this assessment, contact Daniel Overmoe at dovermoe@ndrw.org or 701-430-3834

Our Water

Keeping it Clean

North Dakota Department of Environmental Quality

Project Spotlight

Morton County Soil Conservation District

Meridith Miller, Environmental Scientist
North Dakota Department of Environmental Quality

For more than a decade, the Morton County Soil Conservation District (SCD) has been working to reduce nonpoint source pollution through the Big Muddy Watershed Project. Nonpoint source pollution occurs when run-off from rain or snowmelt carries contaminants into nearby lakes and streams. Watershed projects address nonpoint source pollution by providing financial and technical assistance to landowners implementing conservation practices known as Best Management Practices (BMPs). The Big Muddy Watershed is a nearly 300-square-mile watershed mainly in Morton County. The headwaters are near Hebron and it extends to the confluence with the Heart River south of New Salem.

The initial watershed project sponsored by the SCD addressed concerns in the Danzig Dam and Hailstone Creek Watershed (yellow streams in the map to the left), later expanding to the greater Big Muddy Watershed. The project is focused on reducing in-stream concentrations of Total Suspended Solids and E. Coli bacteria. Big Muddy Creek, Hailstone Creek, and Wilson Creek within the watershed have all been identified as “Not Supporting” recreation (based on ND Water Quality Standards) due to high concentrations of E. Coli in the water. E. Coli can come from wildlife, cattle in or near waterbodies or leaky septic systems. If a human comes in contact with water contaminated with E. Coli they may experience gastrointestinal illnesses, skin infections, respiratory infections or eye or ear infections.

To reduce nutrients, E. Coli and sediments in the watershed, the SCD has been working with producers to implement a variety of BMPs, including converting cropland to perennial grass cover, grazing and water infrastructure, and rotational grazing systems.

Chance Porsborg has been the Morton County SCD watershed coordinator for the last two and a half years. Porsborg says that some of the favorite parts of his job “are the opportunities to work with producers in our area and partner with other agencies to provide insight, education, cost share and other learning opportunities for conservation.”

In his time with the SCD, one of the larger hurdles they’ve faced was “getting the county informed about the watershed [project] and the opportunities it had available to producers within it. Once that hurdle was overcome, we have become very successful in terms of the number of practices implemented and acres impacted within the county.”

In addition to working with landowners, Porsborg and the Morton County SCD are busy coordinating education and outreach events. The largest of their events is “Investing for the Future,” held annually in December. Event topics focus on grazing, weed control and future



Big Muddy Watershed area in Morton County, ND.

investments, not only financial but on the farm as well. The SCD also hosts an annual event in the county to talk about different cost share opportunities, practices, projects, and information that can be beneficial to our producers and community and showcase our conservation practices and award winners within the county.

For information about “Investing for the Future” and other events hosted by Morton County SCD or sponsors, Porsborg recommends visiting its website (mcsd.com) or Facebook page.



Installation of water wells, tanks, troughs, and pipelines for rotational grazing systems (above and below) have been popular BMPs in the Big Muddy watershed implementation project. Pictures are courtesy of the Morton County SCD.



As water quality continues to improve in the Big Muddy Watershed and BMPs are implemented, the Morton County SCD is looking to the future and planning additional watershed projects. In the spring of 2025, Porsborg will begin an assessment of the Outlet Heart River watershed southwest of Mandan. During this assessment, he will be monitoring the water quality to see if we are able to implement a new watershed project like the Big Muddy project in this area. Depending on landowner interest and water quality results, the SCD intends to apply for funding to support a watershed project, focused on conservation practices in the Outlet Heart River Watershed in 2027.

For more information on the Big Muddy Watershed Project or the Outlet Heart River Assessment Project, contact the Morton County Soil Conservation District at 701-667-1163 (ext. 3) or email Chance.Porsborg@nd.nacdnet.net.

For information on watershed projects throughout North Dakota, contact Environmental Quality Nonpoint Source Program Manager Emilee Novak at 701-328-5240 or email ejnovak@nd.gov.

NORTH
Dakota | Environmental
Quality
Be Legendary.™

4201 Normandy Street
Bismarck, N.D. 58503-1324
701-328-5210
www.deq.nd.gov

THE Timmer Chronicles

By Scott Nelson

Another calving season is here. It's my favorite time of year. I love seeing all those little critters gamboling around their mothers in the spring sunshine and new grass. It's every rancher's goal to have a 100% calf crop but no matter how much time you spend with the cows, you are bound to lose a certain percentage of those calves. In all my close to a half-century of ranching, I remember only one time that I got a 100% calf crop. And that only happened because a couple sets of twins helped me out.

