OFFICIAL BULLETIN

VOLUME 111

JANUARY 2023 - APRIL 2023

NUMBERS 1-6

SPRING ISSUE

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

Incidentally, so do we.



There is no B-Team.

Editor

Jake Schafer

Business Manager

Laura Lee

Contributing Authors

Drinking Water Program Staff; Operator Certification, Training and Facility Inspections Unit Staff; and Conference Sections

Members of the conference are indebted to those members and others who have contributed articles and other materials for this publication.

If you are interested in submitting articles or pieces for publication, please contact Jake Schafer at jrschafer@nd.gov

OFFICIAL BULLETIN

Official Publication of the North Dakota Water and Pollution Control Conference

Spring Issue

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NOS. 1-6

PRESIDENT - Lance Meyer

-

PRESIDENT-ELECT - Scott Schneider

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ASSOCIATE DIRECTOR - Karli Frohling

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On the cover: Calm after the storm - Rachel Iverson Schafer, 2023

The objectives of this Conference shall be: the advancement of the knowledge of design, construction, operation and management of water and wastewater systems; the promotion and encouragement, through annual meetings or otherwise, of an exchange of information and experience among its membership; the promotion and encouragement of the protection of public health and improved environment through the construction and efficient operation of water supply and wastewater treatment facilities; and the promotion of water and wastewater system operator education and certification programs.

Article II of the Constitution of the North Dakota Water and Pollution Control Conference

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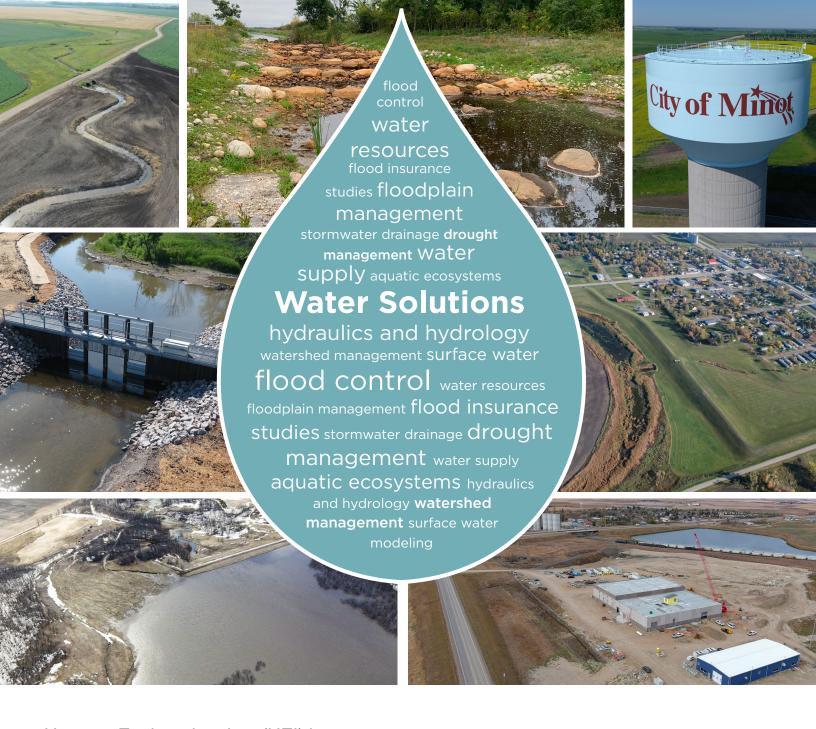
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NDWPCC JOINT BOARD OFFICERS MEETING MINUTES January 10, 2023 Online - Teams

A meeting of the Joint Board of Directors of the North Dakota Water and Pollution Control Conference (NDWPCC); North Dakota Water Environment Association (NDWEA); North Dakota Chapter of the American Public Works Association (NDCAPWA); North Dakota Section of the American Water Works Association (NDAWWA); and the North Dakota Chapter of the American Stormwater and Erosion Control Association (NASECA-ND) was held on January 10, 2023, online through Teams. A spreadsheet was generated indicating those in attendance and will be available upon request.

The meeting was called to order at 9:02 a.m.by NDWPCC President Lance Meyer.

For the first order of business, President Meyer called for a motion to dispense with the reading of the minutes from the October 11, 2022, meeting and approve the copy emailed to all board members. Jake Schafer so moved, Scott Schneider seconded, and the motion carried.

