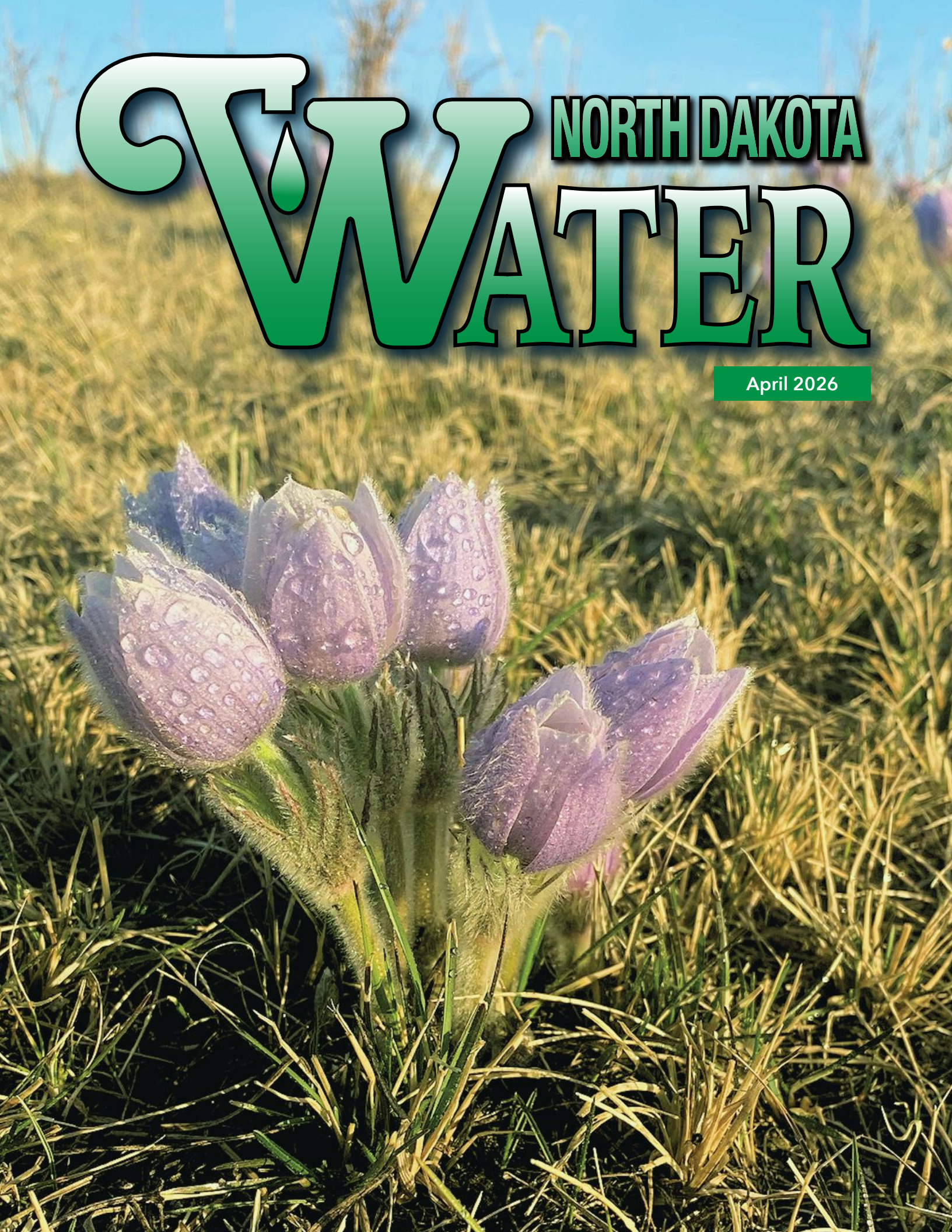
NORTH DAKOTA WATER

April 2026



PROTECTING OUR INFRASTRUCTURE FOR THE LONG TERM

Dani Quissell
Executive Director
North Dakota Water
Education Foundation

In March we celebrated Buddy's seventh birthday. His muzzle is getting grayer, but thanks in part to his rigorous stretching routine, he isn't getting any slower—at least that's what we thought. I spent a few days down in South Dakota this spring helping my dad calve heifers. Buddy, of course, had to come with. What would we do without his *invaluable* help?

While we were there, Buddy decided to befriend one of the soon-to-be mommas. She was decidedly not interested. After nudging him away with her head, she turned to walk off—and Buddy, not quite quick enough on his feet, ended up with his paw under her hoof. Thankfully, there was no lasting damage, but he did have to endure the indignity of wearing a sock for a few days to keep him from licking the injury. Oh, the shame.

Much like Buddy's sock, we need to ensure we are doing all we can to protect our infrastructure for the long term. Whether we're talking about a brand-new water intake or century-old legal drains, we must think strategically about safeguarding the systems that support our communities. Our children and grandchildren deserve the same quality of life we enjoy today—made possible by safe drinking water and responsible water management that protects people, infrastructure, and property.

One of the looming threats to our infrastructure, particularly on the Missouri River, is the spread of aquatic nuisance species. This issue of the magazine features a great article highlighting the work of the North Dakota Game and Fish Department in preventing the further spread of ANS. While Game and Fish's efforts are essential, protecting our waters is a responsibility we all share.

We also must recognize that much of the infrastructure we enjoy today was built in partnership with investment from the state of North Dakota—fueled by oil tax dollars through the Resources Trust Fund. Our forebears were visionary in establishing the Resources Trust Fund. Thanks to their foresight, we benefit from a robust rural and regional water supply system, enhanced flood protection in both rural and municipal areas, and so much more.

Recently, discussions have surfaced about reducing investments in the Resources Trust Fund as the state faces increasing needs and tighter budgets. As these conversations continue, we must ensure the legacy of the fund is protected. Continued investment is essential if we want to maintain and build the water infrastructure that future generations will rely on.

Just as Buddy continues his daily stretching routine to stay limber as he ages, we too must remain diligent—daily, intentionally, and consistently—in protecting the water infrastructure that sustains our communities.

Dani

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Volume 34 Issue 3 April 2026

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.

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.

North Dakota Water is printed on recycled paper.

Contents

Features

Departments

On the Cover

"Dewy Crocus" by Cathy Myrum, Petersburg. This photo was an Honorable Mention in the 2025 North Dakota Waterways Photo Contest, sponsored by the North Dakota Water Education Foundation.

Quality Water for Southwest North Dakota

SOUTHWEST PIPELINE PROJECT

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!

SOUTHWEST WATER AUTHORITY

swwater.com

25 Years of *Make A Splash:*

Where Water Education Comes to Life

For many students across southwest North Dakota, learning about water doesn't just happen in a classroom, it happens through hands-on discovery. At the annual *Make A Splash* Festival, students rotate through interactive stations, test their knowledge, ask questions and, most importantly, see firsthand how water shapes their daily lives.

In 2026, Southwest Water Authority celebrates the 25th anniversary of *Make A Splash*, a milestone that reflects decades of collaboration among educators, volunteers and water professionals dedicated to building water awareness among young learners. What began as a local effort to introduce students to water science has grown into a cornerstone educational event that continues to evolve alongside the communities it serves.

A NORTH DAKOTA IDEA WITH LASTING IMPACT

Make A Splash draws inspiration from Project WET (Water Education Today), a program developed to help students understand how water connects people, communities and ecosystems. While Project WET provides the educational framework, Southwest Water Authority brings that learning to life locally through its annual festival in Dickinson.

The goal has always been simple: create an engaging, memorable experience that helps students understand where their water comes from and why it matters. Over the years, the festival has become known for its hands-on approach, allowing students to explore concepts through activity-based learning rather than lectures.

According to Tina Harding, water education program manager for the North Dakota Department of Water Resources, the strength of the festival lies in its ability to reach large numbers of students in a single day, while still creating meaningful learning moments. By combining science, creativity and teamwork, *Make A Splash* offers an experience that many students remember long after they leave the event.

LEARNING BY DOING

Inside the festival, energy is high as students move from station to station, each designed to spark curiosity and encourage exploration. One popular activity invites students to become a drop of water traveling through the natural water cycle, moving between lakes, rivers, clouds and groundwater while discovering how water flows through the environment.

Other stations focus on topics such as watersheds, conservation and the role of water in everyday life. Facilitators introduce each lesson with a brief overview before guiding students through hands-on exercises that reinforce key concepts. The short, focused activities help students stay engaged while allowing them to experience multiple aspects of water education in a single visit.

Harding says the most powerful moments often come when students make connections for themselves. Many arrive with a limited understanding of water systems, sometimes believing water simply comes from the faucet. By the end of the day, they leave with a deeper appreciation for the journey water takes and the role they play in protecting it.

BUILT ON COMMUNITY COLLABORATION

A defining feature of *Make A Splash* is the strong network of partners who contribute to its success. Educators, volunteers, youth organizations and local professionals all play a role in delivering the festival's programming. Southwest Water Authority serves as the local coordinator, working behind the scenes to ensure each station runs smoothly and each student has a meaningful experience.

Community involvement has allowed the festival to grow and adapt over the years. New activities are introduced, station formats evolve and organizers continually look for ways to improve efficiency while maintaining educational value. Lessons learned from past events have helped shape a model that balances fun with purpose.