There are times that no matter what you do, you will lose calves. Cold weather and blizzards have always hurt the calf crop, especially when you calve early. Sometimes they are born dead or the birth membrane covers the nose and they suffocate. If you aren't there right at the moment of birth, you will lose them. Often the cow will clean off the membrane after the fact so the rancher has no idea why the calf died. Then there are always the backward calves, legs back, or just plain too big. Sometimes the only way to save a calf is a trip to the Vet at 2 a.m. for a cesarean.

Cows are all individuals and take the loss of a calf in different ways. I've had cows get up and walk away from their dead calf without a second look back. Then there are the ones who grieve their lost calf for weeks. Cows will often wander the pasture, bellowing for their lost calf for days on end. There is nothing sadder than walking out in the yard on a quiet spring evening and hearing a cow up in the pasture, mournfully pining for their lost offspring. Occasionally a cow so misses her calf that she will, on her own, adopt another cow's calf. When this happens, I don't interfere. The lucky calf ends up with two mamas and gets twice the milk. All is good.



Sometimes things work out where I have an orphan to pair with the calf-less cow. I used to rope the cow and let the orphan suck. After several sessions, the cow would usually accept the calf as her own. Other times things don't go as smooth. I've had to stand with a club so the cow lets the calf suck. She wants a calf but she wants HER calf and won't take a replacement. In the past, I've roped a cow for several weeks, morning and night, till she takes the calf.

I've finally smartened up in my old age and now I do things different. First of all, drugs! Not for me but the cow. A few CCs of Ace makes even the most stubborn cow love everybody. Also, I put "calf claim" on the calf to get it to smell good. Real vanilla extract also works well. After the cow comes out of her drug stupor, the calf has sucked several times and most times is accepted with no problems.

Years ago, I had a cow I bought with a bunch of bred replacements. She had no ears and was the ugliest cow you ever saw. When she calved, she tried to kill her own calf! The poor little thing was lucky to get away from her through the fence. I ended up penning and roping her so the calf could suck. I didn't dare leave the calf alone with her because she would butt and stomp on it. One day as I was giving her water, she pushed me up and over a panel! I got mad. I grabbed a post and brought it down on her head. She dropped like she was shot. I figured I killed her but several minutes later I was surprised when she staggered to her feet. She immediately showed interest in her calf outside the pen. I cautiously put them together and she suddenly became a doting, loving mother! I must have knocked some maternal sense into her!!

See yuh next time, Scott

Garrison Diversion Conservancy District: Focused on North Dakota

Oftentimes when the topic of “Garrison Diversion” is brought up among North Dakotans, the Garrison Diversion Conservancy District (Garrison Diversion) is confused with the Garrison Diversion Unit (GDU) Project. Simply put, Garrison Diversion is the local agency responsible for the implementation of a federal project, whose scope has been greatly revised over many years. Read on to learn how Garrison Diversion is committed to improving the quality of life for the citizens of North Dakota!



GARRISON DIVERSION UNIT PROJECT

The GDU Project is the result of a federal plan with roots in the Flood Control Act of 1944 (later renamed the Pick-Sloan Missouri Basin Program), which constructed multiple dams on the Missouri River for the purpose of flood control, navigation, irrigation and hydropower. To compensate North Dakota for flooding prime farmland as a result of the dams, the state was promised more than a million acres of irrigation; however, further studies indicated that the soil in northwestern North Dakota was not suitable for irrigation according to federal irrigation standards. As a result, the Bureau of Reclamation (Reclamation) revised the diversion plan proposing instead to take water from the Garrison Dam and reservoir to irrigate other lands to the east, and thus became known as the “Garrison Diversion.”

In 1965, federal legislation called for the construction of the Garrison Diversion Unit Principal Supply Works, which included the McClusky Canal, New Rockford Canal, Snake Creek Pumping Plant and Oakes Test Area. Congress later halted the project, and legislation was reformulated multiple times through the 1986 Reformulation Act and the Dakota Water Resources Act of 2000.