Next, President Lennington called for the Treasurer's Report. Shawn Heinle read the 2022 NDWPCC year-end financial report, which showed a net loss of \$18,327.67 and total assets of \$123,521.74. President Meyer asked for any discussion. Secretary Heinle explained that part of the deficit was due to publications of the Official Bulletin. He also explained that the Conference had not yet received the profits from UND Services for the 2022 Conference, which would total \$17,409.40. President Meyer called for a motion to approve the Treasurer's Report. Tyrel Clark so moved, Greg Wavra seconded, and the motion carried.

Next, President Meyer called for any old business. First, the Auditing Committee, which will meet prior to the next May board meeting. Secretary Heinle will send a Doodle Poll to Alan Kemmet, Scott Schneider, and Greg Wavra, so as to choose a time to meet and go over the books.

Next, Jake Schafer discussed the survey of members who would still like a hard copy of the Official Bulletin instead of an online version. The was some discuss on volunteers from the member groups to help with providing articles. Also, Miranda Kleven asked for timelines for when items need to be submitted and if Mr. Schafer would email those dates.

Other old business included the previously discussed liability waiver for the conference. Mr. Schafer is working with Bair Law Firm to create a liability waiver, which will be included with future conference registrations.

President Meyer called for any other old business, being none moved to new business. Secretary Heinle presented the current draft for spring trainings and asked for presentation submissions to fill in the open times in the schedule. There was discussion on topic focus, to which Secretary Heinle indicated operators prefer topics that can be applied to their day to day duties. A question was posed if various water and wastewater companies ever present at the trainings, to which Secretary Heinle indicated that in the past they have presented. Another question was asked if operators themselves present, Secretary Heinle said they can and have, but it is a time commitment which deters most operators. Jim Kershaw volunteered to present but will need a topic suggestion.

Scott Schneider asked Secretary Heinle how UND services went and if he would continue using them. Secretary Heinle said he liked the service and it took a lot of the workload off himself and Assistant Secretary Schafer, which allowed them to be more involved with interacting with the

conference. A survey conducted by UND Services indicated attendees were happy with the registration process and the Conference but had issues with the venue used.

President Meyer then posed the question on why there was no partial credit with the Conference. This lead to a lengthy discussion, in which the Department explained their position and reasons for the policy. There as also discussion on some alternatives.

No other new business.

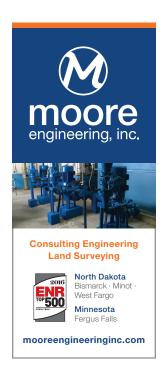
President Meyer then called for a motion to adjourn. Motion made by Jake Schafer, seconded by Alan Kemmet. Meeting adjourned.

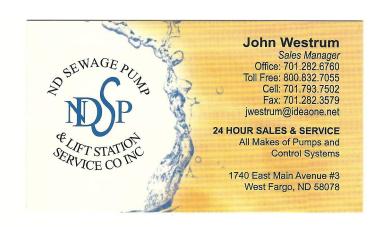
The meeting adjourned at 10:02 a.m.

Respectfully submitted,

Shawn Heinle Secretary/Treasurer

SH:II







NDWPCC JOINT BOARD OFFICERS MEETING MINUTES May 9, 2023 Online - Teams

A meeting of the Joint Board of Directors of the North Dakota Water and Pollution Control Conference (NDWPCC); North Dakota Water Environment Association (NDWEA); North Dakota Chapter of the American Public Works Association (NDCAPWA); North Dakota Section of the American Water Works Association (NDAWWA); and the North Dakota Chapter of the American Stormwater and Erosion Control Association (NASECA-ND) was held on May 9, 2023, online through Teams. A spreadsheet was generated indicating those in attendance and will be available upon request.

The meeting was called to order at 10:03 a.m.by NDWPCC President Lance Meyer.

For the first order of business, President Meyer called for a motion to dispense with the reading of the minutes from the January 10, 2023, meeting and approve the copy emailed to all board members. Greg Wavra so moved; Gary Zuroff seconded. Jim Lennington indicated an error in the fourth paragraph, Secretary Heinle said he would amend the error. The motion was then approved.

Next, President Meyer called for the Treasurer's Report. Shawn Heinle read the May 8th NDWPCC financial report, which showed a current net profit of \$15,792.46 and total assets of \$136,234.20. President Meyer asked for any discussion. President Meyer called for a motion to approve the Treasurer's Report. Gabe Schell so moved, Karli Frohling seconded, and the motion carried.

