

# WATER

NORTH DAKOTA

January 2026



# CREATING COMMUNITY



**Dani Quissell**  
Executive Director  
North Dakota Water  
Education Foundation

I went to a small, private college on the banks of the Missouri River in northeast Kansas. One of the pillars of the college was community. The campus was intentionally designed to foster connection—whether through study groups or social activities—creating an environment where students could thrive together.

After college, I had the privilege to work with the agriculture community. I built connections with a strong network of farmers and ranchers who worked together to bring opportunities for future generations, educate consumers about their industry and advocate for policy to strengthen American agriculture.

When I moved to North Dakota and switched my career focus from agriculture to the water world, I wondered if I would find the same community mentality. I hoped to be able to continue to work with individuals and groups dedicated to strengthening communities and creating opportunities. I was not disappointed.

The water community in North Dakota is strong. This was evident at the water convention in Bismarck in December. Despite treacherous weather, we had more than 200 attendees from across the state and some from neighboring states as well. Everyone came together for two days of networking and brainstorming ways to use our water resources to benefit the entire state.

This community doesn't just happen—it was intentionally created and needs to be carefully cultivated. The strength of North Dakota's water community comes from the commitment of its people and the organizations that

support them, including the North Dakota Water Users Association, the North Dakota Irrigation Association, the North Dakota Water Resource Districts Association and the Upper Missouri Water Association, to protect, develop, and manage our most precious resource—water. These groups work tirelessly to educate, advocate, and create opportunities for collaboration.

At the water convention this year, Water Users President Mary Massad challenged attendees to join the Water Users Association as an individual member. I want to echo that challenge. Membership isn't just about joining an organization—it's about investing in the future of our water resources and the communities they sustain.

If you believe in the power of water and the strength of community, take the next step. Learn more about North Dakota's water groups and what membership could benefit you at [www.ndwater.org](http://www.ndwater.org) or call 701-223-4615. Together, we can keep this community strong for generations to come.

A handwritten signature in black ink that reads "Dani". The script is cursive and elegant.

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# Contents

## Features

- Quality Water for Southwest North Dakota ..... 4
- Never Dream Too Big: A Three-Generation Commitment to Rural Water ..... 5
- Missouri River Water Takes Center Stage at Joint Water Convention ..... 8
- Farming, Flooding, and Federal Rules: The Wetland Easement Debate ..... 10
- Dushinske-Jamison Water Resources Scholarship Recipients ..... 11
- North Dakota Water Award Winners ..... 11
- Our Missouri River ... Twins United ..... 14
-  Wrapping Up 2025, Looking Ahead to 2026 .. 25
- Lake Agassiz Water Authority Election: Lisbon Secures Seat on Board of Directors ..... 26
- Introducing Tim Meyer, LAWA Board Member.. 27

## 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

*"Suspended Animation" by Marshall Lipp, Mandan. This photo was 2nd Runner Up in the 2025 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](http://swwater.com)



## Never Dream Too Big:

# A Three-Generation Commitment to Rural Water

When University of North Dakota freshman Talli Eaton sat down to write an essay about the water industry, she approached it with a broad perspective. Her paper explored public health, wastewater management, agriculture, environmental protection and the wider economic impacts of stable water systems. What she didn't mention is that rural water isn't just an academic topic for her. It's part of her family's history.

Talli is the great-granddaughter of Leonard "Lenny" Jacobs, one of the early champions of bringing reliable water to southwest North Dakota, and the daughter of Jonathon Eaton, who serves as Vice Chairperson on the Southwest Water Authority (SWA) board. Her three-generation story is about public service and the belief that rural communities deserve the same quality of water as any city.

### *He Was There From The Very Beginning*

The family's story starts long before Talli was born. As a county commissioner in Adams County, Lenny worked in the 1970s and beyond to bring high-quality water to the region. He believed deeply in what clean water could do for rural communities, and he had evidence to prove it.

"Most people didn't have to grow up with brown water in their house," Jonathon says. "But we did. Grandpa kept a jar of that brown water on his desk when he served in the state legislature."

Lenny understood that improving water quality wasn't just a convenience. For rural residents, it meant safer drinking water, better health outcomes and the potential for growth in farming, business and community life.

"When they started the pipeline, they gave out golden shovels for the first spade of dirt," Jonathon recalls. "I remember Grandpa's shovel sat behind his bedroom door, and as a kid, I'd go in and look at it. When he passed, I got that shovel. It's nothing you can replace."

For Jonathon, the golden shovel represents more than the start of a project. It symbolizes the perseverance required to, as he put it, "fight for every construction dollar" to make rural water a reality.

Lenny passed away in October 2024, but his words still guide Jonathon's perspective on SWA's work.

"Grandpa would always say, 'You can never dream too big,'" Jonathon says. "That stuck with me."

### *Stepping Into Big Shoes*

By 2008, Lenny was 80 and ready to pass the torch. He asked Jonathon if he would consider running for the SWA board seat he had held for decades.

Jonathon ran, was elected and has served ever since. And just like his grandfather, he quickly realized his role wasn't solely about his own county.

"It's never been just about Adams County," he says. "It's



about the whole southwest and really the whole state. Being part of SWA gives you a broader picture. It changes your outlook from ‘what benefits my area?’ to ‘what makes sense for everyone?’”

Just as Lenny had, Jonathon developed his own deep passion for rural water.

### *A Third Generation*

By the time Jonathon joined the board, Talli was just one year old. She grew up with water board meetings woven into the family’s schedule and began absorbing bits and pieces—nothing formal, she says, but enough to build a foundation.

“Dad was always willing to talk about what was happening at the meetings and entertain my random questions,” she remembers.

Over time, she learned that her great-grandfather had served on the board before her dad. That connection resonated.

“When I found out my great-grandfather held that spot before him, it made their involvement feel bigger,” she says. “I feel very proud to be part of a family with multiple generations connected to rural water, especially when I hear the passion they have for what they do.”

Talli also noticed the impact their work had on everyday life.

“People my age don’t realize how much rural water in North Dakota impacts our lives,” she says. “We use water for a multitude of things without much thought.”

### *More Than An Essay*

When the opportunity to apply for the North Dakota Rural Water Systems Association scholarship came up, Talli was ready. As a high-achieving student, taking 11 classes during an eight-period school day, she approached the scholarship with determination.

Talli’s essay explored the water industry’s broad contributions. She chose themes she connected with

intellectually rather than focusing on family history.

“When doing my research, those themes were some of the most common to come up,” she says. “Since I didn’t know much about the fine details, I stuck with a broader, big-picture idea.”

The public health component especially intrigued her.

“She picks things up like a sponge,” Jonathon says. “She loves learning and she always works hard at what she’s doing.”

### *His Pride Was Clear When She Was Selected*

“I was really excited,” he says. “It was something I care about more than a lot of other things. It was cool that she won in an area that I find important.”

### *Carrying Forward The Values Of Service*

Although Talli is majoring in criminal justice at UND and hopes to become a lawyer, she sees a connection between her studies and the values passed down from her father and great-grandfather.

Her interest in community systems and public service reflects the same work ethic they modeled.

“When it comes to values, both my dad and great-grandfather encouraged having a strong work ethic,” Talli explains. “They taught me that when taking on an assignment or task, I should give it my all, because there was no point in not doing my best.”

Jonathon sees those qualities in her as well, noting her integrity and dedication to the things she’s passionate about.

One story stood out to Talli: her dad joined the SWA board because her great-grandfather asked him to continue the work he cared so deeply about, and he stayed because he eventually found that same sense of purpose. For Talli, that blend of passion, service and commitment is what she hopes to carry forward.

### *Honoring the Past, Inspiring the Future*

From a jar of brown water to a golden shovel to a scholarship essay written decades later, the Eaton-Jacobs family story shows how one project can shape the lives of multiple generations.

Clean, reliable water changed the trajectory of communities across southwest North Dakota. For families like theirs, it changed something else: the belief in what’s possible when people “dream big,” work together and commit to serving their community.