The festival's longevity also reflects the dedication of those who have supported water education throughout the region. Many facilitators return year after year, bringing passion and expertise that enrich the learning environment and strengthen the festival's impact.

REACHING THOUSANDS OF STUDENTS

Since organizers began tracking participation more closely, water festivals like *Make A Splash* have reached more than 107,000 students in kindergarten through sixth grade, with broader water education programs touching hundreds of thousands more individuals across North Dakota. These numbers highlight the growing demand for hands-on environmental education and underscore the importance of partnerships between water authorities, schools and communities.

While the festival remains deeply rooted in North Dakota, its influence extends far beyond state lines. The educational model behind *Make A Splash* has helped inspire similar water festivals and learning opportunities across the country and around the world. What began as a local effort to connect students with water science has grown into part of a larger movement, demonstrating how ideas developed in North Dakota can create lasting impact well beyond the region.

While statistics tell part of the story, the true impact of *Make A Splash* is seen in the way students carry their knowledge beyond the festival. Organizers often hear that children return home excited to share what they learned, sparking conversations about water conservation and stewardship within their families.

EVOLVING WITH EACH GENERATION

Over the past 25 years, *Make A Splash* has adapted to meet the needs of students and educators. Organizers have refined schedules, adjusted event formats and explored new ways to engage families. While the structure has changed, the mission has remained consistent: help young people understand water in a way that is both meaningful and memorable.

Harding noted that early exposure to water topics helps students develop critical thinking skills and encourages responsible decision making later in life. By connecting science to real-world experiences, the festival fosters a sense of stewardship that extends beyond the classroom.

LOOKING AHEAD

As *Make A Splash* celebrates its 25th anniversary, organizers are already thinking about the future. Water education continues to evolve, and programs like *Make A Splash* play an important role in preparing the next generation to understand the challenges and opportunities surrounding water resources.

For Southwest Water Authority and its partners, the legacy of *Make A Splash* is measured not only in years but in the students who leave inspired to learn more about the world around them. Each activity, lesson and "aha" moment contributes to a larger goal, ensuring that future generations understand the importance of water and protecting it.

After 25 years, one thing remains clear: when students learn by doing, the lessons make a lasting splash.

Grace Rixen Retiring After Decades of Service to Southwest Water Authority

After more than three decades in the water industry, including years of leadership at Southwest Water Authority, Water Treatment Manager Grace Rixen is retiring, leaving behind a legacy of innovation, teamwork and dedication to delivering safe, reliable drinking water across southwest North Dakota.

Rixen joined Southwest Water Authority in 2012, overseeing three water treatment plants and a residuals handling facility that serves thousands of customers across a vast regional system. Under her leadership, the authority expanded treatment capacity, introduced new technologies such as ultrafiltration and strengthened operations that move water more than 150 miles from Lake Sakakawea to communities, farms and industries throughout the region.

A native of Richardton, Rixen built a career rooted in hands-on work and problem-solving, bringing experience from facilities in Montana, Wyoming and Louisiana before returning home to North Dakota. Known for her collaborative leadership style, she credits the success of the system to the operators and staff who work alongside her each day, emphasizing that providing high-quality drinking water is always a team effort.

Throughout her career, Rixen remained focused on a simple but vital goal: ensuring customers receive safe, dependable water while preparing the next generation of utility professionals. Her impact will continue to be felt across the region's communities long after her retirement.

Southwest Water Authority extends its sincere appreciation to Rixen and wishes her well in her future endeavors.

Game and Fish Battles Aquatic Nuisance Species to Protect North Dakota Waters

By Scooter Pursley
Clearwater Communications

Water infrastructure projects are a top priority throughout North Dakota, and protecting those waters from invading aquatic nuisance species (ANS) rests with Ben Holen and his team of seasonal staff from the North Dakota Game and Fish Department.

Holen, the Game and Fish Department's aquatic nuisance species coordinator, admits he's playing a game that often has no winning moves when it comes to eradicating ANS. However, the longer and harder his team plays, the more likely it is to hold out until somebody eventually finds a silver bullet.

"That thought certainly creeps into people's mind; are we just delaying the inevitable?" Holen asked. "Even if we are delaying the inevitable, that's 20, 30, 40 years of my kids or their kids enjoying the resources in North Dakota as I knew them. It's also millions upon millions in infrastructure costs and recreational value we're saving the state of North Dakota. If we are going to lose these battles, let's lose them 40 years down the road, when we have a greater chance of winning the war."

A team of like-minded seasonal employees (mostly college students) work from mid-May to late fall inspecting watercraft, boats, docks, and commercial equipment, the latter of which Holen explained is often overlooked in terms of possible ANS introduction.

The Game and Fish Department considers ANS to be nonindigenous aquatic plants or animals that cause harm to native and desirable species or have a negative effect on aquatic habitats, the environment, or the economy of the state. The most destructive and widely known of these is the zebra mussel, a nasty little shelled creature that causes water managers across the state many sleepless nights. With their propensity to reproduce, zebra mussels can damage a lake and its infrastructure to the point of being beyond control in as little as a year.

Lake Ashtabula near Valley City is a prime example of what can happen to a large water body when zebra mussels are introduced.

"Lake Ashtabula is heavily infested," Holen said. "There are areas where zebra mussels will cut your feet. They cut your hands when pulling out docks. The U.S. Army Corps of Engineers has lowered the lifecycle of buoys and chains and docks. Over time, zebra mussels weigh them down and become corrosive."

Stopping infestations before they start is the only sure way to stop future infestations. But that isn't easy. Holen and water managers across the state have to remain diligent, inspect faithfully and react quickly when issues are found.

"I think we have a lot of people coming around to the impacts of ANS in North Dakota," Holen explained. "Over the last 10 years, North Dakotans have been supportive of our Game and Fish ANS program and spreading the word. We've had a lot of great partners come to the table and ask how they can assist us in these efforts."

North Dakota's pristine waters are both a blessing and a curse. Boating and fishing opportunities in the state rival those found anywhere. Unfortunately, ANS species also find the waters perfectly suited for reproduction.

An often-overlooked threat is that posed by commercial vendors coming into the state for water-borne construction products, like those used to build bridges or supply drinking water. Holen said his team is more likely to find ANS on barges or equipment coming into North Dakota than on recreational boats.

"We're so watercraft-focused but there are so many other vectors that are really, really high risk that the public doesn't necessarily see on a day-to-day basis and think about," Holen said. "But whenever they're utilizing the water body, it's important to have that thought in the back of their mind, 'could this spread an aquatic nuisance species?'"

Game and Fish works closely with the Department of Water Resources, Department of Transportation, U.S. Army Corps of Engineers, and Bureau of Reclamation when those agencies are permitting projects using commercial equipment, including water infrastructure, bridges and culverts. Those contractors usually bring in large industrial equipment from out of state, like barges, tugboats, chains, and buoys.

Ben Holen inspects and cleans a boat as part of efforts to stop the spread of invasive zebra mussels in local waterways.

"We've developed a good relationship with those agencies to be able to contact the contractor, set up an inspection and check out the equipment before it hits our waterways. We are more likely to find zebra mussels on barges and tugboats and things like that than on recreational boats," Holen said. "We are one of the most proactive states for checking commercial equipment. I'm not sure it's because we have more of that related to oil and gas and water infrastructure in the state. Some others may not have the notification process we do to evaluate these projects."

In 2025, inspectors found more than 30 pieces of large industrial equipment (out of 200 inspections) coming from out of state with zebra mussels compared to nine of 11,449 watercrafts inspected in the state.

Inspecting such equipment is a time-consuming task. Inspections are conducted on all equipment, regardless of what permitting agencies are told about the length of time the equipment spent in or out of the water before it was brought into the state.

"We work with the contractor early for them to fill out the full list of equipment and how long it's been in the water," Holen explained. "That isn't gospel, but we often get information about equipment and view the equipment and it's different. They may say it's been out of the water for a year and I'm finding fresh algae on it, so we still rely on that physical checking.

"When we do these inspections there's a lot of logistics. With a 15-ton barge, we have to lift it with a crane and set it on a platform to inspect it. If we find mussels, we have to figure out how to hot-water pressure wash them. It might take us hours if we find mussels."

And it's usually not one or two.

"A large barge may be sitting in the Mississippi River for three months and have literally thousands upon thousands of zebra mussels. If you bring it to a large body of water and plunk it there, they can actively spawn," Holen noted.

While zebra mussels may be ANS public enemy No. 1, others can be just as destructive to North Dakota waters. Holen puts common carp among the most damaging ANS in the state. "They rut up the bottom and stir up nutrients, knock down aquatic vegetation and become over abundant. From a fishing perspective, common carp are extremely harmful in a lot of water bodies," he noted. "If you look at it from a water infrastructure perspective, zebra mussels certainly take the cake there. One zebra mussel can reproduce a million offspring a year."

That's why Game and Fish attacked Smishek Lake in northwest North Dakota when zebra mussels were found there last September. During high water, Smishek Lake can drain into the White Earth River and ultimately into Lake Sakakawea, possibly introducing zebra mussel veligers into the big lake.

Catching it early, Game and Fish began aggressive eradication efforts on Smishek Lake right away. It will continue monitoring the lake into the future.