Next, President Meyer called for any old business. First, Secretary Heinle presented the numbers and issues with the 2023 Operator Spring Trainings. Two of the water classes had to be cancelled due to the weather. Attendance at the other two was 37 and 42 attendees. There was a struggle to obtain enough presentations for the wastewater classes. The classes were presented with a shortened schedule. There were 33 and 31 attendees. A **BIG THANKS** to everyone who presented at the classes, your time and knowledge are greatly appreciated.

To address these issues next year, Secretary Heinle said he has reserved April 29-May 1 and May 6-10 at the Russell Reid Auditorium in the Heritage Center for classes next spring. The auditorium seats 240 attendees. The first week will be water and the second week will be wastewater. The idea is twofold, first, by reducing the training dates, but increasing the number of attendees, it will be less of a commitment for presenters, especially out-of-town presenters. Second, by moving the dates back, avoid potential weather cancellations. Secretary Heinle also said the ND Department of Environmental Quality would try to provide the bulk of the presentations next year. Those in the meeting agreed that it sounded like a good plan.

Next, Jake Schafer indicated that a liability waiver had been obtained, the lawyer he was in contact with said the Conference should consider obtaining liability insurance also. Mr. Schafer also discussed a media waiver also be added to cover photos taken for the Official Bulletin. Jill Peterka from UND services said they will be added to the registrations and the conference website. Mr. Schafer then discussed the survey sent on making the Official Bulletin digital. Of those who responded, ninety percent wanted a digital version instead of a hard copy. A few hard copies will be printed for historical record. Gabe Schell asked if there was specific feedback from the advertisers on the switch. Mr. Schafer indicated they were part of the survey, but he did not have specific data on them. Jeannie Shultz Mock then asked about reducing the advertising fee. Secretary Heinle said it might be a possibility, but they will use the next year to evaluate income to cost ratio with the change to digital.

Last old business was to discuss separating the NDWEA checking account from the Conference accounts. Secretary Heinle said he had previously spoken to WEA members on the topic but had not heard a reply. No WEA members were in attendance, but those who were thought it was a good idea. Secretary Heinle indicated he would again reach out to the WEA members on the subject.

President Meyer asked if the ND Department of Environmental Quality would again consider giving partial credits for the Conference. Secretary Heinle said the Department would discuss the subject.

President Meyer called for any other old business, being none moved to new business.

Secretary Heinle discussed the upcoming fall conference, October 17-19, 2023, at the Alerus in Grand Forks. He said he signed a contract with UND services who will again handle registrations and other logistics on behalf of the Conference. He also asked for volunteers to be on the Local Arrangement committee to coordinate and help with the upcoming conference. Lisa Botnen and Jeannie Shultz Mock volunteered and said they would ask others.

Secretary Heinle also asked for volunteers from each of the member groups to be on the Presentation Committee. The volunteers would help evaluate the abstracts and make sure their group's presentation times are fulfilled. Gabe Schell asked when Secretary Heinle would need the volunteers. Secretary Heinle said by the end of the month, he will pass the abstracts on during the month of June for review, and the committee will meet in July to pick the presentations. This allows time to notify those presenters chosen. Jill Peterka also indicated an abstracts tab will be added to the conference website for submittal.

Gabe Schell also asked about conducting the Snow Operators training again at the conference. He said it was well attended last year. Secretary Heinle indicated it would be fine and they will coordinate with UND services to line up a room, day, and time.

No other new business.

President Meyer then called for a motion to adjourn. Motion made by Gabe Schell, seconded by jake Schafer. Meeting adjourned.

The meeting adjourned at 10:35 a.m.

Respectfully submitted,

Shawn Heinle Secretary/Treasurer

SH:II

Backflow Mitigation

By: Jake Schafer – NDDEQ

Recently, the North Dakota Department of Environmental Quality (NDDEQ) has begun an enforcement program aimed at backflow prevention and cross connection-control. This is not a new requirement, but really an enforcement push on existing state law, the North Dakota Plumbing Code, and the Uniform Plumbing Code. The aim of this article is to provide readers of the North Dakota Water magazine more information on backflow prevention and why these types of initiatives are so important.

What is backflow?

Within water distribution systems, there exist points called cross-connections where non-potable water can be connected to potable water sources. At these points, when pressure in the distribution system drops or when an external system operating at a higher pressure than the distribution system is connected, then chemical or microbiological contamination could be introduced into the potable water distribution system. There can be any number of backflow causes. The most common causes, outside of single-family homes, are water main breaks and high-pressure equipment. Examples include chemical injection equipment or pressurized storage systems.