As Talli begins her college years, she understands the power behind strong public systems. And as Jonathon continues the work his grandfather began, the story of Southwest Water Authority isn’t just a chapter in their family history. It’s a testament to how vision and persistence can shape a community and the generations who inherit it.

# The Importance of the Water Industry in our Lives

Water is an essential resource for life on Earth. Without it, human survival be impossible. That is why the water industry plays a key role in ensuring a safe, reliable, and sustainable supply of water for communities. From areas like water treatment and distribution to topics like wastewater management and conservation efforts, this industry is vital to public health, economic growth, and environmental protection.

To start, let's look at how the water industry improves public health. The industry plays a vital role by providing clean and safe drinking water for communities. Access to drinkable water is fundamental to our health, yet it is considered a privilege as millions of people lack such access to clean water. Also, water treatment facilities remove harmful contaminants and bacteria, so people consume water that meets the safety standards without having to worry about the dangers of unclean water like cholera, dysentery, and typhoid. By supporting this access and ensuring clean water, the water industry prevents waterborne diseases and boosts public health.

Taking a step back from its importance to humankind, the water industry supports economic development in multiple fields. For example, we have agriculture—a field that relies heavily on irrigation and would be unsustainable without a reliable water supply. Additionally, industries like manufacturing, energy production, and technology require vast amounts of water use. To show that, we can look at power plants that use water for cooling. The water industry works to keep these fields functioning efficiently while also contributing to economic growth.



**Talli Eaton**

Within the water industry, another crucial aspect is wastewater management. With growing populations, there is a need for proper sewage and wastewater treatment. The wastewater treatment plants help with that issue by removing harmful substances from used water before releasing it back to the environment. Without this procedure, harmful substances can pollute our rivers, lakes, and oceans, endangering not only humankind but aquatic life.

Finally, along with ensuring public health and supporting economic development, the water industry is important to environmental protection. They address climate change and water scarcity, acknowledging the fact that many areas face droughts and diminishing water supplies due to climate change and pollution. To improve

this, water management organizations create solutions like desalination, rainwater harvesting, and advanced filtration systems. Additionally, the industry encourages both individuals and businesses alike to use their water efficiently. With these strategies and practices, the water industry helps lessen the impact of change and works toward environmental protection.

In conclusion, the water industry plays an instrumental role. It is imperative to public health, economic development, and environmental protection. By providing clean water and access to it, supporting fields like agriculture, managing wastewater, and addressing environmental concerns, the industry is vital to sustaining life and growth. Without it, our survival and more would be at risk.



# WATER NOT AN OPTION

## Missouri River Water Takes Center Stage at Joint Water Convention

By Scooter Pursley

The current and future use of the Missouri River was the focus of the Wednesday session of the Joint Water Convention and Upper Missouri Water Association Conference in Bismarck in December. Several presentations discussed current and future use both in the Missouri River basin and potential out of basin transfers.

### Using Missouri River Water In South Dakota

Although later to the trough than its neighbor to the north, South Dakota is also tapping into the Missouri River to supply water for its growing population and is looking towards significant use in the coming decades as it extends its regional water network to all four corners of the state. Representatives from four different South Dakota water systems shared updates on their current use and expansion plans.

“The state of South Dakota is following the lead of North Dakota,” said Troy Larson, executive director of the Lewis and Clark Regional Water System located in southeast South Dakota. “North Dakota, you are only 10

to 20 years ahead of us in South Dakota for planning,” he said.

Getting started is just the first step in a lengthy process.

“These things don’t move fast,” said Kurt Pfeifle, executive director of the Dakota Mainstem Regional Water System in eastern South Dakota. “The wheels of water turn slowly, as do the wheels of government.”

### Lewis and Clark Regional Water System

The Lewis and Clark system covers the southeastern corner of South Dakota and has members in South Dakota, Iowa and Minnesota. In order to further serve its 350,000 members, the system is looking to expand infrastructure to 60 million gallons a day (MGD) capacity. It will need a further 95 MGD by 2070 just to meet the demands of existing members. The treatment plant upgrade in Vermillion is expected to be completed in 2028.

“We will be looking for more Missouri River water rights,” Larson said. “Other large water projects in upper Missouri River states will face the same issues Lewis and Clark is facing. Their original system served its purpose and now we are exceeding capacity. How do we build for the future on what has already been done?”





## WINS Project

The Water Investment in Northern South Dakota (WINS) project has brought water from Lake Oahe to northeast South Dakota, helping to ease the stress on the third-largest city in South Dakota – Aberdeen – and the surrounding area with its 100,000 members.

As the first federally authorized system in the nation, WINS started out as an open-air water diversion canal by WEB Water before the project was changed to deliver potable Missouri River water through a pipeline system to Aberdeen and the area.

“In 2015, WEB couldn’t add any more capacity to the system. Things came to a head,” WEB water operations manager Shane Phillips said.

To meet the growing need, WEB Water’s 17 counties (three in North Dakota), the BDM rural water system and the city of Aberdeen came together to form the WINS project which received \$600 million in federal COVID-19 dollars to kickstart the project.

Today, Phillips said the WINS project is “laser-focused” on getting another four MGD to Aberdeen but additional capacity is needed, including an upgrade from 11 MGD to 17 MGD. He estimates \$108 million of work remains.

## Western Dakota Regional Water System

Like other western areas, the Black Hills of South Dakota are seeing population and industrial growth and a corresponding demand on water from aquifers that can’t recharge sufficiently to meet demand. So where can it turn? The Missouri River, obviously.

Western Dakota Regional Water System executive director Kristin Conzet said the system is proposing a 165-mile pipeline with a 2,000-foot lift to bring river water to western South Dakota. Conzet said the pipeline would need to provide 95 MGD.

Unlike the other systems that presented at the conference, the Western Dakota Regional Water System is still in its infancy. Plans are underway and hurdles are being identified. As one might expect, engineering hurdles can be overcome. Financial hurdles are a different story. The system will continue to work to identify a path forward for this ambitious but necessary project.

## Dakota Mainstem

The Dakota Mainstem project is the largest of four water projects in South Dakota and has 57 members (39 in South Dakota, 11 in Iowa, six in Minnesota and a tribal nation in Nebraska).

“Our footprint is enormous,” Pfeifle said. “Membership keeps growing because the need is real. Water demand is increasing faster than these systems can stand on their own. That’s the whole reason we started playing on a regional scale.”

Pfeifle said studies indicate the area within the Dakota Mainstem system will need an additional seven MGD by 2030, 35 MGD by 2050 and 195 MGD by 2070, including 95 MGD for the Lewis and Clark Regional Water System.

## Missouri River Floodwater Project

After hearing from South Dakota managers, attendees at the convention floated down to Kansas where Clay Scott of the Kansas Aqueduct Coalition talked about their work exploring water transfers to restore rivers and aquifers in western Kansas and beyond using high and flood flows, likely from the Missouri River.

Kansas and other western states are facing crises when it comes to water availability. Whether from aquifers or major river systems, like the Colorado River, supply isn’t there to support current and future needs for the region. At the same time, Scott noted we’ve seen times of destructive flooding in the Missouri River system. The flood of 2011, when ironically western Kansas was mired in a D4 drought, is a prime example. “Why was that water not for us?” Scott questioned.

Scott said Corps of Engineers’ historical graphs show there is water to use during high flows that would not affect downstream navigation, a point of contention for the State of Missouri and other downstream states. In 2014, the Kansas Aqueduct Coalition began working with the Corps to update a 1982 study of water transfer programs on the Missouri and Mississippi rivers. “We were looking at what makes it worse and is there water available,” said Scott. He ended by praising North Dakota for its visionary approach to water development and a hope that Upper Missouri basin states will stay engaged with downstream interests, like the Coalition.

