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2017 Annual Water Quality Report



WATER SYSTEM INFORMATION

The City of West Fargo Annual Water Quality Report provides information for those whose drinking water is supplied by the City. The City of West Fargo routinely tests drinking water for regulated contaminants to ensure water is safe to drink.

If you are the owner of an apartment building or a business, let tenants or workers know they can find this report at:
westfargond.gov/water17.

For a paper copy of this report, call (701) 433-5400. If you are aware of non-English speaking individuals who need help with translating this report, contact Public Works Director, Chris Brungardt, at (701) 433-5400.

If you have concerns about the quality of West Fargo's water, the West Fargo City Commission meets on the first and third Monday of each month at 5:30 p.m. at the City Hall, 800 Fourth Ave. E., West Fargo, and is open to the public.

THE SOURCE

The City of West Fargo purchases drinking water from the City of Fargo which is drawn from the Red River of the North. Alternate sources are the Sheyenne River and Lake Ashtabula.

30 The City of Fargo Water Treatment Plant is a 30-million-gallon per day (MGD) lime softening, ozone and chlorine disinfection, filtration plant.

15 The City of Fargo is adding a 15 MGD membrane softening plant for enhanced treatment of dissolved solids such as sulfates and bromide. The addition is scheduled for completion in the fall of 2018.

CONTAMINANTS

SOURCE WATER PROTECTION

Our public water system, in cooperation with the North Dakota Department of Health, 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 Health has determined that our source water is moderately susceptible to potential contaminants.

You may learn more about the North Dakota Source Water Protection Program online at www.deq.nd.gov/WQ.

EPA ON DRINKING WATER

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. Get more information about contaminants and potential health effects from the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

CONTAMINANTS

The sources of drinking water (both tap water 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.

POSSIBLE SOURCE WATER CONTAMINANTS:

Microbial Contaminants....

such as viruses and bacteria, that 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 storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming

Pesticides and Herbicides....

which may come from a variety of sources such as agriculture, urban storm water 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 storm water 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems.

Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population.

“Minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking.”

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 (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline.

CONTAMINANTS

Lead

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. City of West Fargo is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. 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 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 www.epa.gov/safewater/lead.

TESTING RESULTS

Cryptosporidium

Cryptosporidium is a microbial parasite which is found in surface waters throughout the United States. Although Cryptosporidium can be removed by filtration, the most common filtration methods cannot guarantee 100 percent removal. Symptoms of Cryptosporidium infection may include nausea, diarrhea and abdominal cramps.

Most healthy individuals are able to overcome these symptoms within a few weeks. However, immuno-compromised individuals have more difficulty and are

at greater risk of developing severe or potentially life threatening illness.

Cryptosporidium must be ingested to cause disease and it may be ingested through means other than drinking water. Immuno-compromised individuals are encouraged to consult their doctors regarding the appropriate precautions to take to avoid infection.

The City of Fargo completed the third round of testing of the source water for Cryptosporidium in 2017 to comply with the Long-Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR). The analysis of 24 samples resulted in an average of 0.095 oocysts per liter in the source water (Red River or Sheyenne River). This concentration of Cryptosporidium results in the treatment facility falling into the second lowest of four levels of required treatment. This result requires the City of Fargo to enhance the treatment of the source water by lowering individual and combined filter turbidity results. The City of Fargo intends to add a filter-to-waste process to the treatment plant to meet this requirement.

Bromate*

The City of Fargo's highest sample of bromate exceeded the EPA limits in drinking water in 2017.

Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer. The City of Fargo is committed to reducing bromate levels in the treated water to meet EPA regulatory limits.

**Safe Water Drinking Hotline:
800.426.4791**

To ensure that tap water is safe to drink, EPA prescribes regulations to limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report.

Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels.

Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The

EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination.

As such, some of our data, though representative, may be more than one year old.

In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Contaminants	MCLG or MRDL	MCL, TT, or MRDL	Detect In Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Bromate (ppb)*	0	10	12	ND	88	2017	Yes	By-product of drinking water disinfection
Chloramine (as Cl ₂) (mg/L)	4	4	3.3	2.71	3.47	2017	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	21	6.98	35.8	2017	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	17	4.45	36.8	2017	No	By-product of drinking water disinfection

WATER QUALITY DATA TABLES

Inorganic Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Bromide (ppm)	N/A	N/A	0.261	0.028	0.261	2017	N/A	Erosion of natural deposits
Nitrate[measured as Nitrogen](ppm)	10	10	0.24	NA	NA	2017	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Microbiological Contaminants								
Turbidity (NTU)	NA	0.3	0.201	NA	NA	2017	No	Soil runoff
100% of the samples were below the TT value of .3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.201. Any measurement in excess of 1 is a violation unless otherwise approved by the state.								
Total Organic Carbon Removal								
Alkalinity- Source (ppm)	N/A	N/A	337	183	337	2017	N/A	Naturally Present
Carbon, Total Organic (TOC)- Finished (ppm)	N/A	N/A	6.61	3.44	6.61	2017	N/A	Naturally Present
Carbon, Total Organic (TOC)- Source (ppm)	N/A	N/A	9.7	5.67	9.70	2017	N/A	Naturally Present
Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source	
Inorganic Contaminants								
Copper - action level at consumer taps (ppm)	1.3	1.3	0.0584	2017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Inorganic Contaminants								
Lead - action level at consumer taps (ppb)	0	15	ND	2017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	



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

Maximum Contaminant Level (MCL): The highest level of a contaminant 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 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.

