

## **City of Devils Lake 2015 Consumer Confidence Report**

The City of Devils Lake, as required by the Federal Safe Drinking Water Act (SDWA), has prepared and is distributing to our customers this year's annual drinking water quality report. This is our opportunity to share information on the quality of water we provide to your home, apartment, or business. This report will also inform you of the source of our water, our treatment facilities, and processes. It is the city's goal to provide you with a safe and dependable supply of drinking water.

If you have questions regarding this report, please call Joel Myhro, Utilities Supervisor, at 701-662-7623. Questions can also be answered at our regularly scheduled City Commission meetings on the 1<sup>st</sup> and 3<sup>rd</sup> Monday of each month, starting at 5:30 pm. We want our valued customers to be informed about their water utility. If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call Mr. Myhro at the number listed above.

This report has required definitions of terms, language requirements, table of water quality data, and other pertinent information you will hopefully find interesting and educational.

The city purchased 200 acres of land for the installation of the new well field and secured a water permit from the State Engineer. The city installed a water transmission line from the new well field near Hamar, ND, and developed the well field during the 2008 construction season. **On April 6<sup>th</sup>, 2009, the city of Devils Lake began using water from our new well field.** The water travels 33 miles by pipeline to a reservoir on the south side of the city.

The City of Devils Lake has constructed an iron/manganese filtration plant that removes the iron and manganese to acceptable levels. The treatment plant has been in operation since November 22<sup>nd</sup>, 2010. After the filtration process, the water is treated with chlorine to kill bacteria and an orthophosphate is added to control our lead and copper, which is mandated by the Environmental Protection Agency (EPA). If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The city of Devils Lake Utilities is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. **Use water from the cold tap for drinking and cooking. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.** If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Devils Lake is participating in the North Dakota Wellhead Protection Program. Our public water system, in cooperation with the North Dakota Department of Health, has completed the delineation and contamination/land use inventory elements of the source water protection program. Based on the elements of the source water protection program, the city of Devils Lake well field is only moderately susceptible to potential contaminants, which is not a concern with the disinfection and treatment of the water before it is distributed into the city.

The city of Devils Lake would appreciate it if large volume water customers post copies of this Consumer Confidence 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. If you own or manage an apartment complex or have renters, we encourage you to share this report with them.

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 (i.e. for inorganic contaminants), though representative, was taken from January 1 of 2011 through December 31 of 2015.

EPA requires monitoring of over 80 drinking water contaminants. The contaminants listed in the table in the report are the only contaminants detected in your drinking water. Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

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.

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 operation and wildlife.

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

Pesticides and herbicides, which come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

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 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.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water hotline at 1-800-426-4791.

Some people are more vulnerable to contaminants in drinking water than the general population. Immune compromised persons such as those with cancer undergoing chemotherapy, those 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.

Environmental Protection Agency/Center for Disease Control (EPA/CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water hotline at 1-800-426-4791.

The City of Devils Lake routinely monitors for contaminants in your drinking water according to Federal and State laws. Required definitions:

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 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 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.

Maximum Residual Disinfectant Level (MRL) - 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.

Highest Compliance Level - The highest level of that contaminant used to determine compliance with a National Primary Drinking Water Regulation.

Range of Detections - The lowest to the highest result value recorded during the required monitoring timeframe for systems with multiple entry points.

Abbreviations -

PPB-parts per billion or micrograms per liter

PPM-parts per million or milligrams per liter

PPT-parts per trillion or nanograms per liter

PPC-parts per quadrillion of picograms per liter

NA-not applicable

ND-none detected

PIC/L-picocuries per liter (a measure of radioactivity)

MDL - million fibers per liter

MREM/YEAR - millirems per year (a measure of radiation absorbed by the body)

NTU - Nephelometric Turbidity Units

pCi/l - picocuries per liter (a measure of radioactivity)

PPT - parts per trillion, or nanograms per liter

PPQ - parts per quadrillion, or picograms per liter

MCLs 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 levels for a lifetime to have a one-in-a-million chance of having the described health effect.