## The “Saga” Of Western Water

In 40 years of water resource management in the West – renowned for its unmanageable weather patterns and water resources – HDR water supply management director Blaine Dwyer had adopted the acronym SAGA for best practices to get water-related projects developed:

- S = Sound science; it must be based on factual evidence.
- A = Acceptable; it must be acceptable to regulatory agencies, resource agencies and diverse stakeholder groups.
- G = Green; it must be environmentally friendly beyond that expected by stakeholder groups to minimize impacts and look for opportunities.
- A = Adaptable; it must allow for periodic updating operations to address urgent conditions or issues, to scientifically assess new hypotheses in an open and collaborative manner.

Dwyer said following his SAGA plan is a way to keep everyone happy, or as happy as can be, when it involves water.

# Farming, Flooding, and Federal Rules: The Wetland Easement Debate

By Scooter Pursley

Easements, particularly wetland easements, are a hot topic at the moment. From litigation to interim studies by the legislature, the impact that these easements have on landowners, agricultural producers and local governments is top of mind in North Dakota. The topic was also part of a key presentation at the Joint Water Convention and Irrigation Workshop in Bismarck in early December.

Jeffrey McCoy, senior property rights attorney for the Pacific Legal Foundation (PLF), walked attendees through a myriad of issues relating to federal wetland easements and “Swampbuster” provisions affecting landowners. Since joining the PLF in 2017, McCoy’s focus has been on separation of powers and private property rights with a focus on environmental litigation. He has argued two cases before the Supreme Court dealing with private property owners looking to defend their rights against the government.

McCoy and his landowner clients are navigating the murky waters that exist when it comes to federal regulation of wetlands. The crux of the issue generally has to do with regulation of wetland easements held by the U.S. Fish and Wildlife Service (USFWS) and “Swampbuster” regulations enforced by the Natural Resources Conservation Service (NRCS). To exacerbate matters, particularly for ag producers, at times, the two agencies themselves are inconsistent in how wetlands are considered, classified, and regulated.

“The big thing is to provide certainty for farmers,” McCoy said. “Consistency is a big thing as well. There are two different standards between the NRCS and USFWS. They don’t even often say wetlands are the same.”

Much of the ambiguity around wetlands has dealt with the extent to which landowners can use the land around a wetland and the regulation of any potential impacts that activity could have on the wetland. While unclear, McCoy argued that current USFWS guidance could be interpreted to say landowners can have no effect on a wetlands feature. That differs from the NRCS “Swampbuster” provision, which says if a farm has a minimal effect on a wetland, then it’s not a violation of Swampbuster.

“There is a dispute between the NRCS and USFWS on standards. They have to have wetlands hydrology, wetlands vegetation, wetlands soils. You would think that, at a minimum, the agencies would agree on that but they do not,” McCoy said.

Another related issue is setbacks. In a case from southeast North Dakota, the USFWS mapped a parcel of farmland like Swiss cheese, requiring large setbacks that left half of the land unfarmable.

“Some are 1/100th of an acre, a tenth of an acre. When you combine that with a 1,500-foot or 2,000-foot setback, you can see how much land would be lost if you can’t put drain tile there,” McCoy said.

McCoy challenged the current USFWS guidance, arguing the USFWS standard was illegal because under general property law principles the easement holder can’t excessively infringe on the landowner or vice versa. He argues that the NRCS’ enforcement of Swampbuster is more appropriate, allowing for minimal impacts.

“Litigation is still ongoing,” McCoy noted. “We do hope we can get a good decision. Also, there has been some talk of making regulatory changes.”

McCoy said former North Dakota Governor and current U.S. Interior Secretary Doug Burgum is aware of the problem.

One solution currently being explored is to allow more easement exchanges. This would allow a landowner to mitigate the impact they have on one wetland by enhancing or restoring another one. The outstanding question is what is the standard that needs to be met for the new wetland to qualify.

A recent Court of Appeals in the state of Illinois ruled that under statute all that is required is an equal amount of land be exchanged. However, the USFWS currently requires that the new wetland must show greater than equal benefit to the existing wetland in order to qualify. “There’s discussion about that as well. Hopefully that will allow equal-value exchange rather than allow polka dots on the land with setbacks that keep half the land from being farmed,” McCoy said.

While much of the focus has been on the impact wetland regulation has on agricultural land, local political subdivisions have also been impacted. Northland Township in Ransom County had one road which happened to cross a wetland. In wet times, the wetland grew so that water ran over the road, making it impassable. In order to allow for the safe passage of vehicles along that road, the township drained the wetland; the USFWS declared that a violation. Northland Township sued.

“Our argument was that the road has existed since the 1950s and 60s and it’s on a section line. Under North Dakota law, towns have a right of way to their section lines,” McCoy explained. “(They) were interfering with a right of way. They agreed... We came to agreement not to drain the whole thing, just enough to make road passable.”

While the example from Northland Township ended in a mutually agreeable settlement, wetlands litigation involving Swampbuster and historical easement are often complicated and lengthy, involving every level of court jurisdiction up to the Supreme Court.

“If there is any ambiguity, a court needs to interpret a

contract against the person who wrote it. All these were written by the agency,” McCoy continued. “If you have an agreement to protect wetlands on the property, a farmer isn’t going to say, “OK, I’ll protect wetlands and not farm half my property.””

The takeaway from McCoy’s presentation was twofold. One, while this is an issue that seems to put a bullseye on North Dakota, and North Dakota farmland in particular, it is a national issue that is currently being worked on in the halls of Congress, within the Administration and in the legal system. Secondly, the tide seems to be slowly turning in the favor of landowners and agriculture producers thanks to the work of producers, political subdivisions and lawyers working with them.

## Dushinske-Jamison Water Resources Scholarship Recipients

The North Dakota Water Education Foundation created the Dushinske-Jamison Water Resources Scholarship Endowment to honor Russell Dushinske and Warren Jamison for their exceptional service, leadership, and lifelong dedication to water development in North Dakota.

Each year, the endowment awards four \$1,500 scholarships to deserving students whose families have been actively involved in the state’s water management efforts.

The 2023 scholarship recipients are Kylee Hofmann of Medina, Madison Hofmann of Medina, Ryan Landenberger of Bismarck, and Carson Wyant of Dickinson.

Kylee Hofmann, a Medina High School graduate, will attend Bismarck State College to pursue a degree in Agricultural Industries and Technology, focusing on Agronomy. Passionate about sustainable farming, Kylee is especially interested in how innovations like precision agriculture and advanced irrigation systems can boost productivity while conserving resources. Her parents are Bonnie and Jacob Hofmann.

Madison Hofmann, also a Medina High School graduate, will attend Bismarck State College to pursue a Bachelor of Science in Nursing. Currently employed at an assisted living facility, Madison plans to continue her education and eventually earn a master’s degree in nursing. Her parents are Bonnie and Jacob Hofmann.

Ryan Landenberger, a graduate of Century High School in Bismarck, will attend North Dakota State University to major in Civil Engineering. Ryan aspires to become a civil engineer, with the goal of improving infrastructure and enhancing quality of life in his home community. His parents are Beth and James Landenberger.

Carson Wyant, a graduate of South Heart Public School, will attend Bismarck State College to study in the Electrical Lineman Program. Carson is excited about a hands-on career as a lineman, an essential role that will allow him to serve and support his community. His parents are Amy and Jamie Wyant.

## 2025 ND Water Award Winners

*The following state water leaders were recognized for their contributions.*

**LOREN DEWITZ** received the Irrigation Excellence Award, which is given by the North Dakota Irrigation Association for leadership, outstanding service and advancement in the irrigation industry.

**JERRY SCHAACK** received the Irrigation Excellence Award, which is given by the North Dakota Irrigation Association for leadership, outstanding service and advancement in the irrigation industry.

**GOVERNOR KELLY ARMSTRONG** received the Riverman Award, which is given by the Missouri River Joint Water Board to an individual or organization in appreciation for a lifetime of leadership, resource management and water development in the Missouri River corridor.