MFL: Million fibers per liter, used to measure asbestos concentration

mg/L mg/L: Number of milligrams of substance in one liter of water

MNR: Monitored Not Regulated

MPL: State Assigned Maximum Permissible Level

MRDL: Maximum residual disinfectant level. 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.

MRDLG: Maximum residual disinfection level goal. 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.

mrem/yr mrem/yr: Millirems per year (a measure of radiation absorbed by the body)

NA: Not applicable

ND: Not detected

Nephelometric Turbidity Units (NTU): Turbidity measures the cloudiness of water. It indicates the effectiveness of a filtration system.

NR: Monitoring not required, but recommended.

pCi/L pCi/L: Picocuries per liter (a measure of radioactivity)

ppb: Parts per billion, or micrograms per liter ($\mu\text{g/L}$)

ppm: Parts per million, or milligrams per liter (mg/L)

ppt: Parts per trillion, or nanograms per liter

ppq: Parts per quadrillion, or picograms per liter

Percent positive samples/month: Percent of samples taken monthly that were positive

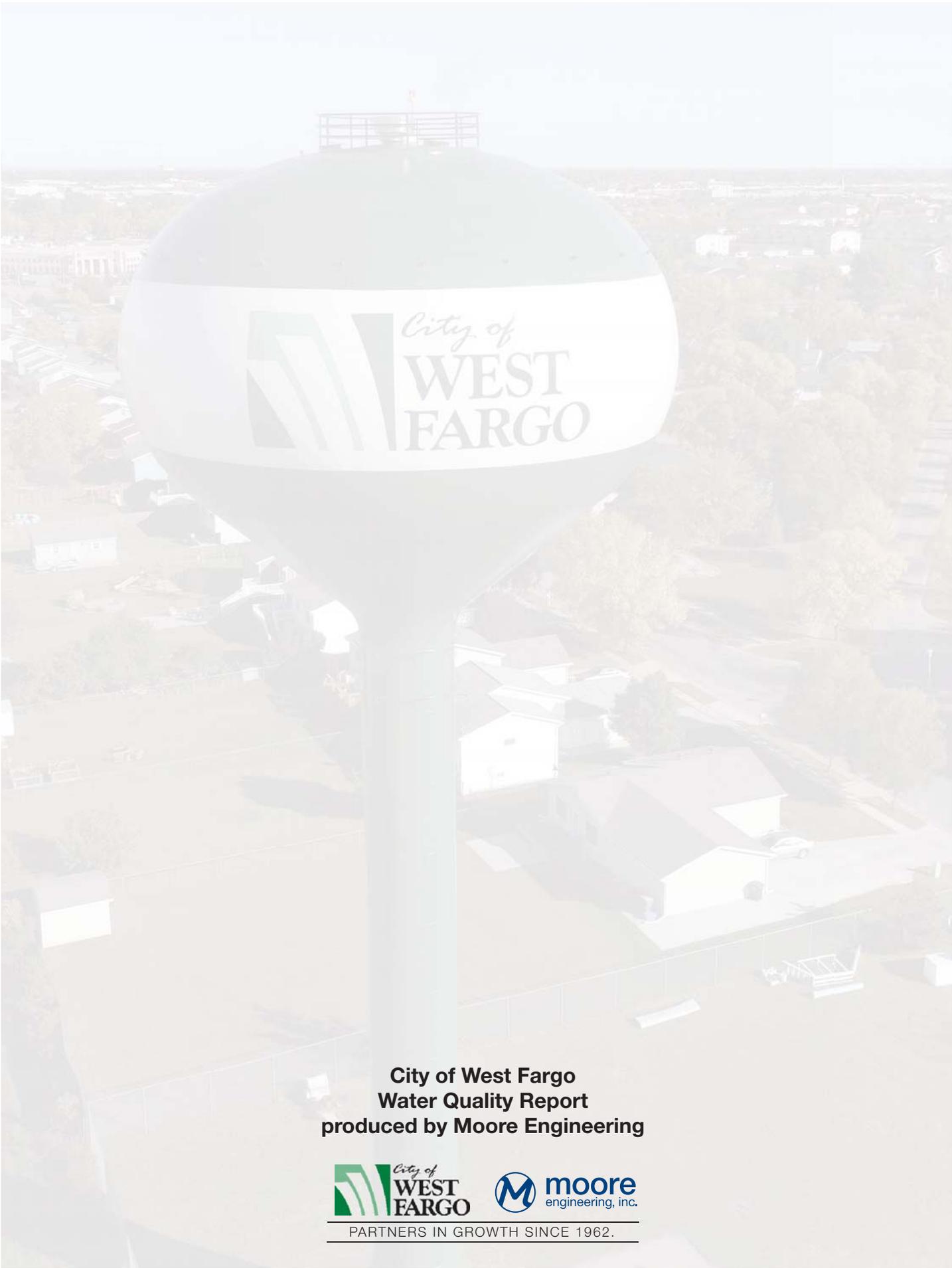
positive samples/month: Number of samples taken monthly that were found to be positive

positive samples/yr: The number of positive samples taken that year

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

ug/L: Number of micrograms of substance in one liter of water

Variations and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.



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Water Quality Report
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