In addition to zebra mussels, Holen's inspectors seek out signs of other ANS on every inspection, including vegetation like Eurasian watermilfoil, curly leaf pondweed and flowering rush. "Vegetation is often easier to spot on watercraft and commercial equipment than mussels," Holen said. "Some are difficult and some are dead giveaways. Regardless of species, our people are trained to mitigate risk whenever possible."

According to mapping data from the Game and Fish website, curly leaf pondweed is prevalent in Lake Sakakawea, but the only findings of zebra mussels in the Missouri River in North or South Dakota were on docks near Pierre, S.D. Holen and his team hope to keep it that way as long as possible, but they will need help.

"It comes down to having an educated, knowledgeable public that ultimately cares about their water resources and takes pride in their public water to keep it pristine," Holen said of Game and Fish outreach efforts. "We do a little bit of everything: targeted print and digital ads, commercials, radio, signage, watercraft inspectors out in the summer educating."

Holen said the public can help in three ways: clean, drain, dry.

Scooter Pursley is a communications specialist with Clearwater Communications.

FOR MORE INFORMATION

Healthy Grazing Lands for Today and Future Generations

2025 NDGLC Grazing School participants.

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 organization's board of directors is made up of owners/operators of grassland-based enterprises from across the state. Serving as officers for 2026 are Derrick Dukart (Chair), Dave Bauer (Vice-Chair), and Darrell Oswald (Secretary/Treasurer). This year marks the 30th anniversary of the Coalition, which was organized by a grassroots group in 1996.

MENTOR NETWORK

At the heart of the Coalition mission is a statewide mentor network. Thirty-seven producers provide guidance and counsel on grazing management issues like goal setting, fencing, water development, cover crops, and complementary grazing. 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.

Rancher Joe Donnelly explains how his solar water system works at Grazing Logic in Antler.

Mentor Justin Zahradka speaks at Grazing Logic in Maddock.

EDUCATIONAL EVENTS

Each year, the Coalition hosts its Grassroots Grazing Summit in January and a summer field tour. 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. The Coalition has hosted 12 Grazing Logic events to date, serving all five soil conservation district areas in North Dakota. The next event is scheduled for Dickey County on Sept. 3. If you are interested in bringing Grazing Logic to your community, contact administrator Lesley Icenogle at contact@ndglc.com.

In 2026, the Coalition plans to host three schools for producers and conservation professionals:

- Stockmanship school with Dr. Tom Noffsinger June 23-24 in Dickinson
- Grazing school with Principled Land Managers Sept. 15-17 at Menoken Farm
- Financial short course with John Haskell Nov. 9-10 in Bismarck

To learn more and register for these events, visit ndglc.org/events.

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.
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.

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 rancher panels from the 2025 Mentor-Guided Workshop. Videos from the 2026 Grassroots Grazing Summit will be posted soon.

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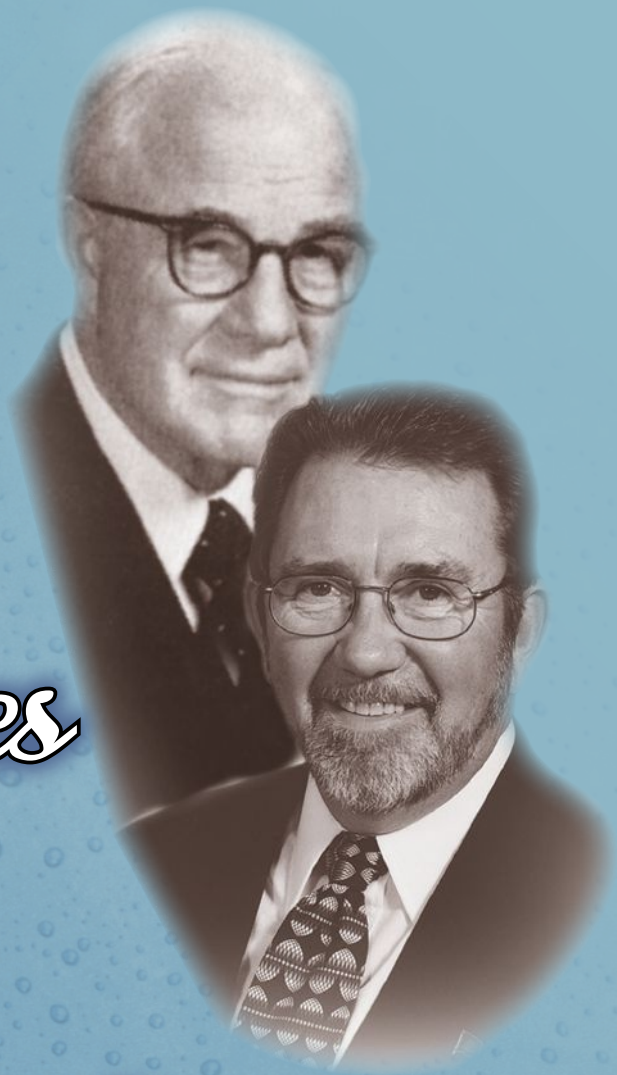
2026 Dushinske & Jamison Water Resources Scholarship



APPLY FOR THE 2026 Dushinske & Jamison Water Resources Scholarship STARTING January 1, 2026

The North Dakota Water Education Foundation (NDWEF) will begin accepting applications for the 2026 Dushinske & Jamison Water Resources Scholarship on January 1, 2026!

APPLICATION DEADLINE: April 15, 2026

This scholarship honors the legacy of Russ Dushinske and Warren Jamison, whose unwavering commitment to water development in North Dakota set the standard for leadership and service. Established by the NDWEF within the North Dakota Community Foundation, the Dushinske & Jamison Water Resources Scholarship Endowment supports the next generation of leaders in water resources.

For more details, visit https://ndwater.org/scholarships/

Scholarship recipients are required to attend the North Dakota Water Convention awards program on December 10, 2026, to present their essays either in person or virtually.

2026 North Dakota Waterways PHOTOGRAPHY CONTEST

The 2026 North Dakota Waterways Photo Contest will be begin accepting entries **January 1, 2026**

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

| Deadline for submitting photos is May 15, 2026 |

More information at www.ndwater.org/photo-contest-winners/

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.

Photography Contest Rules:
Entries will be judged on suitability for publication on the front cover, appropriate representation of North Dakota's water, and photographic creativity and quality. Photographs must have been taken in North Dakota and water must appear in some form (i.e., snow, rain, ice, lake, river, etc.) in the photograph. Digital photos preferred and must be at least 300 DPI at 9 x 12 inches, vertical orientation. Photographs not meeting these specifications will be disqualified. There are no categories.

E-mail digital photos to editor@ndwater.net.

Send entries to: 2026 Waterways Photo Contest, c/o *North Dakota Water* magazine, P.O. Box 2254, Bismarck, ND 58502.

Entries must be received by May 15, 2026.
One overall winner, runners-up, and honorable mention winners will be chosen at the judge's discretion. The decisions of the judge are final. There is no entry fee and no limit on the number of photographs you may enter. ***Only the winners will be notified.*** There will be no acknowledgement of receipt of entries. Results will be published in the July issue of North Dakota Water. Prizes: Winners will receive cash prizes.
Any winners' photos may appear on a future front cover of the magazine.

2026 North Dakota Waterways Photo Contest Entry Form

Attach this form to each entry. Copies of the entry form are acceptable.

Photographer's name _____

Address _____

Phone _____

Email address _____

Photograph title _____

Where was the photo taken? _____

WINNER AGREEMENT:
If I'm selected a winner of this contest, I hereby grant permission to the North Dakota Water Education Foundation to use my photograph(s) in future issues of *North Dakota Water* and for any publicity associated with future photo contests or the North Dakota Water Education Foundation.

☐ Check here to allow us to add your photo submissions to the North Dakota Water Education Foundation's photo library for possible future use.

_____
Signature Date

Missouri River Water: Cooperation, Not Conflict

JAMES ODERMANN
Odermann Communications Company

Earlier this year, Congress passed and President Donald Trump signed into law H.R. 6938, which provides funding and usage opportunities from the Missouri River Basin for North Dakota. The reaction triggered a volley of opinions from various entities in the state of Missouri, implying North Dakota is trying to drain the Missouri River dry.

The state of Missouri has been leading a charge against Missouri River Basin water usage in North Dakota for multiple decades. The Show-Me State contends Missouri River water usage upstream—by states like North Dakota—jeopardizes its citizens' agricultural markets, drinking water supplies, family safety and farm livelihood.