**STEVEN C. KRENTZ** received the Oarsman Award, which is given by the Upper Sheyenne River Joint Water Resource Board to an individual whose efforts support the board’s mission of managing the basin’s water for the benefit of citizens.

**RANDY GJESTVANG** received the Thompson Varnson Steamboat Award, which is given by the Red River Joint Water Resource District annually for distinguished service in the management of water resources in the Red River watershed of North Dakota. It is named in recognition of Robert Thompson and Ben Varnson’s dedication to North Dakota water resource districts and exemplification of the pioneering spirit of the settlers who traveled the Red River by steamboat.

The Water Wheel Awards, which are given by the North Dakota Water Users Association and the North Dakota Water Resource Districts Association, were awarded to **DUAINE ASH, WADE BACHMEIER, HAROLD GAUGLER, L. DAVID GLATT, STACEY GUSSIAAS, and ANDREW NYGREN**, in recognition of distinctive leadership and perseverance in protecting, developing, and managing North Dakota’s water resources, thereby fostering a better quality of life for our people.

**DUANE DEKREY** received the Commodore Award, which is given by the governor of North Dakota for outstanding leadership, dedication and commitment to the development and management of North Dakota’s water resources. This individual is commissioned as a commodore in the North Dakota Mythical Navy.

# 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/>

# 2026

DEADLINE APRIL 15, 2026



## DUSHINSKE & JAMISON WATER RESOURCES SCHOLARSHIP APPLICATION

Name of Student \_\_\_\_\_ Date of Birth \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Student's Telephone \_\_\_\_\_ Student's Personal Email (not school-linked) \_\_\_\_\_

Parent(s) Name \_\_\_\_\_ Parent(s) Telephone \_\_\_\_\_

Parent(s) Mailing Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Names and relationships of relatives/guardians involved in water management, protection or development and how they are involved in the industry.

### EDUCATION

High School \_\_\_\_\_ City \_\_\_\_\_ Graduation Year \_\_\_\_\_

Principal's Name \_\_\_\_\_ Grade Point Average \_\_\_\_\_

Name of College or University (attending or planning to attend) \_\_\_\_\_ Expected Graduation Date \_\_\_\_\_

Mailing Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Intended Major \_\_\_\_\_ Intended Minor \_\_\_\_\_

Other Education or Training \_\_\_\_\_

### ESSAY (ATTACH)

**In a two-page essay (12-point type, double-spaced), write about YOUR MOST VIVID MEMORY CONCERNING WATER.**

Please provide the following information (please type):

- 1) Honors and awards
- 2) Non-academic school activities and special interests
- 3) High resolution photo
- 3) Career plans after college graduation
- 4) Reason(s) for applying for this scholarship

### FOR MORE INFORMATION OR TO APPLY

North Dakota Water Education Foundation  
PO Box 2254  
Bismarck, ND 58502  
701-223-8332  
Fax: 701-223-4645  
editor@ndwater.net  
<https://ndwater.org/scholarships/>

I certify that the above information and data are correct and I consent disclosure of public information. I understand that the essay I wrote for the purpose of this scholarship competition may be used and distributed by the North Dakota Water Education Foundation without further approval from me.

Signature of Applicant \_\_\_\_\_ Date \_\_\_\_\_

# Our Missouri River ... Twins United

By Ken Royse

It seems like almost a regular occurrence to come across stories of people being reunited with unknown or nearly forgotten and long lost relatives after many years apart. One famous story on this issue involves a pair of twin boys, separated at birth, and adopted by different families, who later found each other after being apart for 39 years. Both were named Jim (they were labeled the “Jim Twins” by local papers). Each had a brother named Larry and a dog named Toy. In school both excelled in mathematics but hated spelling. Both married a woman named Linda, and each then remarried to a woman named Betty. They both lived in Ohio and grew up only 40 miles apart. They both drove the same model car, smoked the same brand of cigarettes, and were both law enforcement professionals. Both enjoyed football.

These types of stories abound on the internet. It seems that everywhere you look you can find stories of long-lost twins, family members, or long-forgotten friends being somehow, by some happenstance, reunited.

Coincidentally, that is what is now happening, to a degree with North Dakota and South Dakota, particularly as it relates to our use, and dependence and appreciation of the Missouri River.

Our two States are twins by the nature of our birth. North Dakota and South Dakota both became States on November 2, 1889. Both were granted Statehood by the same proclamation signed by President Benjamin Harrison. Both States claimed that they were admitted to the Union first, but because North Dakota is alphabetically ahead of South Dakota, it was listed first in the Congressional Statutes At Large.

Since that time the two States have both developed in a remarkably similar fashion, to the extent that twins living apart can do so. North Dakota has our badlands, the Enchanted Highway, Medora, the world’s largest Holstein cow and vast agricultural fields of sugar beets, corn, soybeans, and wheat. South Dakota has the Black Hills, Mount Rushmore, Wall Drug, the Corn Palace, and their own vast fields of corn, soybeans, and wheat. Both States



**KEN ROYSE**  
Program Manager, Missouri  
River Joint Water Board

are generally dry in the west and wet in the east. We are both, in large part, settled by indigenous peoples as well as immigrants from the Scandinavian countries and Germany. We both pride ourselves on our hardworking culture, our sense of fair play, regardless of political affiliation, and our ability to withstand and thrive in cold weather. We both have significant tribal lands and populations. And we both, as the famous Jim Twins, enjoy football, cheering on our North Dakota and South Dakota teams: Go Bison, Go Hawks, Go Jacks, Go Yotes.


But now, even more importantly, after many years, we are both discovering that we have remarkable similarities in use, appreciation, and plans for the Missouri River.

The Missouri River runs north to south through both States. Both States have our capital cities located on the river. Both States, prior to the construction of the dams on the river, were subjected to nearly annual flooding. Both States, as directed by the 1944 Flood Control Act, became the sites for major dams and reservoirs to control the river and to provide both of us benefits of flood control, water supply, irrigation, power supply, recreation and wildlife enhancement.

Lake Sakakawea, located just upstream of Bismarck, N.D., impounds nearly 23.5 million acre feet of water;

**Garrison Dam,  
North Dakota**

- ▶ Constructed 1946-53
- ▶ Lake is 383,000 acres
- ▶ 3rd Largest Reservoir In US
- ▶ Required 584,000 acres of land (500,000 of fee land)
- ▶ Holds 23,500,000 acre feet (1/3 of total system storage)
- ▶ Cost to Construct \$305.3M (1999 dollars)



Missouri River Basin  
**Mainstem Master Water Control Manual**  
Garrison Project  
Reservoir, Embankment,  
Intakes, Powerhouse and Spillway  
U.S. Army Engineer Division Northwestern  
Corps of Engineers, Omaha, Nebraska  
November 2018

Lake Oahe, just upstream of Pierre, S.D., impounds a similar volume of water. Both lakes are a primary defense for flooding of the respective communities downstream. Both lakes, and respective dams, now provide significant recreational benefits to each State, and generation of significant power to each State. Both States have used the reservoirs, and the river, for extensive water delivery projects.

Importantly both States were promised significant irrigation support and development by the Federal Government. A promise was made to compensate North Dakota for our loss of approximately 566,000 acres of good and fertile bottom and riverside lands, from which nearly 150,000 acres were tribal lands. For that loss, the Federal Government promised to deliver an irrigation project of near 1.2 million acres.

South Dakota has mirrored that almost exactly. They lost a similar amount of bottom and riverside land, which coincidentally, also included approximately the same amount of tribal land. They were also promised a similar sized irrigation development project.

Now, more than 70 years later, no extensive irrigation development has occurred in either State. What has occurred however, in almost identical fashion, has been a robust water development program in each State to use the Missouri River for water supply for Statewide municipal, rural, and industrial water uses.