In order to establish, construct, develop, maintain and operate the GDU and all its components, the North Dakota legislature created the Garrison Diversion

Conservancy District in 1955, and included 22 counties. N.D. Century Code (CH. 61-24) directs Garrison Diversion to:

- Promote the establishment, construction, development, maintenance, and operation of the Garrison Diversion Unit, or any part thereof.
- To make available ... waters diverted from the Missouri River for irrigation, domestic, municipal, and industrial needs, and for hydroelectric power, recreation, fish, wildlife, and other beneficial and public uses.
- To study and provide for the water needs of eastern North Dakota communities and water districts and western Minnesota communities through a Red River Valley Water Supply Project.

Today, Garrison Diversion consists of 28 counties, with each county supporting Garrison Diversion’s operations by issuing a one-mill levy and electing a citizen to serve a four-year term on its board of directors. The mission of Garrison Diversion today is to “provide a reliable, high quality and affordable water supply to benefit the people of North Dakota.”

While reliable water supplies are the core of our mission, Garrison Diversion’s focus goes well beyond a dependable drinking water supply. It also aims to provide opportunities for agriculture, recreation and development of North Dakota’s natural resources.

AGRICULTURE AND NATURAL RESOURCES

The promised irrigation projects in the original GDU project did not materialize; however, the potential that irrigation holds for building a healthier North Dakota remains as strong as ever. Garrison Diversion works to develop and enhance irrigation throughout the state by investing in agriculture initiatives through partnerships with the North Dakota Irrigation Association and NDSU Extension Service.

The McClusky Canal, an original feature of the GDU, has become a valuable resource to farmers looking to develop irrigation on their farmland. To help guide irrigation expansion efforts along the McClusky Canal, Garrison Diversion developed an Irrigation Master Plan. Since 2010, developing the McClusky Canal Irrigation Project has been a vast undertaking. In recent years, multiple irrigation projects have been developed, currently irrigating nearly 8,000 acres.

Along with irrigation development, Garrison Diversion has worked with numerous government agencies and environmental groups to maintain, enhance and protect North Dakota's natural resources. From wildlife habitat mitigation to the North Country Trail, Garrison Diversion has played a part in keeping North Dakota a beautiful and environmentally friendly place to live and visit.

RED RIVER VALLEY WATER SUPPLY PROJECT

Garrison Diversion is the state lead in the development of the Red River Valley Water Supply Project (RRVWSP), the purpose of which is to meet the water supply needs of central and eastern North Dakota through providing a supplemental water supply during times of drought.

Surface water supplies in central North Dakota and the Red River Valley are limited and unreliable, especially in drought conditions. With continued growth and industrial development, the RRVWSP is needed to mitigate against

drought conditions that would cause costly shortages, foster economic development by meeting municipal, rural and industrial water demands, and provide for economic sustainability.

The RRVWSP will use a buried pipeline to carry Missouri River water from the McClusky Canal to the Sheyenne River, which will provide a supplemental water supply to users in central and eastern North Dakota during droughts. When completed, the RRVWSP could benefit nearly half of the state's population. The water will also provide opportunities for industrial development, as a current lack of industrial water supply has driven industries to obtain water through less desirable means and/or relocation outside of North Dakota.

Project construction is underway in the Carrington area, with 18 miles of pipe in the ground as of December 2024. The 125-mile pipeline and supporting facilities are anticipated to be operational in 2032. "The construction crews made a lot of progress last season and we're in a great place with design. We're hoping to keep the momentum as we approach a new construction season and beyond," Garrison Diversion General Manager Duane DeKrey says.

MUNICIPAL, RURAL AND INDUSTRIAL (MR&I) WATER SUPPLY PROGRAM

Reliable and high-quality water is vital to the success of small towns and family farms. Garrison Diversion works to ensure North Dakotans have access to reliable and high quality water through the state Municipal, Rural and Industrial (MR&I) Water Supply Program. Garrison Diversion is the fiscal agent and, along with the Department of Water Resources, is responsible for administering the state MR&I Program in which \$400 million is authorized in federal funds to help water systems deliver quality water to homes, businesses and farms across the state.

To date, nearly \$460 million has been awarded for system expansions and improvements across the state.

Engel's Point Wildlife Management Area



Harvey Centennial Park



Additionally, Garrison Diversion recently developed a Water Supply Assistance Grant Program, designed to provide funding assistance to offset the costs of new customer hookups to a rural water system or district within Garrison Diversion's member counties. The Water Supply Assistance Grant Program is also in place to aid municipal water systems or districts with extraordinary OM&R projects that will impact the delivery of water to users, introduce health and safety issues, or bring potential harm to other infrastructure if not repaired.