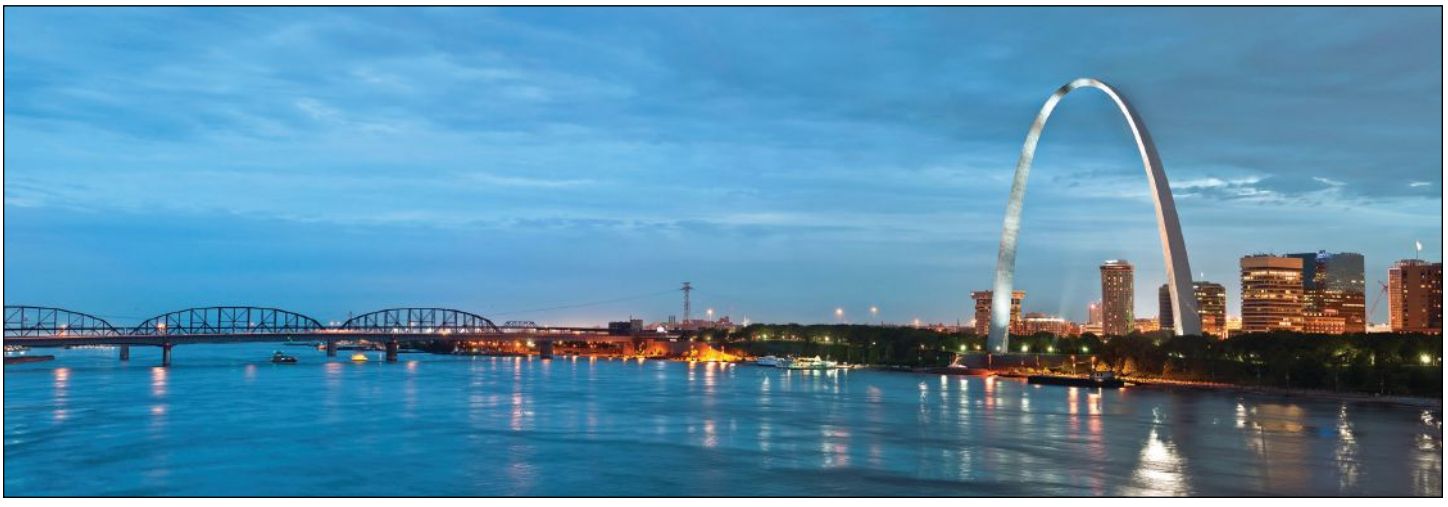
Welcome to North Dakota's world where these same scenarios are played out daily. Water is a vital resource for everybody and everything in North Dakota.

Transferring water from the Missouri River Basin to the Red River watershed through the Red River Valley Water Supply Project (RRVWSP) is like many other watershed transfer projects around the United States. In the case of the RRVWSP, the maximum transfer of 165 cubic feet per second (cfs) presents a scenario (when needed) to serve rural areas (providing farm safety and farm livelihood for North Dakotans), the cities of Valley City, Lisbon, West Fargo, Fargo, Grand Forks and more, and North Dakota's economy.

The Missouri River flow at Bismarck averages 23,000 cfs. The Missouri River flow at St. Louis averages around 90,000 cfs. The City of St. Louis produces around 150 million gallons per day for drinking water (www.stlouis-mo.gov/government/departments/planning/sustainability/water.cfm). Over a year, that's 54.75 billion gallons or about 233 cfs.

Combining RRVWSP and the City of St. Louis usage (just shy of 400 cfs), there is still north of 89,600 cfs of flow available. The case in point: there is plenty of water left for use in the state of Missouri and the basin.

North Dakota's transfer across the continental divide into another basin is—and has been--subject to mountainous environmental reviews. These reviews robbed North Dakota citizens in three ways:



The Missouri River at St. Louis, Missouri.

- First, North Dakotans have dealt with delays in construction activities and water services. (How long were the Northwest Area Water Supply (NAWS) and RRVWSP projects delayed because of drawn out environment reviews and lawsuits? Too long!)
- Second, economic opportunities for our families, farms and ranches, businesses and industries have been changed (or perhaps even washed away) because of these delays in construction and water services. North Dakotans' quality of place and quality of life has been impacted significantly.
- Third, costs for construction for projects like NAWS and RRVWSP, since initiated, have increased substantially, creating challenges in funding other desperately needed North Dakota water projects—whether from the Missouri River watershed, other watersheds or subsurface connections.

The divide and conquer mentality of Missouri is antagonistic to success for everyone because data and fair judgment tell another story of Missouri River usage. North Dakotans have a long history of measured, reasonable and patient use of the Missouri River. In fact, truth be told, the efforts to embezzle North Dakota's use of water in the Missouri River Basin does little to promote synergy between Upper Basin states and the Lower Basin states.

Water is a lifeline to all of humanity. Making this precious resource become a political football is counterproductive to harmonious coexistence—and blatantly ignores the contributions of the states of Montana, North Dakota and South Dakota. Collectively, these three states contributed more than 1,700,000 acres of highly productive agricultural land for the 1944 Flood Control Act. Additionally, cultural resources were covered by the reservoirs and lifestyles of indigenous people, pioneer settlers and current residents were forever altered.

Garrison Dam at Lake Sakakawea in North Dacota.

This land forfeiture is over twice the size of the state of Rhode Island or more than the size of the state of Delaware. Collectively, all states in the basin benefit. The Missouri River watershed stores more than 75 million acre-feet (MAF) of water in five reservoirs from northeast Montana to southeast South Dakota. In Lake Sakakawea, North Dakota alone stores more than 23 MAF of water, plus water from Oahe Reservoir.

The Missouri River Basin reservoir system protects our sisters and brothers in the Lower Basin states from annual flooding and creates opportunities for consistent, high quality water flow for multiple benefits. North Dakotans need and deserve a consistent, dependable source for its citizens, the same thing Missouri wants for its citizens.

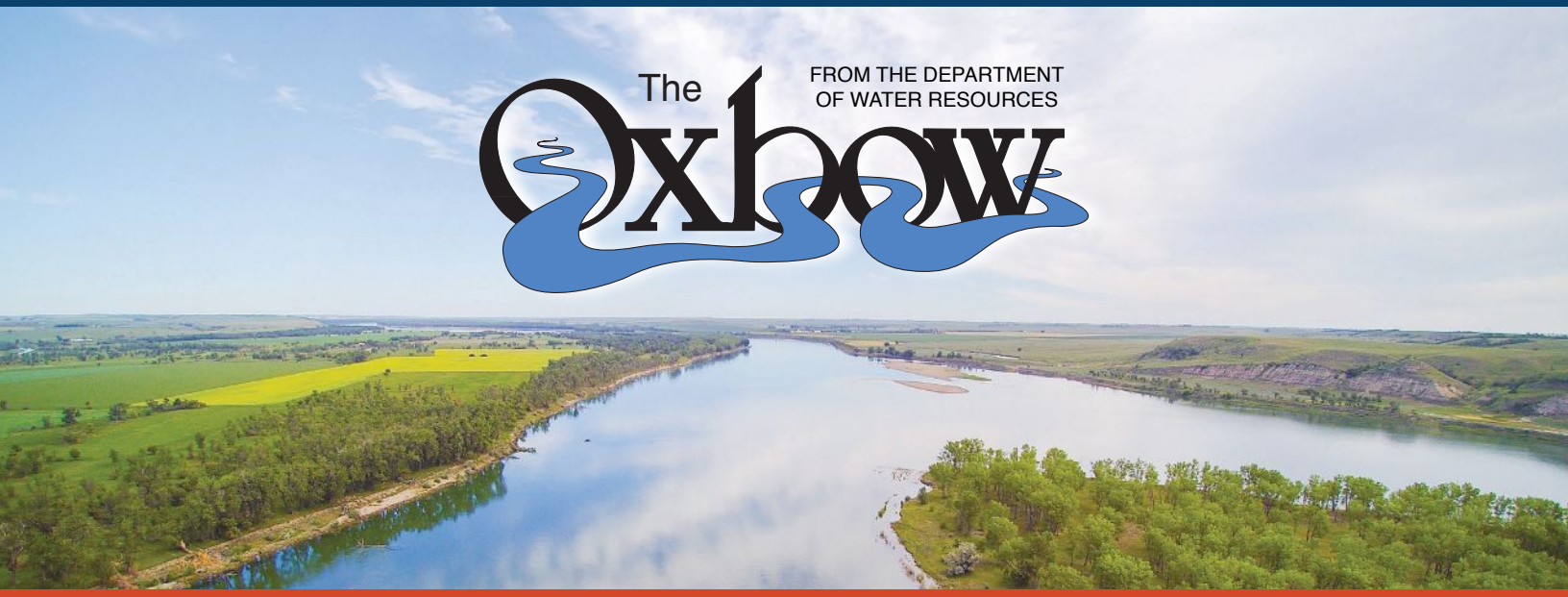
The lawsuits and roadblocks from Missouri lead to many questions. Does Missouri think Lower Basin states are more important than Upper Basin states? Are North Dakotans (and Montanans and South Dakotans) not entitled to the same water amenities Missourians receive? Does it make sense to penalize Upper Basin states, who use only three percent (3%) of their permitted usage?

Objectively, the facts of this discussion point out there is enough water. It is high time to recognize this key element: all basin states are entitled to use Missouri River water flowing through their state. It is crucial for all basin states to have fair use of this important resource—and be singing off the same music sheet.

Failure by all basin states to work cooperatively could result in water being exported out of the basin states to the west. Paramount to a good outcome is collaboration where all need to speak with passion, listen with respect, react with sensitivity and see good in each other.

The sequel should be positive for all.

James Odermann has served as the Billings County Director for the Southwest Water Authority since 1996. In 2020, Odermann was elected chairperson of the Southwest Water Authority Board of Directors, a role in which he continues to lead the organization's strategic direction. Additionally, Odermann has been a member of the State Water Commission since 2021, where he represents the Upper Cannonball, Upper Heart, and Little Missouri River watersheds, advocating for sustainable water management and policy in North Dakota and the region.