In North Dakota, our Southwest Pipeline Project uses the River for a water supply for all the counties in the southwest part of our State. Similarly, the Western Area Water Supply in northwest North Dakota and the Northwest Water Supply Project in the north central part of our State also use the Missouri River. In the south central part of our State, the Missouri West System and

the South Central Regional Water System use the Missouri River. Soon, the Red River Valley Water Supply Project will be taking Missouri River water to all our counties along the eastern portion of our State. We have seen that every community and every rural water system in North Dakota that can get access to the river or lakes, then does so and uses that water.

The map below shows the large regional system of our State, each of which relies on our Missouri River as a water source.



In South Dakota the same pattern has emerged. In northeast South Dakota the WEB Water Development System now serves all or parts of a 17-county area with Missouri River water. That is repeated in similar sized areas by the Mid Dakota Water System, the West River Lyman Jones/Mni Wiconi Project, and the Lewis & Clark System all now spread to south, central, western, and eastern South Dakota. And just as we in North Dakota are pursuing a Red River pipeline to our east, South Dakota has ambitious plans for a number of large projects with expanded Missouri River water use to more of their area across that entire State. South Dakota may also, like North Dakota, be able to someday provide every county, every community, and every water user in their State with Missouri River water.

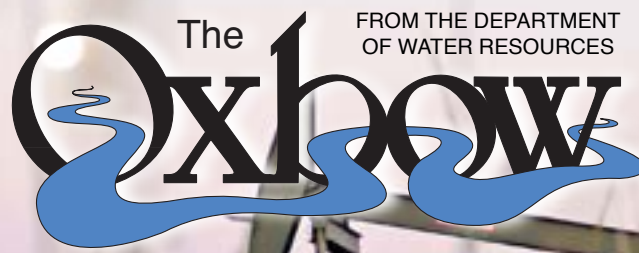
In terms of water history, and water development, our States are truly twins. We have the same DNA, we think alike, and we have similar water development needs and goals. We both continue to seek the benefits from the Missouri River system which have been long-promised, but not delivered, to our States for our accommodation of the 1944 Flood Control Act. And our ongoing efforts and common interests will continue to bring us both closer. This is a relationship which promises benefits not only to our two States, but all the States of the Upper Missouri Basin.

**Oahe Dam, South Dakota**

- ▶ Constructed 1948-58
- ▶ Lake is 386,000 acres
- ▶ 4th Largest Reservoir in US
- ▶ Required 402,417 acres of land (400,000 of fee land)
- ▶ Holds 23,000,000 acre feet (1/3 of total system storage)
- ▶ Cost to Construct \$346.5 M (1999 dollars)



Missouri River Basin  
Mainstem Master Water Control Manual  
Oahe Project  
Reservoir, Embankment, Intakes,  
Powerhouse and Outlet Tunnels  
U.S. Army Engineer Division Northwestern  
Corps of Engineers, Omaha, Nebraska  
November 20218



# BUILDING A SUSTAINABLE PATH FOR WATER DEVELOPMENT

## A SHIFTING FUNDING LANDSCAPE

North Dakota’s water development efforts are supported in large part by the Resources Trust Fund (RTF), which remains the primary state funding source for major water projects. Because the RTF is funded through a portion of the oil extraction tax, its revenues naturally fluctuate with changes in oil activity. In recent years, a growing number of oil wells have begun qualifying for “stripper well” status. Under state law, production from these wells is fully exempt from the oil extraction tax, which means no extraction tax is collected from them. While this trend is projected to reduce deposits into the RTF in the near term, it also ensures the industry’s ability to extend the productive life of mature wells.

Under North Dakota Century Code, a stripper well is a low-producing oil well whose average daily production over any consecutive 12-month period falls below specific thresholds set in law, which vary based on the depth of the well and whether it is located in the Bakken or Three Forks formations. These depth-based production limits determine when a well qualifies for the reduced oil extraction tax rate.

By exempting these wells from oil extraction tax, oil and gas producers are able to keep these wells economic to produce, extending their useful life for many years to come and continuing to contribute oil production revenues for the benefit of the state. Although this underscores the



need for disciplined financial and policy planning in the water community, it also ensures that our state can continue to enjoy the economic benefits that our oil revenues provide.

## STRENGTHENING WATER THROUGH STRATEGIC PLANNING

This shift matters because the RTF is one of the primary funding sources for statewide water development. The fund receives 20.5 percent of the state’s oil extraction tax, and those dollars support water supply infrastructure, flood protection projects, planning efforts, and other essential water management needs.





As oil-related revenues fluctuate—and in this case trend downward due to changes in well classifications—the Department of Water Resources (DWR) anticipates tighter budget conditions in the years ahead.

This means more careful planning will be required to align statewide water priorities with available funding.

## EVALUATING THE COST-SHARE PROGRAM

To prepare for this new funding environment, the Legislature directed the DWR to evaluate the long-term sustainability of the state's Cost-Share Program. In response, DWR hired Deloitte, an independent professional services firm, to complete the study and provide an independent assessment of how the program can sustainably serve North Dakota's water development needs in future years.

The evaluation is focused on the big-picture question: whether the current cost-share framework is positioned to meet statewide water project needs through 2039, given projected revenue constraints. The study will help the State Water Commission and DWR understand how current policies, cost-share percentages, and project eligibility requirements align with future financial realities—and identify strategies to maintain a strong and reliable program for the long term.

## THE 2027 WATER DEVELOPMENT PLAN KICKS OFF

These funding trends highlight the importance of the Water Development Plan (WDP), the state's comprehensive inventory of water projects prepared every two years as required by NDCC 61-02-01.3. The WDP identifies project needs, organizes them by basin, and forms the basis of DWR's budget request to the Legislature.

The Water Development Plan process begins in January when DWR asks project sponsors to submit updated information about the projects they hope to advance. Sponsors will have until the end of April to provide their materials. After submissions

are received, staff review and prioritize projects using the State Water Commission's guidance. The resulting draft inventory is then shared during the Commissioner-hosted basin meetings held across the state in summer. These meetings—one in each of North Dakota's eight major drainage basins—offer sponsors and the public the chance to discuss project needs, receive updates, and participate directly in the planning process. All meetings are open to the public, and participation is strongly encouraged.

The final Water Development Plan will be presented to the 70th Legislative Assembly in January 2027.

## ENGAGEMENT STRENGTHENS THE PROCESS

As the state faces a future with tighter revenues, participation in the WDP process becomes even more important. When resources are limited, complete and accurate project information helps the State Water Commission and the Legislature make informed decisions about prioritizing water development across the state.

Early engagement from project sponsors—through timely submissions and active involvement in basin meetings—ensures that local needs are clearly reflected in statewide planning and budgeting discussions.

North Dakota has a long history of collaborative water management, grounded in partnerships between local sponsors, state agencies, and stakeholders. In the years ahead, this collaboration will be essential. By working together through the Water Development Plan process combined with the cost-share program evaluation, the state can continue building a sustainable path for water development—one that supports current needs while planning responsibly for the future.

For more information on the WDP process, please visit [www.dwr.nd.gov](http://www.dwr.nd.gov).





# THE ATMOSPHERIC RESERVOIR

*Examining the Atmosphere and Atmospheric Resource Management*

## THE ICING ON THE LAKE

By Mark D. Schneider

January is a popular month for ice fishing on North Dakota's lakes and rivers. Regrettably, incidents of vehicles and ice fishing shelters falling through insufficiently thick ice occur each season. There are many factors that determine the formation of ice including the thickness of any current ice, weather conditions (temperatures, winds, and cloud cover) and water currents.

In previous articles, Growing Degree, Heating Degree, and Cooling Degree Days were discussed. Now we introduce the Freezing Degree Day (FDD) and use it to calculate the accumulation of ice. A FDD is defined as the daily average temperature subtracted from 32 degrees Fahrenheit. For example, if the daily average temperature is 17°F, we take 32° minus 17°F and get 15°F. This means that there were 15 FDDs and that is conveniently the average number of FDDs that it takes a lake to accumulate an additional inch of ice in 24 hours. Again, there are other factors that determine how fast and thick ice accumulates, but FDDs are a basic method to estimate the rate.