RECREATION

The enhancement of one of North Dakota's most treasured resources, recreational opportunities, is a key initiative for Garrison Diversion. Investing in the promotion, development and preservation of natural resources is important to ensure the continued and future utilization of these areas.

Garrison Diversion believes in developing recreational opportunities that provide North Dakotans areas to enjoy the great outdoors. For this reason, Garrison Diversion dedicates two-tenths, or 20%, of its one-mill levy to its Matching Recreation Grant Program.

Funds from this program have been awarded to install new playground equipment at parks, develop campground facilities and walking paths, among other facilities. Since the program's inception in 1990, more than \$9 million has been awarded for recreation projects within the district.

In addition, the Chain of Lakes Recreation Area, four in-line lakes on the McClusky Canal, provides numerous recreational opportunities such as fishing, camping, boating, hunting, hiking and more. East Park Lake, West Park Lake, Heckers Lake and New Johns Lake make a popular recreation destination in central North Dakota. The recreation areas are equipped with boat ramps, primitive camping sites and vault toilets for the convenience of visitors.

The McClusky Canal is important to these recreation areas because water is pumped from the canal, as needed, in order to maintain optimal water levels for recreation. Garrison Diversion performs basic maintenance of the Chain of Lakes facilities.

OPERATIONS AND MAINTENANCE

Garrison Diversion is responsible for the operations and maintenance (O&M) on the GDU project facilities under a cooperative agreement with Reclamation, who owns the facilities. The GDU facilities include the McClusky Canal, New Rockford Canal and Snake Creek Pumping Plant.

Garrison Diversion maintains an impressive staff with high levels of expertise. The staff includes a professional engineer, master electricians, certified diesel mechanic, painting and coating specialists, vegetative management specialists and multiple heavy equipment operators. O&M employees are located in Carrington, McClusky, New Rockford and at the Snake Creek Pumping Plant in Coleharbor.

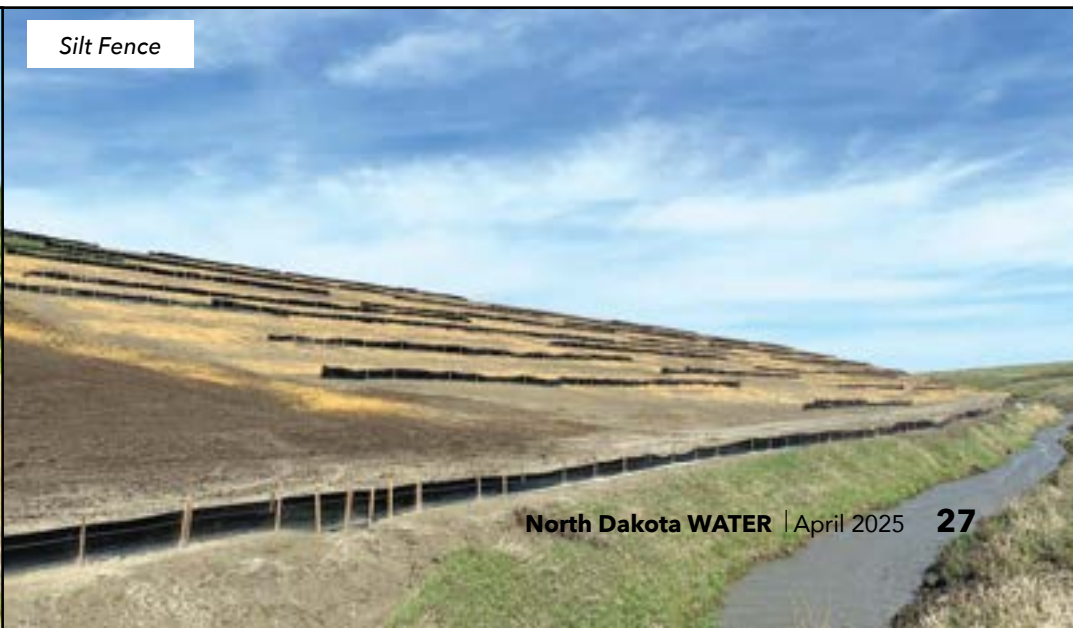
A large fleet of equipment is maintained with dozers, loaders, backhoes, trucks and excavators, and many specialized pieces that allow for work in a variety of situations.

Expertise in canal maintenance, earth moving and other construction areas enables the O&M staff to assist federal and state government agencies such as the Department of Water Resources, Reclamation, North Dakota Game & Fish, and U.S. Fish and Wildlife Service. These partnerships benefit everybody involved!

