2024

Annual DRINKING WATER

QUALITY REPORT

NORTHEAST REGIONAL WATER DISTRICT

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We're pleased to present to you the 2024 ***Annual Drinking Water Quality Report***. This report is designed to inform you about the safe clean water we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Northeast Regional Water District (NRWD) purchases its water from the City of Devils Lake water treatment plant and also supplies approximately 60.69 percent from the NRWD's groundwater source in the Icelandic Aquifer west of Cavalier.

The North Dakota Department of Environmental Quality has prepared a Source Water Assessment for the City of Devils Lake and NRWD. This information will be made available at the respective offices during normal business hours. The City of Devils Lake & NRWD participate in the wellhead protection program and copies of the wellhead protection plan are available from the City of Devils Lake & NRWD offices during normal business hours. Information of Devils Lake Source Water Assessment can be obtained from the City of Devils Lake, contact Joel Myhro, public works superintendent. Our public water system, in cooperation with the North Dakota Department of Environmental Quality, has completed the delineation and contaminant/land use inventory elements of the North Dakota Source Water Protection Program. Based on the information from these elements, the North Dakota Department of Environmental Quality has determined that Devils Lake's ground water source from the Spiritwood Aquifer near Tolna is "moderately susceptible" to potential contaminants and the Icelandic Aquifer west of Cavalier groundwater source is "susceptible" to potential contaminants.

However, NRWD's board of directors has taken an aggressive position toward protecting the quality of the water source in the Icelandic Aquifer, particularly because of the fragile, leachable sands in this area. Within recent years, the district has purchased approximately 1,800 acres of land to establish a wellhead protection area around the production wells. Much research had been done to determine groundwater movement, annual recharge over the well field, and generally restricting the land to only "water-friendly" uses. In addition, restricted covenants with some area landowners have been entered into, whereas, those landowners agree to only "water-friendly" land use practices. The boundaries of the land purchased were determined on the basis of direction of groundwater movement and the zone of influence of each production well.

Northeast Regional Water District is pleased to report that our drinking water is safe and meets federal and state requirements.

This report shows our water quality and what it means.

If you have any questions about this report or concerning your water utility, please contact Jeremy Schuler, Manager, at (701) 265-8503. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the last Thursday of each month at 8:00 AM in Northeast Rural Water District Langdon Branch or Cavalier Branch office. If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call Jeremy at the number listed above.

Northeast Regional Water District would appreciate it if large volume water customers would please post copies of the *Annual Drinking Water Quality Report* **in conspicuous locations or distribute them to tenants, residents, patients, students, and/or employees, so individuals who consume the water, but do not receive a water bill, can learn about our water system.**

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land, or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Northeast Regional Water District routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2024. As authorized and approved by EPA, the state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data [e.g., for inorganic contaminants] though representative, is more than one year old.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, which come from a variety of sources such as agriculture, urban stormwater runoff and residential uses. (Pesticide: Generally, any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest. Herbicide: Any chemical(s) used to control undesirable vegetation.)

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

In the tables on pages 3 thru 5 you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Not Applicable- (N/A)

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter (μg/l)- one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Picocuries per liter (pCi/l) - picocuries per liter is a measure of the radioactivity in water.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level (AL)- The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level **(MCL)-** The "Maximum Allowed" (*MCL*) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The "Goal" (*MCLG*) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

2024 TEST RESULTS FOR THE CITY OF DEVILS LAKE

Contaminant	MCL	MCLG	Level Detected	Unit Measurement	Range	Date (year)	Violation Yes/No Other Info	Likely Source of Contamination
Inorganic Contaminants								
1. Nitrate-Nitrite	10	10	1.3	ppm	N/A	2024	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
2. Barium	2	2	0.0409	ppm	N/A	2017	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
3. Fluoride	4	4	0.809	ppm	N/A	2017	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
4. Arsenic	10	0	4.29	ppb	N/A	2021	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production waste
Stage 2 Disinfection By-products								
5. Total Haloacetic Acids (HAA5)	60	System-wide	17	ppb	N/A	2024	No	By-product of drinking water chlorination
6. Total Trihalomethanes (TTHM)	80	System-wide	34	ppb	N/A	2024	No	By-product of drinking water chlorination
Synthetic Organic Contaminants including Pesticides & Herbicides								
7. Pentachlorophenol	1	0	0.03	ppb	N/A	2017		
Copper/Lead	**Samples**	**Action Level**						
8. Copper	20	AL=1.3	0.441 90th % value	ppm	0.0143 to 0.622	2024	0 Samples exceeded the AL	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
9. Lead	20	AL=15	1.96 90th % value	ppb	ND to 5.0	2024	0 Samples exceeded the AL	Corrosion of household plumbing systems; erosion of natural deposits
Disinfectants								
10. Chlorine	MRDL =4.0	MRDLG =4	.5	ppm	0.06 to .67	2024	No	Water additive used to control microbes
Radioactive By-products								
11. Gross Alpha, including RA, excluding RN & U	15	15	ND	pCi/L	N/A	2017	No	Erosion of natural deposits
12. Radium, combined (226, 228)	5		0.29	pCi/L	N/A	2017	No	Erosion of natural deposits
13. Uranium, combined	30		1.26	ppb	N/A	2017	No	Erosion of natural deposits