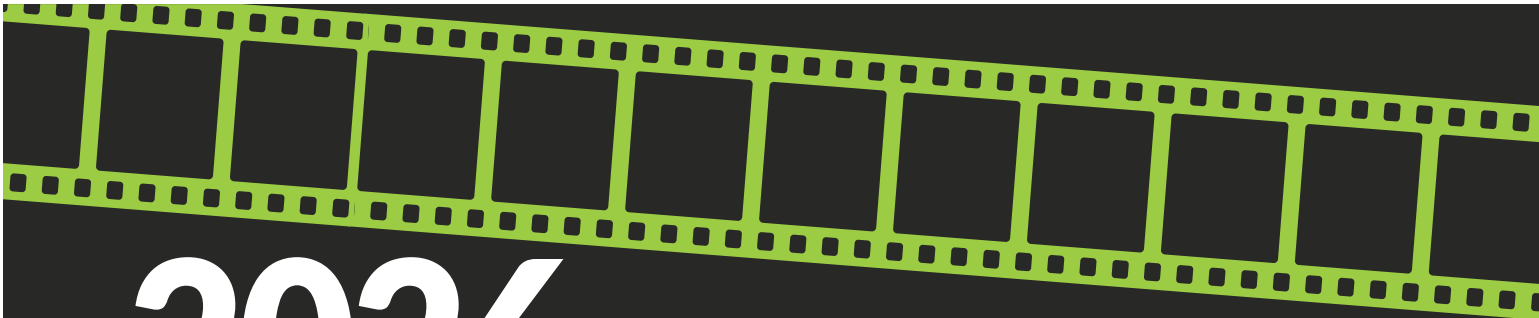
An existing layer of ice on the surface of a lake works to insulate the water below. Air pockets form in the ice, like the air bubbles inside an ice cube, and these trap heat much

like the multiple layers of blankets or clothes that we're accustomed to using during the winter months. Snowpack on top of existing ice also serves as an insulator by trapping heat. This slows the rate of ice accumulation and is why lakes don't freeze all the way to the bottom even when temperatures remain very cold for extended periods of time. During the coldest of winters, the ice on North Dakota's lakes may be three to four feet thick, but this isn't usually enough to completely freeze lakes unless they are shallow.

The last consideration for lake ice formation is turbulence. A current or some other mechanism mixing the water body can prevent ice formation or at least make it unpredictable. Small, sedentary lakes are usually more predictable because of their lack of significant currents. However, many lakes may have springs that introduce warmer water limiting ice accumulation or entirely preventing the formation of ice. Many stories about Lake Sakakawea have been told over the years where areas with ice in the morning become open water by afternoon on the same day. So, enjoy North Dakota's winter recreation but remain cautious when crossing frozen waterways as some of them can change as quickly as the weather!

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

ND Weather Modification Association | PO Box 2599 | Bismarck, ND 58502 | (701) 223-4232



# 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/](http://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](mailto: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 \_\_\_\_\_



# THE SPIGOT

from the NORTH DAKOTA RURAL WATER SYSTEMS ASSOCIATION

## 40th Annual Water Systems EXPO AND Conference

### February 10-12, 2026

### Delta Hotels by Marriott - Fargo

#### TUESDAY, FEBRUARY 10

- 8:00 am Registration Opens - CRYSTAL COURTYARD
- 9:00 am - Noon Pre-Conference Session: Cyber and Physical Security Best Practices, CISA - ETUDE
- 9:00 am - Noon Northern Pipe Products Tour (Requires separate, no-cost registration.) - CRYSTAL COURTYARD
- 2:00 pm NDRWSA Annual Board Meeting and EXPO Opening Session  
Keynote Speaker: *Jay Gubrud: Jumping in the Driver's Seat* - SYMPHONY HALL
- 3:00 pm Exhibit Hall Opens and Meter Change-Out Competition: Preliminary Round - EXHIBIT HALL
- 5:00 pm Exhibitor Appreciation Social - EXHIBIT HALL
- 6:00 pm Exhibit Hall Closes for Evening

#### WEDNESDAY, FEBRUARY 11

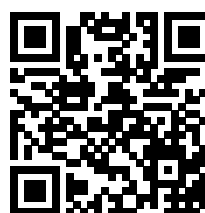
- 7:30 am Breakfast in the Exhibit Hall and Exhibit Hall Opens
- 8:30 am Concurrent Sessions
- Board & Management Track - BACH
    - Roundtable and Legislative Discussions with Special Guests
  - Operations & Maintenance Track - EXHIBIT HALL
    - Exhibit Hall Demonstrations
- 9:00 am Water Taste Contest - EXHIBIT HALL
- 11:00 am Meter Change-Out Competition: Final Round and Exhibit Hall Drawings - EXHIBIT HALL
- Noon Exhibit Hall Closes and Buffet Luncheon
- 1:00 pm Concurrent Sessions
- Board & Management Track - MOZART
    - *Jay Gubrud: Change Management - Shifting Gears & Changing Lanes*
    - *Bartlett & West: The Use of AI in Rural Water System Management*
  - Operation & Maintenance Track I - BACH
    - *AE2S: The Importance of Electrical Systems Maintenance*
    - *AE2S: Membrane Technology Basics and Applications in ND Water Systems*
    - *HDR: High Performance Graphics - Enhancing your SCADA System*
  - Operation & Maintenance Track II - BRAHMS
    - *Fougner Engineered Solutions: Lagoon Challenges from Influent to Effluent*
    - *LiquidTEK, LLC: Solving the Pond Puzzle*
    - *Team Laboratory Chemical: Bio Augmentation and Aquatic Plant Management*

- 3:00 pm** Concurrent Sessions
- Board & Management Track - MOZART
    - *Jay Gubrud: Change Management - Relationships & Team Building*
  - Operation & Maintenance Track I - BACH
    - *Apex Engineering Group: Phosphate for Corrosion Control Treatment in Drinking Water*
    - *Bartlett & West: A Fresh Take on Old Tanks - Efficiency Through Innovation*
  - Operation & Maintenance Track II - BRAHMS
    - *CPI Construction Technologies, Inc: Solving Infiltration and Corrosion in Water/Wastewater Structures*
    - *Dakota Supply Group: Beyond Smart Meters - Finding the Water Loss You Cannot See*
- 5:00 pm** Awards Banquet
- Awards Social
  - Awards Ceremony - Honoring the Best in the Business
    - *Emcee: Jay Gubrud*
  - Corporate Elite & Diamond Sponsor Recognition
  - 2026 Water Taste Contest Final Judging
  - Scholarship "Live" Auction

## THURSDAY, FEBRUARY 12

- 7:30 am** Breakfast Buffet
- 8:30 am** Concurrent Sessions
- Board & Management Track - MOZART
    - *Stroh & Associates: 2026 Health Insurance and Employee Benefits Changes, Options and Compliance*
    - *Widmer Roel: Beyond the Numbers - Government Accounting and Auditing*
    - *AE2S: Navigating Financial Shifts - Funding Water Projects in a Changing Landscape*
  - Operation & Maintenance Track I - BACH
    - *Northern Pipe Products, Inc: ABCs of PVC Pipe*
    - *KLM Engineering: Lifecycle of Coatings on Towers*
    - *ISCO: Solving Rural Water Problems with HDPE Solutions*
  - Operation & Maintenance Track II - BRAHMS
    - *Regal Chlorinators: Chlorinators - Operation, Maintenance, and Troubleshooting*
    - *AE2S: GIS for National Environmental Policy Act Compliance*
    - *In Control, Inc: Maintaining Your Control & SCADA System - How to Extend the Investment*
- 10:30 am** Concurrent Sessions
- Board & Management - MOZART
    - *Burian & Associates: Ensuring Industrial Water Supplies for Rural Central and Eastern North Dakota*
    - *Missouri River Joint Board: Our Missouri River in North Dakota - Using It and Protecting It*
  - Operation & Maintenance Track - BACH & BRAHMS
    - *ND Dept. of Environmental Quality: Regulatory Update*
- 11:45 am** Closing Session: Grand Prize Drawing  
(Must Be Present to Win) - BACH & BRAHMS

**Learn more and register at [www.ndrw.org/EXPO2026](http://www.ndrw.org/EXPO2026).**



# Our Water

Keeping it Clean

North Dakota Department of Environmental Quality

## Improving North Dakota Watersheds

*Meridith Miller, Environmental Scientist  
North Dakota Department of Environmental Quality*

The Watershed Management Program (WMP) with the North Dakota Department of Environmental Quality (NDDEQ) addresses water quality issues in North Dakota's lakes and streams. Priorities and plans for addressing water quality issues are reevaluated every two years. Which waterbodies are you concerned about? We want to hear from you.