Arsenic: EPA is reviewing the drinking water standard for arsenic because of special concerns that it may not be stringent enough. Arsenic is a naturally occurring mineral known to cause cancer in humans at high concentrations. As of April 2009, all Arsenic samples have been satisfactory with results being less than 6 ppb.

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

**Safe Drinking Water Act Chemical/Radiological Detected Results from 2011-2015**  
**Important! Please read the following explanation first.**

The following is a summary of the chemical/radiological analytes and result values that are required for your Consumer Confidence Report (CCR). The summary is divided into several sections (i.e. Inorganic Chemicals, Radiological Chemicals, etc.). Each section includes the chemical name, collection date, result, and units as required in the CCR along with other values (i.e. MCLG, Range of Detections, etc.). Refer to the footnotes at the bottom for the definitions of the specific headings and explanation of the various units.

**ND3600231 CITY OF DEVILS LAKE**

Analyte Name	Date	MCLG	MCL	Highest Compliance level	Units	Range of Detection	Likely Sources
<b>Inorganic Contaminants</b>							
Arsenic	2/23/15	0	10	4.89	ppb	N/A	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits
Barium	5/21/14	2	2	0.052	ppm	N/A	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium	5/21/14	100	100	1.71	ppb	N/A	Discharge from steel and pulp mills, erosion of natural deposits
Nitrate+Nitrite (AS N)	2/23/15	10	10	1.15	ppm	1.26 to 1.36	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits
Fluoride	5/21/14	4	4	0.77	ppm	N/A	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Radioactive</b>							
Gross alpha, including RA, excluding RN & U	4/11/2011	15	15	0.9	pCi/l	N/A	Erosion of natural deposits
Radium, combined (226,228)	4/11/2011		5	0.83	pCi/l	N/A	Erosion of natural deposits
Uranium, combined	4/11/2011		30	0.11	ppb	N/A	Erosion of natural deposits
<b>Disinfection Byproducts</b>							
Total Trihalomethanes	12/31/15		80	17	ppb	N/A	By-product of drinking water disinfection
HAA5	12/31/14		60	6	ppb	N/A	By-product of drinking water disinfection
<b>Disinfectants</b>							
Chlorine	12/31/15	MRDLG=4	MRDL=4.0	0.3	ppm	0.16 to 0.43	Water additive used to control microbes
<b>Lead and Copper</b>							
		AL	90 <sup>th</sup> %	Sites that exceed AL	Units	Range of Detection	
Copper	8/18/15	1.3	0.542	0	ppm	N/A	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Lead	8/18/15	15	1.16	1	ppb	N/A	Corrosion of household plumbing systems; erosion of natural deposits
Analyte Name	Date	MCLG	MCL	Highest Compliance level	Units	Range of Detection	Likely Sources
<b>Unregulated contaminants</b>							
Alkalinity, total	5/21/14			268	ppm	N/A	
Bicarbonate as HCO <sub>3</sub>	5/21/14			326	ppm	N/A	
Calcium	5/21/14			32.5	ppm	N/A	
Chloride	5/21/14			16.2	ppm	N/A	
Conductivity @ 25 C UMHOS/CM	5/21/14			606	umho/cm	N/A	
Hardness, total (as CaCO <sub>3</sub> )	5/21/14			132	ppm	N/A	
Magnesium	5/21/14			12.4	ppm	N/A	
Nickel	9/26/11			0.00128	ppm	N/A	
PH	5/21/14			8.05	PH	N/A	
Potassium	5/21/14			5	ppm	N/A	
Sodium	5/21/14			86.7	ppm	N/A	
Sodium adsorption ratio	5/21/14			3.28	obsvns	N/A	
Sulfate	9/26/11			25.1	ppm	N/A	
TDS	5/21/14			342	ppm	N/A	
Zinc	5/21/14			0.00733	ppm	N/A	

**Bacteriological Monitoring Data**

Total Coliform Data: September had the highest number of Total Coliform Samples  
 Total Coliform Positives for that month: 1

Fecal Coliform/E-Coli Data:  
 Total number of samples detected in 2015: 1



Thank you for allowing us to provide your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements sometimes require rate structure adjustments.

The city 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.

If you have any questions regarding our water, please call the city's general office at 662-7600 or the city's Utilities Supervisor at 662-7623.