2024 TEST RESULTS FOR NORTHEAST REGIONAL WATER DISTRICT – NORTH VALLEY BRANCH

Contaminant	MCL	MCLG	Level Detected	Unit Measurement	Range	Date (year)	Violation Yes/No Other Info	Likely Source of Contamination
Inorganic Contaminants								
1. Fluoride	4	4	0.635	ppm	N/A	2017	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
2. Barium	2	2	0.184	ppm	N/A	2017	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
3. Nitrate-Nitrite	10	10	None Detected	ppm	N/A	2024	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Disinfectants								
4. Chlorine	MRDLG =4	MRDL =4.0	1.2	ppm	.985 to 1.54	2024	No	Water additive used to control microbes
Radioactive By-products								
5. Gross Alpha, including RA, excluding RN & U	15	15	ND	pCi/L	N/A	2022	No	Erosion of natural deposits
6. Radium, combined (226, 228)	5		0.2851	pCi/L	N/A	2022	No	Erosion of natural deposits
7. Uranium, combined	30		1.00	ppb	N/A	2022	No	Erosion of natural deposits
Copper/Lead	**Samples**	**Action Level**						
8. Copper	20	AL=1.3	0.45 90th % value	ppm	0.0173 to 0.65	2022	0 Samples exceeded the AL	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
9. Lead	20	AL=15	1.46	ppb	ND to 2.22	2022	0 Samples exceeded the AL	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Stage 2 Disinfection By-products (TTHM/HAA5)								
10. Total Trihalomethanes (TTHM)	System-wide	80	14	ppb	N/A	2024	No	By-product of drinking water chlorination
11. Total Haloacetic Acids (HAA5)	System-wide	60	6	ppb	N/A	2024	No	By-product of drinking water chlorination
Unregulated Contaminants								
12. Manganese			0.028	ppm	N/A	2017		

2024 TEST RESULTS FOR NORTHEAST REGIONAL WATER DISTRICT – LANGDON BRANCH

Contaminant	MCL	MCLG	Level Detected	Unit Measurement	Range	Date (year)	Violation Yes/No Other Info	Likely Source of Contamination
Copper/Lead	**Samples**	**Action Level**						
1. Copper	10	AL=1.3	0.268 90th % Value	ppm	0.0241 to 0.457	2023	0 Samples exceeded the AL	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
2. Lead	10	AL=15	1.44	ppb	ND to 1.52	2023	0 Samples exceeded the AL	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Stage 2 Disinfection By-products								
3. Total Trihalomethanes (TTHM)	System - wide	80	48	ppb	33.08 to 47.71	2024	No	By-product of drinking water chlorination
4. Total Haloacetic Acids (HAA5)	System - wide	60	21	ppb	14.08 to 20.93	2024	No	By-product of drinking water chlorination
Disinfectants								
5. Chlorine	MRDL =4.0	MRDLG =4	.8	ppm	0.335 to 1.43	2024	No	Water additive used to control microbes

*No sites exceeded the copper action level in 2023.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

EPA requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the tables above are the only contaminants detected in your drinking water.

Once every five years EPA issues a list of unregulated contaminants to be monitored by public water systems. The City of Devils Lake was selected by EPA to sample for thirty (30) unregulated contaminants during 2024. Samples were collected two times at the Entry Point to the distribution system (EP), as required.

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. Should you have any questions, please contact our office.

The following unregulated contaminant was the only contaminant detected during this sampling.

Unregulated Contaminant	Average value at EP Sampling point (ug/L)
Lithium SE1 73.9 ug/L SE2 75.0 ug/L	Average: 74.45 (Range: 73.9 to 75.0)

Your water system monitors for a number of unregulated organic contaminants, which could indicate a contamination of the water supply from a pesticide or petroleum spill or leak.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Nitrates: As a precaution we notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as, persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Lead Health Effects: There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of persons who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your risks.

Lead can cause serious health effects in people of all ages, especially for pregnant people, infants (both formula-fed and breastfed, and young children. Lead in drinking water is primarily from materials and parts used in service lines and home plumbing. Northeast Regional Water District is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing of your home.

Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly.

Use only cold water for drinking, cooking and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact Northeast Regional Water District at 265-8503. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead

Copper Health Effects: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

USEPA has recently published the Lead and Copper Rule Revision. The purpose of this revision is to strengthen public health protections by removing lead service lines within public water systems. One requirement of this rule revision was to inventory all drinking water service lines within our public water system and notify consumers which type of line serves each property. You may have recently received a letter from our system with this information.

The inventory is a listing of all service lines and the material composition of each line. The types of lines being documented are Lead line, Galvanized Requiring Replacement (GRR) and lines made of Unknown Material. Classification of a service line as being comprised of Unknow Service Line material indicates that our system cannot currently confirm the material of both the public and private portions of the line with written records. Non-lead lines were also documented; however, we were not required to notify consumers with the documented nonlead lines. The classification of the type of service line serving a residence was based on historical data regarding the property and in some cases verification of the type of material on the privately owned side of the line by visual inspection or replacement records of the owner.

The current Service Line Inventory for our system has been completed and is available for viewing at our office. Please contact Northeast Regional Water District at 265-8503 should you have any questions.

Additional work to update the service line inventory, including inspection of the line, may need to be performed to further document and confirm the type of material making up both the public and private portions of the line serving your home or business. We will need the help of home/building owners in order to access the service line on the private side of the service line to positively identify the material of the line that carries water within your home/building. Our system may perform this work with our own system employees or we may contract with engineering firms or third party contractors to complete this work to improve our service line inventory.

The water we provide is treated with fluoride addition as a part of the water treatment process to enhance dental health. For information regarding the level of fluoride in the finished water provided to our customers, please contact our office at 265-8503

We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at these levels.

Tampering with a public water system is a federal offense. Report suspicious activity to local law enforcement immediately.

Please call Jeremy Schuler, Northeast Regional Water District at (701) 265-8503 if you have questions concerning your water system.

Northeast Regional Water District works diligently to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Northeast Regional Water District is an equal opportunity employer.

NRWD
Northeast Regional Water District

WATER OPERATORS

Cavalier

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Langdon

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