Please take the [short survey linked here](#) or scan the QR code on the right to tell us more.



Map of North Dakota highlighting major river basins used for watershed monitoring and water quality assessments.

Common water quality problems in North Dakota include the presence of excess bacteria (*E. coli*), nutrients (nitrogen and phosphorus), and sediment. Excess amounts of these pollutants can negatively impact the health and usability of our lakes and rivers. The following process is used to assess waterbodies throughout the state and address identified concerns.

### Step 1. Gather Data

The first step to improving surface water quality is to assess the current health of a waterbody. To assess current waterbody health, the WMP monitoring team collects:

- Water chemistry samples from lakes and streams
- Dissolved oxygen and temperature measurements in lakes
- Fish and aquatic insect surveys

Other partners (primarily Soil Conservation Districts) conduct more intensive sampling to look at *E. coli*, nutrients, and sediment in waterbodies that the local community is concerned about.

You can learn more about our monitoring programs and view fact sheets for many waterbodies in the state on our monitoring program's webpage. If you are interested in viewing local water quality data, please visit our Water Quality Data Portal.

### Step 2. Analyze the Data

Next, the data that was collected in Step 1 is analyzed to determine if it meets North Dakota Water Quality Standards. Water Quality Standards set the allowable pollution limits that all surface waters must meet in order to protect the health of fish, wildlife, and humans. The WMP looks at the data collected to determine if the waterbody can be used for things like recreation, drinking or agriculture, and if the waterbody is supporting aquatic life. If the waterbody is not supporting its intended uses, the waterbody is classified as "impaired," and a plan is made to address the water-body's health.

## Tell Us Your Water Quality Concerns!

NDDEQ's Watershed Management Program is conducting a survey to help determine our surface water priorities for the next two years.

We want to hear from you!

What issues have you noticed?

Scan the QR code or [visit the link](#) to take the brief survey.



<https://tinyurl.com/NDDEQWaterSurvey>

### Step 3. Make a Plan

The Clean Water Act requires the state to create a plan to address waterbodies that do not meet the water quality standards. The plan that is created is called a Total Maximum Daily Load, or TMDL. A TMDL document gives information on the amount of a pollutant a waterbody can handle while still meeting water quality standards. The document discusses what pollutant is affecting the water, where the sources of pollution are, and what steps to take to improve the condition of the waterbody. NDDEQ is currently working on TMDLs to address high levels of E. coli in several watersheds around the state. High levels of E. coli is an indicator of fecal contamination which results in the waterbody being classified as “impaired for recreational use.” TMDLs are reviewed and approved by the US Environmental Protection Agency (US EPA).

For more information about TMDLs in North Dakota, visit NDDEQ’s TMDL website.



*A TMDL is currently in development for Willow Creek in northcentral North Dakota, pictured above. Photo courtesy of NDDEQ staff.*

### Step 4. Improving Water Quality

The WMP’s Nonpoint Source Pollution (NPS) Management Program works with federal, state, and local partners on projects that address nonpoint source pollution. The NPS program provides financial and technical assistance for the implementation of Best Management Practices (BMPs). BMPs vary by project but may include septic system renovations, livestock exclusion fencing, alternative water sources for livestock, nutrient management systems, or riparian vegetation plantings. To learn more about the active watershed projects, please visit the NPS program’s webpage.

# Save the Date!

## North Dakota Water Quality Monitoring Conference

March 17-19, 2026

Bismarck, ND

**REGISTER TODAY!**

<https://www.eventbrite.com/e/2026-north-dakota-water-quality-monitoring-conference-tickets-1839515673899>

To address pollution associated with point sources, such as wastewater treatment lagoons, the North Dakota Pollutant Discharge System (NDPDES) program at NDDEQ issues water quality permits. The NDPDES program updates permit conditions to align with the recommendation of the TMDL.

### Step 5. Delisting a Waterbody

As BMPs are implemented throughout a watershed, water quality monitoring continues to assess the effectiveness of the BMPs. The goal of the projects is to see water quality improving and meeting water quality standards. When a waterbody meets water quality standards, the waterbody is “delisted” (no longer considered impaired) and considered safe for its intended uses.

For more information about the Watershed Management Program, please visit our website [https:// deq.nd.gov/WQ/3\\_Watershed\\_Mgmt/default.aspx](https://deq.nd.gov/WQ/3_Watershed_Mgmt/default.aspx), call 701-328-5210, or email the Watershed Management Program’s manager Josh Wert at [jewert@nd.gov](mailto:jewert@nd.gov).



4201 Normandy Street  
Bismarck, N.D. 58503-1324  
701-328-5210 | [www.deq.nd.gov](http://www.deq.nd.gov)



# THE Timmer Chronicles

By Scott Nelson

Well, it happened again. I came in late last night and discovered there were no leftovers in the fridge, and I'd neglected to take anything out to thaw. What to eat now? Oh boy! A gourmet meal, Pork 'n Beans!!

Pork 'n Beans have been around a long time. The first canned Pork 'n Beans appeared during the Civil War and provided sustenance to Union troops. It consisted of beans and chunks of pork in tomato sauce. It has served as a staple food source since then. I still remember when I was a kid, one brand of Pork 'n Beans actually had a chunk of ham in the beans. As time went on, the chunk of ham got smaller, and then for a long time, there was no ham at all, only a small chunk of pork fat. Over time, the chunk of pork fat got smaller till today, where you can no longer find anything but beans and sauce. A quick look at the ingredients still shows "pork," but it must be there in microscopic proportions. Pork 'n Beans still taste good, but I sure miss that chunk of pork fat. Sometimes I fry up some chopped-up bacon to mix with the beans.

Pork 'n Beans are good by themselves but also good as an addition in other dishes. I know one person who claims they won a chili contest by adding a couple of cans of Pork 'n Beans as a secret ingredient. I remember when unexpected company would show up for a meal, my ma would open a couple of cans of beans to stretch whatever we were having. A sure-fire tasty belly filler is fried potatoes and onions mixed with Pork 'n Beans!

Years ago, one of my brothers was working in Montana and learned of a big hundred-mile trail ride in and around the Missouri Breaks. It was pretty much a drinking party on horseback. My brother talked to some of his friends back here about how much fun that would be. They loaded



horses in our old International truck with a stock rack (very few horse trailers around back then) and headed for Montana. They had no idea that they were supposed to get ownership paperwork on the horses before they crossed the state line. The Montana Highway Patrol stopped them with no documentation on the horses. They were almost locked up as horse thieves, but the patrolman gave them a break and let them call our neighbor and local brand inspector, Manual Stegmiller, who vouched for the horses and who owned them.

My brother almost didn't make it back from the trip. One night, after closing a small-town bar, they were galloping over the hills to get to the next camp. Riding in the pitch dark like that, my brother didn't notice a guy wire for a power line. It connected on his forehead and he flopped, butt over teakettle, off the back of his horse. If you look closely, I think you can still see the mark on his forehead today. If the wire had hit him a couple of inches lower, it would have caught him under the chin, surely breaking his neck.