OPINION

THE MISSOURI RIVER IS A SHARED RESOURCE, NOT A BATTLEGROUND

In a recent opinion column, Missouri Department of Natural Resources Director Kurt Schaefer described Missouri's relationship with North Dakota over Missouri River water as a "water war." That characterization reflects Mr. Schaefer's perspective, but it does not reflect ours. North Dakota has never viewed Missouri River water as something to be won, but as a resource to be responsibly used. Our focus is on meeting water needs within a Missouri River system designed to serve many purposes within its states, not a single interest or geography.

Water within the borders of North Dakota belongs to the state of North Dakota. To suggest otherwise defies both common sense and the foundational principles of state sovereignty. All states were admitted to the U.S. on equal footing, making Missouri's position fundamentally inconsistent with the sovereign authority it would unquestionably claim over waters within its boundaries. Defending and putting our water to beneficial use is not an act of hostility toward downstream states. Rather, it is a responsibility to the people we serve, a responsibility we will continue to defend in full exercise of our state's sovereignty.

North Dakota's approach is shaped by a long history of broken promises from the federal government. Under the Flood Control Act of 1944, our state agreed to the construction of large federal reservoirs, including Garrison and Oahe Dams. In doing so, North Dakota sacrificed half a million acres of highly productive farmland, land with significant economic and cultural value, to support federal

flood control, navigation, and hydropower objectives that continue to benefit the entire basin, including Missouri.

In return, North Dakota was promised a multipurpose water project to irrigate 1.2 million acres of farmland, provide municipal water, and improve water quality in the Red River of the North. Those federal commitments were never fully delivered. Our efforts today are not about expansion or exploitation, but rather fulfilling a long-recognized need to use our share of the river to benefit North Dakotans and to receive promised benefits for our contributions.

Much has been made of North Dakota's use of Missouri River water, but the reality is less dramatic than the rhetoric suggests. North Dakota uses about six-tenths of one percent of the water that flows through our state, a negligible volume in the context of the entire river system. Put another way, if the Missouri River's average annual volume at St. Charles, Missouri, were represented by a single gallon jug, North Dakota's use would amount to roughly half a tablespoon. At that scale, there is no impact on downstream navigation, public water supplies, power generation, or electric grid reliability. The Show-Me State will be unable to show otherwise.

North Dakota's use of Missouri River water is strategic and responsible. It reflects decades of planning funded through revenues that North Dakotans have deliberately invested into long-term water security. These investments are about strengthening the resilience of our communities and ensuring reliable drinking water, not about diminishing the river or disadvantaging our neighbors.

By Reice Haase, Director, North Dakota Department of Water Resources

North Dakota has consistently sought cooperation, but opportunities for meaningful, basin-wide dialogue have gone unrealized. On several occasions, we convened meetings of Missouri River basin states to pursue collaborative river management, invitations which Missouri declined. Missouri later withdrew from the Missouri River Association of States and Tribes, narrowing avenues for coordination when basin-wide engagement mattered most.

Litigation, legislative conflict, and public posturing have produced limited results at significant public expense. The more productive path forward is for all states to take their rightful seat at the table and work together toward durable, basin-wide solutions that allow the Missouri River to continue serving everyone who depends on it.

THE
ATMOSPHERICRESERVOIR
Examining the Atmosphere and Atmospheric Resource Management

CHECKING IN ON TEMPERATURES & PRECIPITATION

By Mark D. Schneider

On March 2, when this article was written, North Dakota's 2025-26 season-to-date snowfall totals (since July 1, 2025) were below normal. Bismarck received 33.4" of snow, Fargo 24.9", Grand Forks 23.6", Minot 22.2", and Williston 20.5". For comparison, that's six to 16 inches below normal season-to-date snowfall and is equal to approximately one-half to one inch of water. North Dakotans know that some of our heaviest snowstorms occur in March and April due to Colorado Lows, so we could easily be caught up on snowfall by the time you're reading this article.

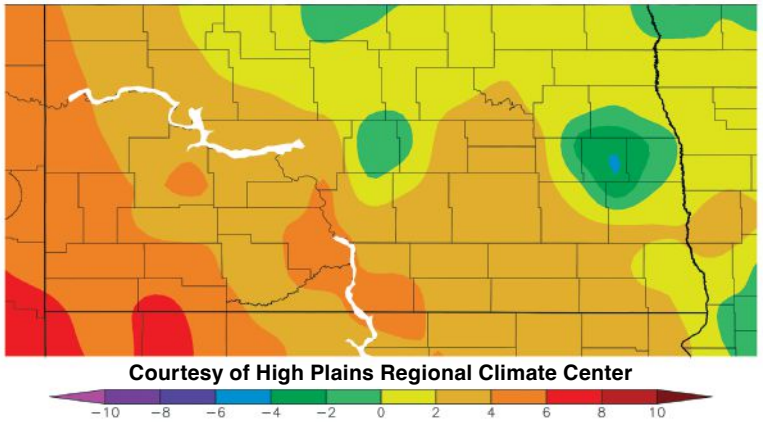
Fortunately, most of our state was near average for year-to-date precipitation. This is partially due to rains that occurred over the winter. More rain over the winter wasn't just an occurrence here in North Dakota. In fact, much of the western U.S. received more frequent rains, and in some mountainous areas, only the higher peaks retained snowfall through the season. These rains could largely be explained by the warmer winter temperatures that were recorded. For example, Salt Lake City had its warmest winter on record and only measured 2.5" of snowfall when its normal was 43.0"! North Dakota wasn't quite that warm, but the table shows how much above average temperatures were at recording sites during the month of February. There were a few record high temperatures in the 50s during February as well.

When looking at the entire three months of our meteorological winter, December through February, temperatures were above normal in all but a few isolated locations across our state (see temperature departure map).

Looking ahead to the start of the growing season, North Dakota producers might feel somewhat optimistic considering soil moisture conditions (see soil moisture map). Let's hope the precipitation continues!

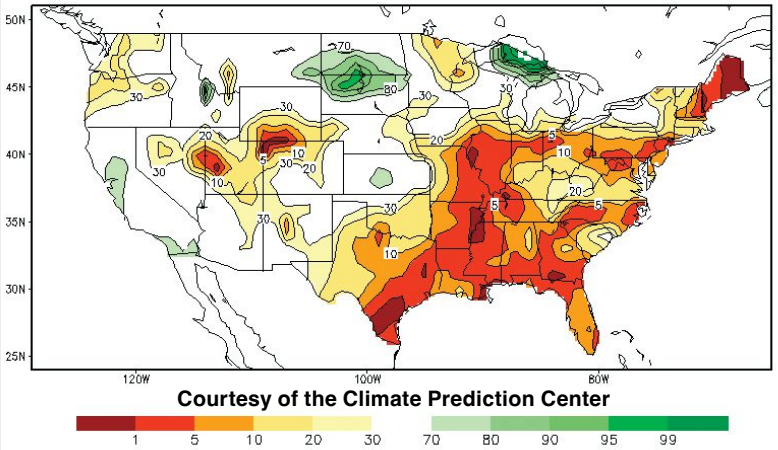
February Monthly Average Temperature Anomaly			
Bismarck	+9.8F	Grand Forks Intl	+7.9F
Dickinson	+9.4F	Jamestown	+9.9F
Fargo	+9.4F	Minot	+7.6F

Departure From Normal Temperature (F)
12/1/2025 - 2/28/2026



Courtesy of High Plains Regional Climate Center

Calculated Soil Moisture Ranking Percentile
March 2, 2026



Courtesy of the Climate Prediction Center

North Dakota Department of Water Resources | Data & Atmospheric Resources | 1200 Memorial Highway, Bismarck, ND 58504
(701) 328-2788 | dwr.nd.gov

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THE SPIGOT
from the NORTH DAKOTA RURAL WATER SYSTEMS ASSOCIATION

AI and the Future of Water Management

How Artificial Intelligence is Reshaping Treatment, Distribution and Wastewater Recovery

By Daniel Overmoe Training Specialist,
North Dakota Rural Water Systems Association

Water Treatment and Distribution

Water is the lifeblood of communities, yet managing it effectively has always been a daunting challenge. From ensuring safe drinking water to treating wastewater before it reenters the environment, utilities face mounting pressures due to aging infrastructure, rapid urbanization, climate variability, and rising operational costs. Artificial intelligence (AI) is emerging as a transformative force in this sector, offering predictive insights, real-time monitoring, and smarter resource recovery. Traditionally, water quality assurance relied on manual sampling and periodic laboratory testing. This approach, while reliable, often left long gaps between measurements.

AI now enables continuous, high-frequency monitoring by analyzing sensor data on pH, turbidity, chlorine levels, conductivity, and emerging contaminants. AI-driven anomaly detection identifies contamination events within seconds rather than hours. Machine learning models can now correlate multiple sensor readings simultaneously, reducing false alarms and improving accuracy. This shift from periodic testing to real-time surveillance allows operators to intervene before contamination spreads, protecting public health more effectively.

Treatment plants depend on pumps, filters, membranes, and valves that are prone to wear and tear. AI systems trained on historical performance data can forecast failures days or even weeks in advance.

Utilities using predictive maintenance have reported up to 30% reduction in unplanned downtime and 20–40% longer equipment life in early pilot programs. AI models can now detect subtle vibration or pressure anomalies that human operators often miss. This reduces emergency interventions, lowers repair costs, and improves overall system reliability.