Although this enforcement program primarily focuses on public water systems and communities, participation on the customer side is also very important. In fact, most backflow events occur because of cross-connections on the customer side. Homeowners, business owners, and property managers can play a major role in protecting the public water supply and thus the health and safety of their neighbors as well.

What is required of public water systems?

Public water systems are required to provide cross-connection control within their systems under North Dakota Administrative Code Chapter 33.1 Section 17-01-19. Compliance with this requirement is achieved by implementing a Backflow Prevention and Cross-Connection Control Program. Every public water system in North Dakota is required to adopt a written Backflow Prevention and Cross-Connection Control Program, of which there are two types.

The first type of Backflow Prevention and Cross-Connection Control Program is known as a Containment Program. Under the Containment Program, public water systems are required to survey the system, identify all potential cross-connections that occur within publicly owned buildings or facilities and ensure that all such hazards are protected through the proper backflow prevention device or assembly. This program only applies to publicly owned locations (owned and operated by the same owner and operator of the water system). It includes

locations such as city halls, community centers, fire halls, and public parks. Participation in this type of program is required and constitutes the bare minimum level of protection for the community.

The second type of Backflow Prevention and Cross-Connection Control Program is known as a Comprehensive Program. Under the Comprehensive Program, public water systems are required to survey the system, identify all potential cross-connections in locations other than single-family housing and ensure all such hazards are protected through the proper backflow prevention device or assembly. This program applies to all commercial, industrial, and multifamily housing in the community as well as the publicly owned buildings and facilities. This type of program may be voluntarily adopted by a community but constitutes the industry standard best practice for backflow prevention.

There are several resources available to help public water systems implement the programs mentioned previously. The best of which is the North Dakota Department of Environmental Quality Backflow Prevention and Cross-Connection Control website at https://deq.nd.gov/mf/bpccc/. This website provides information on backflow and the need for backflow prevention programs through the Guidance Document, as well as forms and templates to assist with program implementation by way of its index of appendix documents.

What is required of individuals?

While public water systems are required to implement backflow prevention programs, individual participation is just as important. Business owners and property managers may be required to help survey their properties and even organize the installation and testing of any required backflow prevention assemblies at their location if their community adopts a Comprehensive Backflow Prevention and Cross-Connection Control Program. In fact, most of these locations should already have protection in place and be testing as required if the location is up to current plumbing code.

Additionally, homeowners, business owners, and property managers can prevent backflow incidents by simply adopting safe water use practices. These measures include adherence to plumbing code, the use of hose bib vacuum breakers or other backflow prevention devices/assemblies, and only filling containers from an air gap (not submerging a hose or fixture).

Backflow events don't only present a danger to individuals, but they can also be costly for communities to rectify. With homeowners, private citizens, and public water supply systems working together, we can better ensure the health and safety of North Dakota residents and protect our valuable water infrastructure.

Operators Pass Certification Examinations (January - April 2023)