So, what does this have to do with Pork 'n Beans? Well ... what did my brother and his friends get for supplies and sustenance? First of all, lots of beer. Second, a couple of cases of Pork 'n Beans. This was back when Pork 'n Beans still had that little chunk of pork fat. My brother said that by the end of the trip, craving meat, they were all fighting over that little chunk of fat in each can. They had so much fun on their excursion into Montana that they vowed never to do it again. If they had to do it again, they'd still take beer and beans, but also some canned meat!

It's almost supper time. Guess what I'm going to have!

See yuh next time, Scott.





# Wrapping Up 2025, Looking Ahead to 2026

The crews working on the Red River Valley Water Supply Project (RRVWSP) enjoyed a longer than typical construction season thanks to mild spring and fall weather in 2025. Construction activities continued into December with a total of 12 miles of transmission pipe installed to date this year. That brings the total amount of pipe in the ground to 29.75 miles of the 125-mile pipeline.

Carstensen Contracting, Inc. worked on installing 72-inch transmission pipeline for Contracts 5D and 6A this year. Contract 5D includes 10 miles of pipeline

and a trenchless crossing of Pipestem Creek in western Foster County and eastern Wells County. All 10 miles are installed on Contract 5D. There are 7.1 miles of pipeline in Contract 6A, of which 2.65 miles are in the ground. This portion of the project runs from the James River to Eastman Township in Foster County. Carstensen Contracting crews will return in 2026 to finish restoration on 5D and continue pipeline installation on 6A.

Oscar Renda Contracting will return in 2026 to install the one mile remaining on the eight-



mile 5C contract and initiate the land restoration process. Garney Construction finished the restoration on Contract 5B this year.

“We were blessed with weather that cooperated this year, which allowed us to make a lot of progress on the transmission pipeline,” says Kip Kovar, Deputy Program Manager for RRVWSP Engineering and Garrison Diversion Conservancy District Engineer. “Now we’re looking ahead to awarding Contracts 6B, 6C, and 7A.”

The three projects will extend the buried transmission pipeline east. Contract 6B includes a 9.2-mile stretch of pipe from McKinnon Township to Sutton Township in Foster and Griggs Counties. It involves one 96-inch diameter trenchless crossing of a jurisdictional wetland. Contract 6C runs 8.4 miles from Sutton Township to Revere Township in Griggs County. 6C also incorporates two 96-inch diameter trenchless crossings of jurisdictional wetlands and one 96-inch diameter trenchless crossing of a BNSF railroad. Contract 7A is 6.5 miles of pipeline from



Revere Township to Cooperstown in Griggs County, including three 96-inch diameter trenchless crossings of jurisdictional wetlands. The results of the bid process will be announced in the first quarter of 2026 RRVWSP newsletter.

## Lake Agassiz Water Authority Election: Lisbon Secures Seat on Board of Directors



Lake Agassiz Water Authority (LAWA) held elections in September during the North Dakota League of Cities conference. Under state law, the LAWA board of directors includes one seat for a city located east of Highway 1 with a population of less than 5,000. The city of Lisbon won the seat previously held by the city of Mayville. Mayor Tim Meyer was officially appointed to represent Lisbon on the LAWA Board in October. City Council member Benjamin Gemar was named Lisbon’s alternate on the LAWA board.

Also during the LAWA election at the League of Cities conference, the board of directors seats held by the cities of Fargo, Grand Forks, West Fargo, Valley City, and Carrington were reelected. In February 2026, LAWA will hold elections for the board’s water system members at the North Dakota Rural Water Systems Association’s 40<sup>th</sup> Annual Water Expo in Fargo. The following water systems currently hold seats on the LAWA Board: Southeast Water Users District, Northeast Regional Water District, East Central Regional Water District, Cass Rural Water Users District, Walsh Rural Water District, Moorhead Public Service, and McLean-Sheridan Rural Water District. The cities of Wahpeton, Devils Lake, and Hunter are associate members of LAWA.

# INTRODUCING Tim Meyer, LAWA Board Member



There is a new face on the Lake Agassiz Water Authority (LAWA) board of directors. Lisbon’s mayor, Tim Meyer, knows his city’s needs very well. He spent the past 20 years serving on the Lisbon City Council – eight as a councilman and the past 12 as mayor. Tim’s involvement in LAWA is a natural progression in his regional water initiatives involvement.

“The city of Lisbon and Southeast Water Users have a partnership with the water treatment plant in Lisbon. The raw water currently is supplied to the treatment plant by three rural wells and three wells within the city of Lisbon. The city serves as the operator of the water plant. I serve on this joint board as mayor of Lisbon,” he explains. Tim also previously served on the Devils Lake Outlet Advisory Board.

“As a LAWA director I look forward to being a voice for the smaller communities: finding solutions for financial challenges smaller users face to remain part of the Red River Valley Water Supply Project, learning more about the long-range plans for operating the project once it’s complete and finding solutions for these issues by working with all entities involved,” says Tim.

The Lisbon mayor says once the RRVWSP is completed, the supplemental and emergency water supply will provide domestic and industrial opportunities for current and future generations. “I have seen the Sheyenne River here down to a trickle, to a level you could walk across. I have also been involved in the farming industry for years, and I have seen the effects of drought. The RRVWSP is a very wise investment for the State of North Dakota with the State Legislature taking the initiative to fund the project,” he says before adding, “This project gives the State of North Dakota the rights to the Missouri River water before downstream entities claim this water.”

Outside of his LAWA and mayoral duties, Tim has worked for Titan Machinery for 42 years as a service manager. He and his wife of 38 years, Elise, have twins named Justin and Abbey who turned 30 this year. Abbey and her husband, John, have provided Tim and Elise with two wonderful grandchildren named Vernalee and Nolan. Aside from spending time with his family, Tim enjoys woodworking, house projects, and being outdoors in his yard.

Little Dam Repurposing Project  
Valley City, North Dakota

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*Cory Chorne, PE, AE2S Engineer*



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

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1,000 to 5,000 Population \$325

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Over 10,000 Population \$1,300

**SUSTAINING MEMBER** \$1,300

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TO JOIN!**



**PROTECT, DEVELOP, AND MANAGE NORTH DAKOTA'S WATER**



## 2026 CALENDAR

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- Feb. 2 Southwest Water Authority's Board of Directors Meeting, Operations and Maintenance Center Office, Dickinson
- Feb. 2-5 National Rural Water Association's Rural Water Rally, Washington, D.C.
- Feb. 10-12 North Dakota Rural Water Systems Association's 40th Annual Water EXPO & Conference, Delta Hotels by Marriott, Fargo
- Feb. 12 North Dakota State Water Commission Meeting
- March 2 Southwest Water Authority's Board of Directors Meeting, Operations and Maintenance Center Office, Dickinson
- March 12 Garrison Diversion Conservancy District's Executive Committee Meeting, Carrington
- March 19 North Dakota State Water Commission's Pre-Commission Meeting
- April 6 Southwest Water Authority's Board of Directors Meeting, Operations and Maintenance Center Office, Dickinson
- April 9 North Dakota State Water Commission Meeting
- April 16-17 Garrison Diversion Conservancy District's Board of Directors Meeting, Carrington
- April 27-29 National Water Resources Association's Policy Conference, Royal Sonesta WDC Capitol Hill, Washington, D.C.
- May 4 Southwest Water Authority's Board of Directors Meeting, Operations and Maintenance Center Office, Dickinson
- May 21 North Dakota State Water Commission's Pre-Commission Meeting
- June 1 Southwest Water Authority's Board of Directors Meeting, Operations and Maintenance Center Office, Dickinson
- June 11 North Dakota State Water Commission Meeting
- June 18 Garrison Diversion Conservancy District's Executive Committee Meeting, Carrington
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For more information or if you would like a water event listed here, call 701-223-8332 or email [jellingson@ndwater.net](mailto:jellingson@ndwater.net).  
Submissions are due the first Monday of each month preceding the next issue.

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