AI also helps balance pumping schedules and treatment processes to minimize energy consumption. By aligning operations with demand forecasts, utilities can deliver clean water more sustainably. AI-optimized pumping schedules can reduce energy use by 10–25%, especially during peak electricity pricing periods. Demand forecasting models allow utilities to align operations with real-time consumption patterns. By integrating energy data with operational data, utilities can deliver clean water more sustainably.

Water loss through leaks is a global problem with some cities losing more than 40% of treated water before it reaches consumers. AI-powered algorithms analyze pressure and flow variations to pinpoint leaks quickly, even in complex networks. Early detection conserves water and reduces repair costs. Modern AI leak detection systems can identify leaks as small as 0.25 gallons per minute, far below the threshold of traditional acoustic sensors. Utilities using AI have reported 20–50% reductions in non-revenue water within the first year of deployment.

Consumption patterns are influenced by weather, population growth, and seasonal changes. AI models predict demand with remarkable accuracy, allowing utilities to optimize storage and pumping schedules. AI demand forecasting models now achieve 95–98% accuracy in short-term predictions. Integration with weather data helps utilities prepare for heat waves, droughts, or sudden demand spikes. This ensures a reliable supply while reducing waste.

Wastewater Collection and Treatment

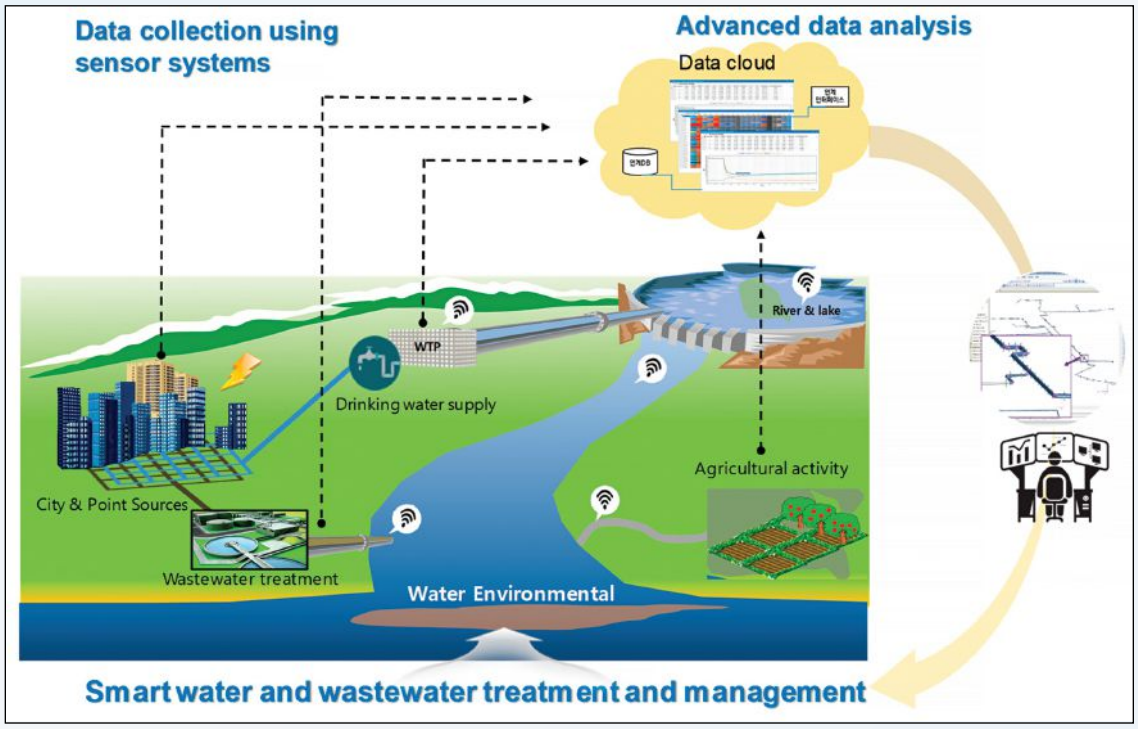
Wastewater systems must handle variable inflows and industrial discharges. AI models predict pollutant removal efficiency and adjust aeration, chemical dosing, and sludge handling in real time.

Aeration optimization alone can reduce energy consumption by up to 40%, as aeration is typically the most energy-intensive step in wastewater treatment. AI can now model biological activity in activated sludge systems with unprecedented precision. This ensures compliance with environmental standards while lowering operational costs.

By integrating with IoT sensors—specialized electronic devices that detect and measure physical conditions like temperature, motion, humidity, and pressure—AI

continuously tracks parameters such as chemical oxygen demand (COD), biochemical oxygen demand (BOD), total dissolved solids (TDS), ammonia, and nitrate levels.

AI-driven early warning systems can detect stormwater surges 15–30 minutes before they overwhelm the system, giving operators critical time to respond. Sensor networks now provide sub-minute data resolution, enabling highly granular analysis. When abnormal inflows occur, AI-powered alerts prevent overloads and environmental damage.



Wastewater is no longer just waste. AI is helping utilities unlock their hidden value and support a circular economy.

Biogas Production: AI predicts optimal conditions for anaerobic digestion, maximizing energy recovery from sludge. AI-optimized digesters can increase biogas yield by 10–20%. Predictive models help maintain stable microbial communities, reducing process failures.

Nutrient Recovery: Machine learning guides the extraction of nitrogen and phosphorus, turning them into fertilizers. AI-controlled nutrient recovery systems can reduce chemical use by up to 35%. Recovered phosphorus can offset fertilizer production costs, creating new revenue streams. These innovations support a circular economy, where waste is transformed into resources that benefit agriculture and energy systems.

Despite its promise, AI integration faces hurdles. Data quality is critical; faulty sensor inputs can undermine decision-making. Upgrading legacy infrastructure to support AI-enabled systems requires significant investment. Cybersecurity risks must also be addressed, as smart water systems are vulnerable to hacking and require robust protection. Cyberattacks on water systems have increased fourfold in the past five years, underscoring the need for stronger digital defenses. Finally, utilities need skilled staff who can interpret AI outputs and manage advanced technologies effectively. More than 60% of utilities report that a lack of staff training is a major barrier to AI adoption.

The future of water management lies in combining AI with IoT, digital twins, and advanced analytics. Together, these technologies can build resilient infrastructure that adapts to rapid urbanization and climate pressures. Digital twins can simulate entire water networks with millisecond-level accuracy, enabling scenario planning and stress testing. AI enables sustainable operations that minimize energy use, maximize resource recovery, and enhance public trust through transparent, data-driven assurance. AI-driven optimization could reduce global water losses by up to 20 billion cubic meters annually if widely adopted. AI enables sustainable operations that minimize energy use, maximize resource recovery, and enhance public trust through transparent, data-driven assurance.

Artificial intelligence is revolutionizing water treatment, distribution, wastewater collection, and recovery. By shifting from reactive to predictive management, AI empowers utilities to deliver cleaner water, reduce waste, and recover valuable resources. As societies strive for sustainability, AI is no longer optional. It is becoming essential for securing resilient communities and providing quality water to everyone.

Our Water Keeping it Clean

North Dakota Department of Environmental Quality

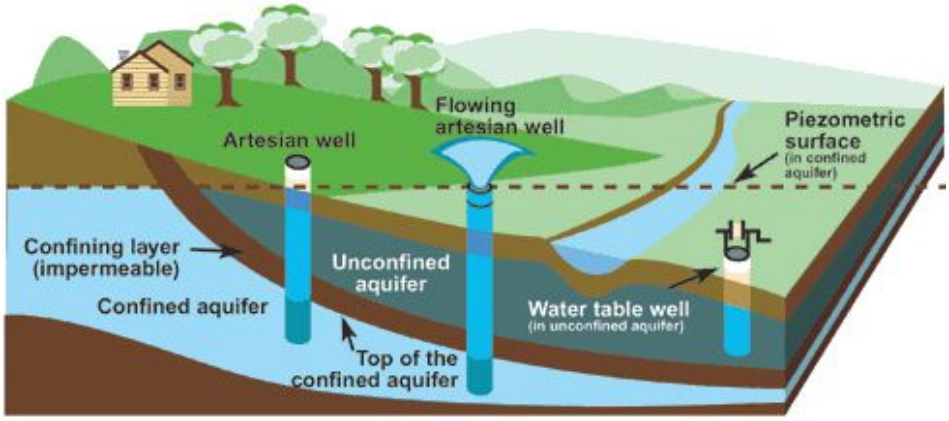
Groundwater Protection Program

Meridith Miller, Environmental Scientist
North Dakota Department of Environmental Quality

Much of the water we drink in North Dakota comes from groundwater. **Groundwater** is the water beneath the land surface filling in spaces in rock and sediment. It is replenished by precipitation, which may take hours, weeks, months or even years to reach the layers of sand, gravel, sandstone or fractured rock where the water is stored, called an **aquifer**.

Aquifers serve as resources for up to 92% of public water systems in the United States. The shallow, surficial aquifers we rely on in North Dakota are often vulnerable to contamination. Contamination could potentially come from threats such as accidental spills of hazardous materials, agricultural chemicals such as pesticides and fertilizers, feedlots, leaking underground storage tanks, septic tanks and drain fields, solid waste landfills, underground injection wells, and winter salting of paved surfaces.

Aquifers and Wells



Wells in confined and unconfined aquifers. Image courtesy of USGS.