Congratulations to the Operators

Operator Certification Type/Grade

Aaron Waller Wastewater Collection 2

Alan Smith Water Distribution 1

Andrew Krueger Water Treatment 2

Benjamin Ratcliff Water Distribution 2

Brandon Sandberg Water Distribution 2

Brett Keith Water Distribution 1

Brett Thompson Wastewater Collection 2

Brian Schmidt Water Distribution 2

Coleton Schmidt Water Treatment 4

Collin Kittelson Water Treatment 4

Dan Janisch Wastewater Collection 3

David Vigen Water Treatment 2

Dillon Reiner Wastewater Collection 2

Douglas Smith Water Distribution 1

Eric Joramo Wastewater Treatment 1A

Wastewater Collection 1A

Jace Posten Water Treatment 3

James Walker Water Treatment 2

Jeff Shaffer Water Distribution 2

John Kotaska Water Treatment 3

Jordan Lorenzen Water Treatment 1

Water Distribution 1

Joseph Kassian Water Treatment 1

Julius Wakam Water Distribution 2

Operator

Justin Breidenbach

Justin Carlson

Kevin O'Keefe

Mark Staskywicz

Matthew Christensen

Matthew Hager

Paul Montplaisure

Philip Markwed

Raymon Fernando

Robert Skurdal

Ryan Morrow

Taylor Galeazzo

Travis Thielen

Wyatt Sherman

Zachary Anderson

Zachery Bredlow

Certification Type/Grade
Water Distribution 3

Wastewater Collection 3

Water Treatment 2

Water Distribution 1A Wastewater Collection 1A

Water Treatment 4

Water Treatment 2

Wastewater Collection 2

Water Treatment 3

Water Treatment 1

Water Treatment 2

Water Distribution 2

Water Distribution 2

Water Distribution 3

Water Treatment 1

Wastewater Treatment 1 Wastewater Collection 1

Water Treatment 1 Water Distribution 1



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Jake Schafer Bismarck, ND

Are you an industry professional with some insights to share? Are you a vendor who would like to reach a targeted audience with your products? Are you a small-town water operator who would like to address an issue you believe to be important? If so, please reach out! Have your article or advertisement placed in the NDWPCC Official Bulletin. Three times a year we are able to reach nearly 1000 subscribers (including several Universities). As the editor, I aim to make the Official Bulletin as good as it can be. However, I need your help to do so. I would love to include what you have to offer.

Articles must be:

- 1 to 20 pages
- MS Word or PDF format
- Submitted via email

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- Submitted via email
- * Cannot accept 3rd party file transfer services*
- * If color, must be in color. If B&W, must be black and white*
- * Invoice/Ad order form must be turned-in along with ad*

Submission due dates:

- May 1st (spring)
- September 1st (conference)
- January 1st (winter)

Thank you all for your continued support of the North Dakota Water and Pollution Control Conference, and the NDWPCC Official Bulletin. For submissions of both advertisements and articles, please contact at me at Jrschafer@nd.gov. I look forward to working with you!

Jake Schafer Editor - NDWPCC Official Bulletin





Attendance Roster: 63rd Annual Water and Wastewater Operator Training Sessions

<u>Operator</u>	vironmental Training Center, E Employer	Bismarck-Training Credits Issued Operator	<u>Employer</u>
Alan Smith	South Central Regional Water District	Cole Berger	Dakota Gasification
Alan Lundstrom	City of Leeds	Coleton Schmidt	City of Mandan
	·	Corey Berger	City of Surrey
Ann Oberg	McLean Sheridan Rural Water District	Cory Krueger	JR Simplot
Arlyn Johnson	City of Mohall	Courtney Swart	Dakota Gasification
Austin Knowlen	City of Bismarck	Dakota Williams	City of Watford City
Austin Lovejoy	City of Beulah	Dallas Sailer	City Of Stanton
Benjamin Valdez	City Of Minot	Damian Emly	North Prairie Regional Water District
Bill Geiger	City of Bismarck	Dan Roller	Southwest Water
Bill Middleton		Dan Ronei	Authority
Blaine Kamoni	Jamestown	Dan McCabe	Public Works
Brandon Biberdorf	All Seasons Water Users District	Dana Reidburn	City of Jamestown
Duandan Dadilla		Daniel Green	City of Alexander
Brandon Padilla	City of Devils Lake	Daniel Karr	Public Works
Brenton Haynes	National Park Service	Darin Opperude	City of Minot
Brooks Anhorn	City of Bismarck		•
Bryan Hall	City of Hillsboro	Darrell Sweep	City of Fargo
Chad Stern	City of Hebron	Dave O'Kelley	City of Harvey
Charles Hanson	JR Simplot	David Ludwig	City of Cooperstown
	•	David Taylor	City of Ray
Clint Cogdill	State Water Resourse	David Allmuth	City of Crosby
Clint Klemisch	City of Valley City	David Ludwig	City of Cooperstown
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Cody Kummer	City of Watford City	Dean larson	City of Wilton
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Don Vetter	South Central RWD	Joshua Vance	Theodore Roosevelt
Dustan Ketterling			National Park
Elroy Grondhovd	South Central RWD	Julius Wakam	MCWRD
Eric Joramo	City of Meville	Justin Seifert	City of Minot
Gary Bovkoon	City of Beulah	Justin Keeler	City of Bismarck
Gary Lawson	City of Cavalier	Kevin Bernier	City of Abercrombie
Gary Kaylor	City of Upham	Kevin Singer	City of Richardton
Gerald Bousson	City of Garrison	Lee Adamson	JR Simplot
Gregory Ficker	National Park Service	Leo Walter	City of Velva
Heath Schaffer	City of LaMoure	Leon Little Owl	Fort Berthold Rural Water
Hunter Wolf	South Central Regional Water District- Emmons	Logan Carns	City of Watford City
Jacob Waldo		Lonnie Arp	City of Emerado
James Murphy	Southwest Water Authority	Lucas Ott	Cass Rural Water District
James Walker	City of Minot	Luke Holen	City of Alexander
Jamey Weinmann	City of Harvey	Luke Holen	City of Alexander
Jason Newman	City of Valley City	Marissa Dinsmoore	City Of Minot
Jason Faller	City of Watford City	Marlin Block	City of Beulah
Jay Alfson	City of Hillsboro	Matt Hooper	City of Watford City
Jeff Harildstad	Northeast Regional Water District	Matt Richard	City of Washburn
Jeff Edland	City of Glenfield	Michael Jensen	City of Hebron
Jeremy Praska	City of Grafton	Nate Jeffries	City of Watford City