For the past 60 years, Garrison Diversion has been committed to building, planning and implementing water projects across the state through several areas of focus. Looking forward, it is proud to play a vital role in the future of our state. To learn more about Garrison Diversion, visit www.garrisondiversion.org and follow us on Facebook by searching GD CD.ND.



Silt Fence





PROVIDING INNOVATIVE SOLUTIONS TO WATER CHALLENGES YOUR COMMUNITY FACES.

learn more at mooreengineeringinc.com

Bartlett&West



Forward, together

With nearly 75 years of institutional experience, we're proud to partner with North Dakota water systems to deliver safe and reliable water solutions for community growth.

BartlettWest.com



Seeing success from every **PERSPECTIVE**

“Your project is important for different reasons, for every stakeholder. It takes seeing each perspective to get everyone moving forward in the same direction. ”

Cory Chorne, PE, AE2S Engineer



Water Engineering and Beyond

Award-Winning Best Place to Work



2025 North Dakota Waterways **PHOTOGRAPHY CONTEST**

Winter, Summer, Spring or Fall . . . WE WANT TO SEE THEM ALL!

We're looking for those hidden away people and places to help us showcase North Dakota's water treasures. Take a picture suitable for the magazine's front cover. It could be taken in your backyard, at the neighborhood playground, by the creek, behind the farm house, or near your favorite fishing hole - in any season.

Be creative! If you "Discover our Cover," you win!

ENTRIES ACCEPTED UNTIL MAY 16, 2025

Entry forms can be found at <https://ndwater.org/photo-contest>

Bridging the gap between idea + achievement

At HDR, building strong communities is at the heart of our endeavors. That's one of the many reasons we are proud to provide analysis and design of flood protection structures for our clients.



Bismarck 701.557.9701
Fargo 701.353.6100

www.hdrinc.com



**Proudly
providing water
infrastructure
solutions for
North Dakota
communities
for more than
50 years.**

2nd Street South Closure Structure and Floodwall
Fargo, North Dakota



HOUSTON
engineering, inc.
houstoneng.com



You don't hire engineers who are
"good enough." You hire the very best.

Incidentally, so do we.



There is no B-Team.



Sponsored by:



2025 CALENDAR

May 5	Southwest Water Authority's Board of Directors Meeting, Dickinson
May 6	North Dakota Rural Water Systems Association's Wastewater Training, Devils Lake
May 7	North Dakota Rural Water Systems Association's Wastewater Training, Bismarck
May 8	North Dakota Rural Water Systems Association's hybrid Cybersecurity Training, Bismarck or online
May 14	Devils Lake Basin Joint Water Resource Board Meeting, Ramsey County Courthouse, Devils Lake
May 21	North Dakota Rural Water Systems Association's Efficient Water Systems: Tackling ND Weather Challenges Training, Casselton
May 22	North Dakota State Water Commission's Pre-Commission Meeting
May 22	Metro Flood Diversion Authority's Board Meeting
May 29	NAWS Authority Meeting virtually or at the Minot Public Works
June 2	Southwest Water Authority's Board of Directors Meeting, Dickinson
June 11	Devils Lake Basin Joint Water Resource Board Meeting, Ramsey County Courthouse, Devils Lake
June 11	Red River Joint Water Resource District's Board of Directors Meeting, West Fargo
June 12	North Dakota State Water Commission Meeting
June 19	Garrison Diversion Conservancy District's Executive Committee Meeting, Carrington
June 26	Metro Flood Diversion Authority's Board Meeting
July 7	Southwest Water Authority's Board of Directors Meeting, Dickinson
July 9-10	North Dakota Water Resource Districts Association and North Dakota Water Users Association Joint Summer Water Meeting, Spirit Lake Casino, Devils Lake
July 16	Devils Lake Basin Joint Water Resource Board Meeting, Ramsey County Courthouse, Devils Lake
July 16-17	North Dakota Rural Water Systems Association's Leadership Retreat, Roughrider Hotel, Medora
July 17-18	Garrison Diversion Conservancy District's Board of Directors Meeting, Carrington
July 24	North Dakota State Water Commission's Pre-Commission Meeting
July 24	Water Day at the North Dakota State Fair, Minot

For more information or if you would like a water event listed here, call 701-223-8332 or email jellingson@ndwater.net.

Submissions are due the first Monday of each month preceding the next issue.

North Dakota Water Education Foundation • P.O. Box 2254 • Bismarck, ND 58502