The Groundwater Protection Program at North Dakota Department of Environmental Quality (NDDEQ) is responsible for protecting and monitoring groundwater quality and restoring groundwater that has been impacted by contaminants. Sub-programs in the Groundwater Protection Program include Source Water Protection, Underground Injection Control, and Agricultural and Western Groundwater Monitoring.

Source Water Protection Program

The Source Water Protection Program focuses on wells and intakes for public water systems. The program delineates the source water protection area, identifies the presence and location of sources within the protection area that may contaminate ground or surface water, and determines the susceptibility of wells to contamination. Additionally, the program raises public awareness of the importance of protecting water resources used for public water systems. To learn about areas in North Dakota designated as source water protection areas, visit the map viewer tool on the Groundwater Protection Program's website.

Underground Injection Control Program

The Underground Injection Control (UIC) Program regulates injection wells to ensure they do not endanger current or future underground sources of drinking water. Underground injection is a way of placing fluids underground in porous formations of rocks through wells or similar systems. The fluids may be water, wastewater, or water mixed with chemicals. The UIC Program at NDDEQ regulates two types of injection wells; other agencies are responsible for regulating the remaining types.

- **Class I wells:** These can inject hazardous or non-hazardous fluids (typically industrial and municipal waste) into isolated formations below the lowest drinking water formation. They are the most strictly regulated wells because they may inject hazardous waste. North Dakota currently only allows non-hazardous Class I wells.

- **Class V wells:** These inject non-hazardous fluids into or above a drinking water source formation. They are typically on-site disposal systems, such as floor or sink drains, leach fields, or similar types of drainage wells.

Major surficial aquifers of North Dakota. Image courtesy of North Dakota Department of Water Resources.

Groundwater Monitoring Programs

The Agricultural and Western Groundwater Monitoring Programs were established to monitor the impacts of agricultural and oilfield activities on surficial aquifers in the state. Shallow, surficial aquifers are vulnerable to contamination, and many North Dakotans rely on them for drinking water and other uses.

- **Agricultural Groundwater Monitoring Program:** This program analyzes water samples for contaminants, such as nitrates and pesticide compounds, as well as trace metals and general chemistry. The Agricultural Groundwater Monitoring Program monitors more than 800 wells from 50 surficial aquifers, focusing on around 10 aquifers per year.

- **Western Groundwater Monitoring Program:** This program monitors North Dakota's groundwater for signs of contamination from oilfield activity in the western part of the state. Water samples are collected from more than 120 wells spread across 20 surficial aquifers in areas with oilfield activity every 1.5 years. Western groundwater samples are analyzed for gasoline and diesel hydrocarbons, benzene, toluene, bromide, strontium, chloride and other trace metal and general chemistry parameters.

Both the Western and Agricultural Groundwater Monitoring Programs have aquifer fact sheets available on the *Groundwater Monitoring Program's website*. The fact sheets contain information about the location and type of aquifer, how the aquifers are used, water chemistry and pesticides or oilfield chemicals that may be detected in the samples. Annual summaries, including pesticide detections and nitrate concentrations, are also available for the Agricultural Groundwater Monitoring Program.

Learn More About Groundwater

The *U.S. Geological Survey (USGS) Water Science School's groundwater page* includes educational materials related to groundwater, aquifers, how wells work, and impacts of human activities on groundwater and aquifers.

The U.S. Environmental Protection Agency (EPA) also has a wide variety of resources related to *groundwater and drinking water* available on its website, including more information about *Source Water Protection* and *Underground Injection Control*.

To learn more about the NDDEQ Groundwater Protection Program, visit https:// deq.nd.gov/WQ/1_Groundwater/default.aspx or call NDDEQ at 701-328-5210.

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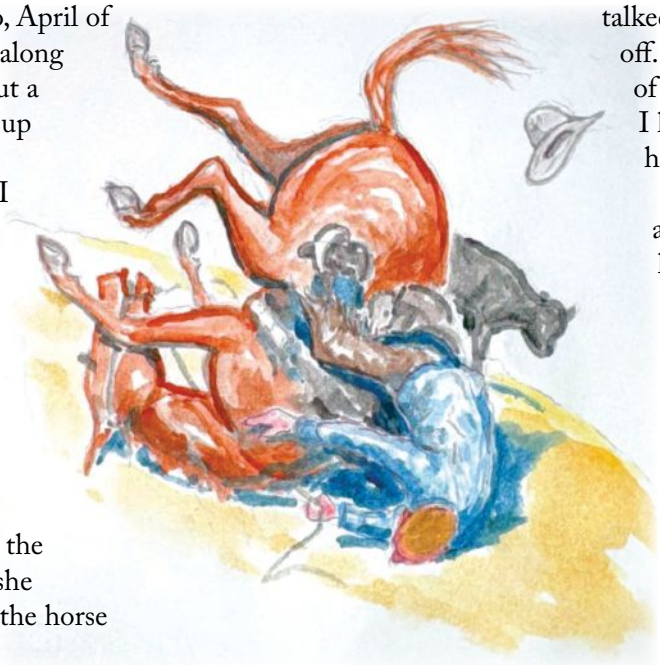
THE Timmer Chronicles

By Scott Nelson

It's been just over 20 years ago, April of 2005. It was calving season, and along with the cows, we were calving out a group of heifers. I had the close-up heifers in the lot next to the yard to keep a better watch on them. I didn't put all the bred heifers in, just the ones who were bagged up. Every week or so I'd bring in heifers who were newly bagged, and heifers that had calved were kicked out with the pairs. On April 6, I was bringing in a bagging up heifer with a horse I was breaking, which was good training for a young horse. I had the heifer right up to the gate when she turned back on me, and I turned the horse to cut her off.



The next thing I remember, I was standing in the yard in front of the house. I didn't know how I got there, but I knew something significant had happened. I'd been in wrecks before, and most times you take it easy for a few days till you get to feeling better. This was not one of those times. I could tell I was pretty busted up. I knew my collar bone was broke, and every time I moved, I could feel my left side jangle around like a bag of loose Tinkertoys. I tasted blood in my mouth. I spit and saw blood but passed it off that I had bitten my lip. Strangely, I didn't feel any pain, just numb all over. I called a neighbor kid and luckily caught him in the house. He came down and I had him go out, find my horse, and unsaddle him. Then I had him drive me 40 miles to the hospital. About this time, I really started hurting. The numbness was wearing off. We finally got to the hospital, and I walked into an emergency waiting room full of people and thought, well this is going to take a while. I figured first come, first served, and I'd have to wait my turn. I just settled in for a long wait when all these folks in scrubs showed up, put me on a gurney and wheeled me in. They cut my shirt off before I could stop them; it was a nice shirt with only one hole in it. I talked them out of cutting my jeans off. They were dirty but still had lots of life left in them. I was thankful I had on clean underwear with no holes. Mom was right!

Everything after that was a bit of a blur. They found I had a bunch of broken ribs, punctured and collapsed lung plus a concussion. They rushed me to surgery to fix me up and installed drain tubes. They also fixed my collar bone with a metal splice. Several times, I asked how many ribs I had broken but never got the same answer. After finally seeing the X-rays, I could see why. ALL the ribs were broken on my left side, some multiple times.

After five days they let me go home. To say I hurt would be an understatement. A cough was excruciating, a sneeze, completely out of the question. If I felt a sneeze coming, I'd grab my nose and will the sneeze to go away. I wasn't out of the woods yet; I kept having trouble with fluid building up in my chest cavity. Two months later, surgery again, this time a thoracotomy to peel the lung off my rib cage and clean out old blood clots. Four more days in the hospital, not much fun. Thanks to family, friends and neighbors, we got through the summer. By fall, I was back on the horse again.

With no memory of what happened, I thought I may have been bucked off, but that didn't make sense as this horse had never bucked. We finally figured out that when I had turned to cut off the heifer by the gate, on the hill side, the horse stumbled and went down, with me under him, saddle horn and pommel coming down on my left side. If it would have hit me dead center, I wouldn't be here writing this, and my name would be etched in stone somewhere.

See yuh next time, Scott

Three RRVWSP Construction Contracts Awarded, 2025-2027 Biennium Funding Confirmed

As contractors prepare for the 2026 construction season of the Red River Valley Water Supply Project (RRVWSP) transmission pipeline, the State of North Dakota's interim Water Topics Overview Committee received an update on the Project's status. On March 26, Duane DeKrey, Garrison Diversion Conservancy District (Garrison Diversion) General Manager, shared a RRVWSP status update, plus work plans for the remainder of the 2025-2027 biennium. Garrison Diversion is a co-sponsor of the RRVWSP with Lake Agassiz Water Authority (LAWA).

"This year's construction season will begin with 30 miles of pipeline installed to date, with plans to construct 14 miles during the 2026 season," DeKrey says.

Garrison Diversion requested construction bids for Contracts 6B, 6C, and 7A last fall. The LAWA and Garrison Diversion boards of directors each voted to award the three contracts to Carstensen Contracting Inc. The combined value of the three contracts is $184,701,941. Carstensen is based out of Dell Rapids, South Dakota, and has worked on other RRVWSP transmission pipeline contracts.