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Nicolas Chapman	City Of Stanton	Tony Dillon	City of Scranton
•	Ž	Travis Thielen	
Philip Gustafson	City of Dodge	Travis Doll	City of Bismarck
Raymond Kazandjian	City of New Salem	Trevor Seelig	City of Lisbon
Rick Olson	City of Sentinel Butte	Hevor Seeing	City of Lisboil
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Samantha Oestreich		Wyatt Sherman	City of Jamestown
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As water professionals, we can create a better path—a path that leads to public appreciation for the value of water, investment in our essential water infrastructure, and a better quality of life for our states and communities. WEF's Water Advocates Program is a simple and effective way for you to become more involved with engaging elected officials, the public, and other interested stakeholders on important water issues. The Water Advocates Program provides training and engagement to promote grassroots advocacy with the goal of creating a network of trained water advocates not only in every member association, but also in every state and U.S. Territory.



Please visit the Water Advocates website at http://bit.ly/wef-water-advocates and let your voice be heard, or email Amy Kathman at WEF to join the Water Advocates program: akathman@wef.org

Include your name, title, organization, address, e-mail, and telephone number. After you sign up, you will be in the Water Advocates program and receive important announcements about bite-size actions you can take to help, right from your computer.









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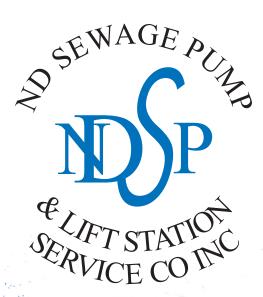
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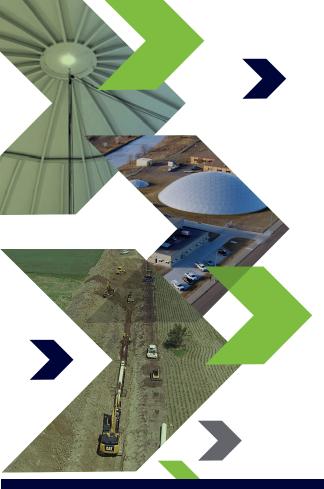
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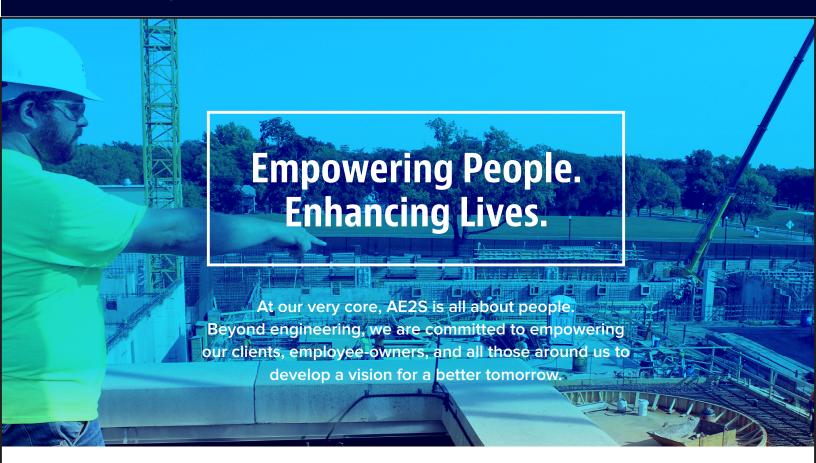
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Water Engineering and Beyond

State Revolving Funds Overview

The State Revolving Fund (SRF) Programs offer below-market interest rate loans (currently at 2 percent) to political subdivisions for financing projects authorized under the Clean Water Act and Safe Drinking Water Act. These programs operate nationwide with funding from the U.S. Environmental Protection Agency to provide loans to maintain and improve infrastructure that protects our vital water resources. Loans are awarded to projects listed on the project priority list based on eligibility and repayment ability.

Eligible Projects

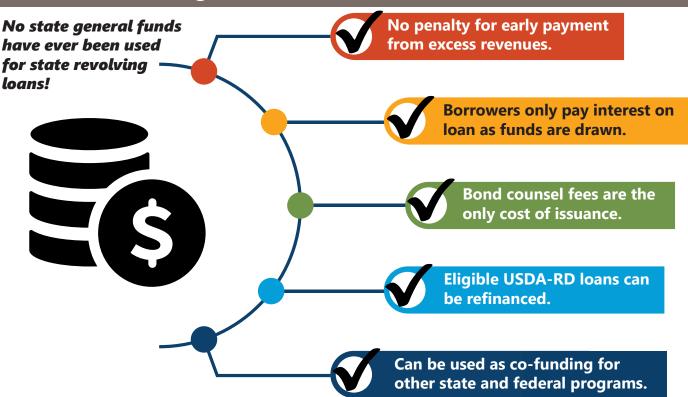
Clean Water State Revolving Fund

- Wastewater Treatment
- Sewer Systems
- Stormwater Projects with a Water Quality Benefit
- Landfill Closure and Leachate Collection/Treatment
- Water Meters
- Water Reuse
- Energy Efficiency Plans
- Necessary Land Acquisitions for Eligible Projects

Drinking Water State Revolving Fund

- Source Water
- Treatment
- Storage
- Water Distribution
- Consolidation of Water Systems
- Water Security
- Energy Efficiency Plans
- Administrative Buildings

Financial Advantages



Project Prioritization

Clean Water State Revolving Fund

- Water Quality Improvements
- Affordability
- Permit Compliance
- Readiness to Proceed
- Green Project Reserve

Drinking Water State Revolving Fund

- Water Quality
- Water Quantity
- Affordability
- Infrastructure Adequacy
- Consolidation or Regionalization
- Operator Safety

Return on Investment

	CWSRF	DWSRF	Total
Total Federal Grants Received	\$258,004,688	\$240,645,767	\$498,650,455
Total Project Assistance Disbursed	\$797,544,842	\$682,140,000	\$1,479,684,842
Return on Investment	309%	283%	297%
Number of Projects	338	311	649

As of 12/31/2022

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How to Prevent Sewer Backups By Bill Gefroh

Have you ever had a plugged sink or sewer pipe blockage in your home? Keep reading on how to prevent blockage and backups. People do not think about this until one day they have a huge clog and have to spend a lot of money to fix it. A leading cause of toilet overflows in homes is from running out of toilet paper. Without toilet paper, your friends and family tend to grab the nearest facial tissue, wipe or paper towel, which do not disintegrate like toilet paper and tend to get hung up in the plumbing causing the toilet to overflow. Even if what you flush escapes your pipe, it can affect downstream pipes and cause sewer backups in neighborhood homes causing costly damage. The two most common causes of sewer backups are usually due to clogs and damage from tree roots.

Clogs – they are created by your actions

If just one toilet, sink or tub seems to be giving you a problem, it may be just a clog in that drain. If every flush creates a backup in your home, you likely have a blockage in your service line or the City sewer main.

Most clogs can be avoided. Here are a few tips that will help keep your sewer line clear.

- Use the trash can, not the toilet Paper towels, facial tissues, baby wipes or other wipes (even if it says flushable), napkins, diapers, hair, coffee grounds, Q-tips, dental floss, cat litter, feminine hygiene products, condoms, and other waste should only go into your trash for disposal. Toilets are only for the three Ps: Poo, Pee, and Toilet Paper. Anything else can clog your drains. Unlike toilet paper, wipes do not disintegrate, they can twist and become stronger, clogging pipes and sewer pumps, while attracting other materials to form solid masses of flushed items.
- **Beware of Hair** Hair will catch and stick to other items and is very difficult to get out of piping once it gets in. Keep hair from going into the pipes by using a fine drain screen to catch hair in your bathtub and shower and dispose of it properly in the trash. Flushing hair down your bathroom sink is the leading cause of sink clogs.
- Use your garbage disposal sparingly Limit the disposal of food scraps through your garbage disposal. This will reduce solids from building up on the interior of your piping, which ultimately cause obstructions or blockages in your sewer line. Scrape food into the trash before doing dishes, even if you have a disposal.
- **Keep grease out of your drain** Fats, oils, and greases are not just bad for your arteries and your waistline; they are bad for sewers too. Grease and fat, although liquid when poured down your drain, will harden within your plumbing, collecting debris and creating a stubborn clog. Allow grease to cool and scrape into the trash. Dry wiping greasy pans will further help to reduce grease clogs.