Current contracts include:

- **Contract 5C:** 8.1 miles from Bordulac Township to Bucephalia Township in Foster County. 1 mile remaining to be constructed in 2026, plus land restoration.
- **Contract 5D:** 10 miles of pipeline and a trenchless crossing of Pipestem Creek in western Foster County and eastern Wells County are complete. Land restoration begins in 2026.
- **Contract 6A:** 7.1 miles of pipeline from James River to Eastman Township in Foster County. 2.65 miles already in the ground, with restoration planned once construction wraps up.
- **Contract 6B/6C:** 17.6 miles of pipe in McKinnon, Sutton and Revere Townships in Foster and Griggs Counties, with three 96-inch diameter trenchless crossing of jurisdictional wetlands and one 96-inch diameter trenchless crossing of a BNSF railroad. Begins in 2026.
- **Contract 7A:** 6.5 miles of pipeline from Revere Township to Cooperstown in Griggs County, including three 96-inch diameter trenchless crossings of jurisdictional wetlands. Begins in 2026.

During the most recent legislative session, North Dakota lawmakers approved $205 million in the Department of Water Resources budget for the RRVWSP, which represents the State's 75% cost share for the 2025-2027 biennium. LAWA represents the end users of the Project, who are responsible for the 25% local share. The local portion for the biennium is $68.333 million, the majority of which will be paid by the RRVWSP's largest users, the cities of Fargo and Grand Forks.

RED RIVER VALLEY WATER SUPPLY PROJECT

ENDAWS Receives Federal Approval and $50M Appropriation

Thanks in large part to U.S. Senator John Hoeven, a federal project that will complement the state-led Red River Valley Water Supply Project (RRVWSP) has received the official green light and federal funding approval. As a member of the Senate Energy and Water Development Appropriations Committee, Sen. Hoeven was the driving force behind securing authorization and $50 million for the Eastern North Dakota Alternate Water Supply (ENDAWS) project within the fiscal year (FY) 2026 appropriations legislation. In February, President Donald Trump signed the $1.2 billion appropriations package, which includes funding for ENDAWS.

Senator John Hoeven

"The federal ENDAWS project brings real savings to the Red River Valley Water Supply Project, reducing its construction costs by $200 million and saving $4 million in annual operating costs," said Sen. Hoeven.

By utilizing existing federal infrastructure, including the Snake Creek Pumping Plant and McClusky Canal, ENDAWS will drastically reduce construction costs. Another benefit of using existing infrastructure is the reduced operational costs due to a lower elevation and shorter pumping distance to convey water from the McClusky Canal to the transmission pipeline.

Sen. Hoeven also reintroduced his bipartisan legislation in March with a goal of fully funding ENDAWS. If approved, the FY2026 Energy and Water appropriations bill will amend the Dakota Water Resources Act (DWRA) to increase authorizations under the Municipal, Rural, and Industrial (MR&I) water supply grant program for North Dakota and the five Tribal Nations in the state. The amendment is necessary because North Dakota reached the state MR&I authorization cap at the end of fiscal year 2024. Because of this, the state and the Bureau of Reclamation (BOR) have reallocated significant MR&I resources to cover federal responsibilities under the Boundary Waters Treaty of 1909. Specifically, Sen. Hoeven is working to ensure the biota water treatment costs are fully accounted for, as they are the federal government's responsibility.

"When the Garrison and Oahe dams were built,

If you're interested in learning more about the RRVWSP, visit www.rrvwsp.com to sign up for the RRVWSP quarterly newsletter to stay up to date on the project's latest developments.

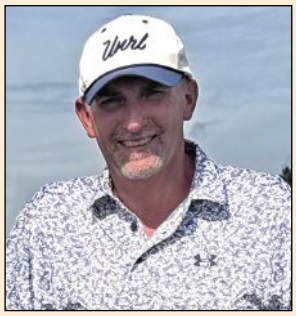
North Dakota lost 550,000 acres of prime farmland, but the amounts originally authorized under the Dakota Water Resources Act of 2000 were insufficient to compensate our state for this loss. As we work to fund water supply projects like ENDAWS, our legislation would correct this shortfall, ensure North Dakota receives the federal support it is owed, and help advance more resilient, drought-tolerant water supplies for communities across our state," said Sen. Hoeven. The legislation is cosponsored by Senators Kevin Cramer of North Dakota and Alex Padilla of California. Representative Julie Fedorchak of North Dakota will introduce a companion to the bill in the House of Representatives.

"This legislation is critical for ensuring reliable water supplies for North Dakota's communities and Tribal Nations. They included some funding for the Eastern North Dakota Alternate Water Supplies Project (ENDAWS). We need to increase existing funding authorizations to further support ENDAWS and other critical water infrastructure projects across the state. I look forward to passing these amendments and ensuring the federal government fulfills this obligation it owes to North Dakota for damming the Missouri River," said Sen. Cramer.

"North Dakota was promised more than a million acres of irrigation as part of the Pick-Sloan project, yet that promise was never fully realized," Rep. Fedorchak said. "The Dakota Water Resources Act Amendments move us closer to fulfilling that commitment by strengthening water systems for our communities and Tribal Nations and making sure the federal government follows through on its commitments to our state."

The full text of the DWRA amendments can be viewed on Sen. Hoeven's website, www.hoeven.senate.gov.

INTRODUCING
Scott Mehring
Garrison Diversion Field Services Supervisor



After 19 years with the Garrison Diversion Conservancy District (Garrison Diversion), Scott Mehring is likely one of the most recognizable staff members. The Field Services Supervisor is Garrison Diversion's eyes and ears on the ground for the construction of the Red River Valley Water Supply Project (RRVWSP).

"I think it's amazing that I have the opportunity to work on such a historic project," Scott says. "It feels great knowing I had a role in delivering water to so many North Dakotans."

Scott works with the engineers, consultants, and contractors working on the drought mitigation project that will serve nearly half of North Dakota's population when it is constructed. Everyone from landowners to county township board members reaches out to him when they have questions or issues.

One of Scott's main responsibilities is managing quality control on land restoration. Before construction began, the project co-sponsors, Garrison Diversion and Lake Agassiz Water Authority (LAWA), developed guiding principles for the RRVWSP. One of the principles is landowner respect. Scott takes this responsibility seriously as he works to ensure the pipeline and associated infrastructure are constructed with care and respect for the land, its owners, and renters. He is also mindful of ensuring the land is restored or reclaimed in an effective and timely manner.

"Since I'm here year-round, I get to know people in the areas where construction is happening. This has been a benefit, because folks know they can come to me to discuss any issues they're having," says Scott. "I spend a decent amount of my time working with landowners and townships."

When he's not at work, Scott is focused on his family. He and his wife, Shannon, have been married for 30 years. They have three children: Shae is a pharmacist in Larimore, Kaydn is a sixth-grade teacher in Carrington, and their son Taylen is a junior in high school. In addition to spending time with family, Scott enjoys being outdoors, especially playing golf.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NORTH DAKOTA WATER USERS ASSOCIATION

North Dakota Water Users Association

was organized in 1959 to protect, develop, and manage North Dakota's water resources.

Together we support completion of vital water supply and flood control projects; promote irrigation development; educate on the importance of our water resources; and advocate for sound water policy at the state and national level.

Everyone Is A Water User... JOIN THE EFFORT

MEMBERSHIP CATEGORIES

INDIVIDUAL MEMBER	$50
BUSINESS MEMBER	$100
WATER RESOURCE DISTRICT MEMBER	
Individual Boards	$325
Joint Boards	$630
PUBLIC MEMBER	
Under 1,000 Population	$125
1,000 to 5,000 Population	$325
5,000 to 10,000 Population	$630
Over 10,000 Population	$1,300
SUSTAINING MEMBER	$1,300

SCAN TO JOIN!

PROTECT, DEVELOP, AND MANAGE NORTH DAKOTA'S WATER

NORTH DAKOTA WATER

2026 CALENDAR

May 4	Southwest Water Authority's Board of Directors Meeting, Operations and Maintenance Center Office, Dickinson
May 13	Devils Lake Basin Joint Water Resource Board Meeting, Devils Lake
May 18	North Dakota Rural Water Systems Association's Operator Certification Review Class, Dickinson
May 21	Western Area Water Supply Authority's Board of Directors Meeting, Williston
May 21	North Dakota State Water Commission's Pre-Commission Meeting
May 28	Metro Flood Diversion Authority's Board Meeting
June 1	Southwest Water Authority's Board of Directors Meeting, Operations and Maintenance Center Office, Dickinson
June 9	North Dakota State Water Commission Meeting
June 10	Devils Lake Basin Joint Water Resource Board Meeting, Devils Lake
June 10	Water Topics Overview Committee Meeting
June 10	Red River Joint Water Resource District's Board of Directors Meeting
June 17	Upper Sheyenne River Joint Water Resource Board Meeting, Carrington
June 17	Mouse River Basin SWC Commissioner-hosted meeting, City Hall, Minot
June 18	Garrison Diversion Conservancy District's Executive Committee Meeting, Carrington
June 18	Lower Missouri River Basin SWC Commissioner-hosted meeting, Virtual or Bank of North Dakota, Bismarck
June 18	Western Area Water Supply Authority's Board of Directors Meeting, Williston
June 25	Metro Flood Diversion Authority's Board Meeting
June 29	Little Missouri, Upper Heart, & Cannonball Basin SWC Commissioner-hosted meeting, Stark-Billings County NDSU Extension Office, Dickinson

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