Tree Roots – actions by nature

Another common cause of home sewer backups is tree roots. Although plastic lines have now become the norm, older homes may have cast iron and clay piping, which have more joint areas for the tree roots to intrude and create obstruction or blockage. Even if the area directly above your sewer line is free of trees, roots from a neighboring tree could be the cause of the blockage.

- If tree roots are an issue, in the spring and fall flush a quart of chlorine bleach and let it set overnight in your service line to kill the roots within the pipe, it will help to prevent regrowth. Tree root foaming agents that touch the roots may be effective too.
- Cleaning and placing a hard liner (slip lining) within your sewer service line is an option to consider with tree root issues if the pipe is in good condition.
- If your home is older, backups could be caused by broken, cracked or collapsed lines. Digging up and replacing the sewer service line may be the best option; however, it may be costlier.

To learn more, including how to get rid of things you no longer want or need, visit us on the Web at www.bismarcknd.gov or call Bismarck Public Works at 701-355-1700.

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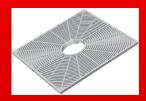
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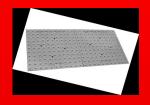
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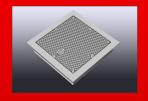
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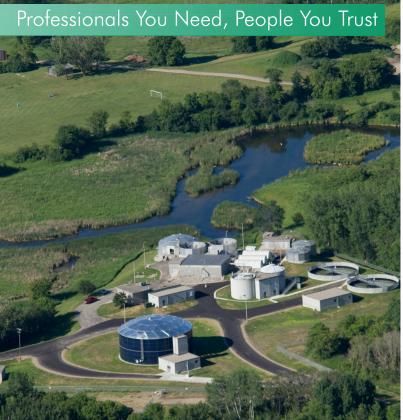
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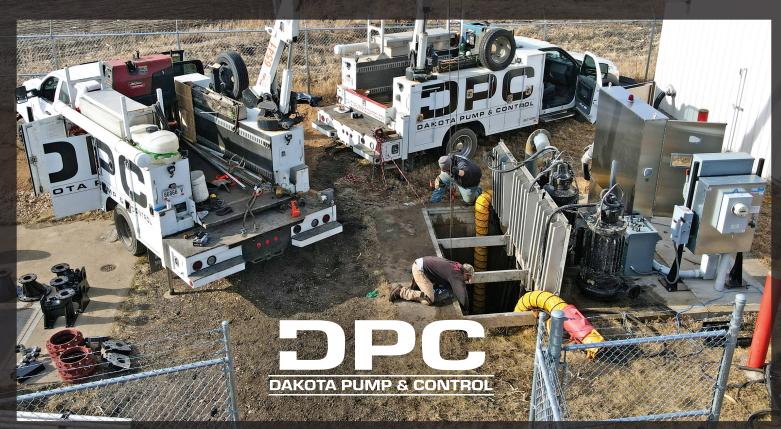
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Drinking Water Prog	gram Directory	
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Acrylamide and Epichlorohydrin Rule	Roxela Friesz	701-328-529
Arsenic Rule	Stacey Herreid	701-328-528
Backflow Prevention Cross-Connection Control Program	Jacob Schafer	701-328-637
Consumer Confidence Reports	LeeAnn Tillotson	701-328-529
Disinfectant/Disinfection Byproducts Rule (TTHM, HAA5) Stage 1 and Stage 2 Rule	Olivia Griffith	701-328-662
Electronic Reporting Information System (ERIS)	All Staff	701-328-521
Filter and Backwash Recycle Rule	Roxela Friesz	701-328-529
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Inspections: Northwest	Bryce Peters	701-328-520
Inspections: Southeast	Jacob Schafer Mike Trythall	701-328-637 701-328-526
Inspections: South Central	Marlon Bell	701-328-662
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Lead and Copper Rule - future	Alicia Andes	701-328-529
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Total Coliform Rule	Maggie Siebel Josh Seerup	701-328-52 701-328-52
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Volatile Organic Chemicals (VOCs)	Olivia Griffith	701-328-662
Central Phone: 701-328-5211		Fax: 701-328-5200
North Dakota Pollutant Discharge Elim	ination System Program Direc	tory
Program Administrator	Marty Haroldson	701-328-523
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