Annual Drinking Water Quality Report
Flaxton, North Dakota
2018

We're very pleased to provide you with this year's ***Annual Drinking Water Quality Report***. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is to provide you with a safe and dependable supply of drinking water. Our water source is ground water. Chlorine is added for disinfection.

The City of Flaxton is participating in North Dakota's Wellhead Protection Program. Copies of the Wellhead Protection Program plan and other relevant information regarding this program can be obtained from the City Auditor during normal office hours. The North Dakota Department of Health has prepared a Source Water Assessment for Flaxton. Information on this program is available at the Auditors office.

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 ***"not likely susceptible"*** to potential contaminants. No significant sources of contamination have been identified.

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 City Auditor, Amy Ones @ (701)596-3511. 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 1st Tuesday of every month in the Flaxton Council Chambers, starting at 7:30 PM. If you are aware of non-English speaking individuals who need assistance with the appropriate language translation, please contact the City Auditor at the number listed above.

The City of Flaxton would appreciate it if large volume water customers would please post copies of this ***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 City of Flaxton 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, 2018. 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, though representative, is more than one year old.

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 operations and wildlife.

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

Pesticides and herbicides**,** which 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, 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 following table 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 (NA), No Detect (ND)

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.

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 - 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 - 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.

2018 Test Results for the city of Flaxton, ND

	MCLG	MCL	Level Detected	Unit Measurement	Range	Date (year)	Violation Yes/No Other Info	Likely Source of Contamination
Lead/Copper								
Copper	1.3	AL=1.3	0.0611 90th % Value	ppm	N/A	2016	0 Sites exceeded AL	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead*	0	AL=15	4.51 90th % Value	ppb	N/A	2016	0 Sites exceeded AL	Corrosion of household plumbing systems, erosion of natural deposits
Disinfectants								
Chlorine	MRDLG =4	MRDL =4.0	0.9	ppm	0.2-1.75	2018	No	Water additive used to control microbes.
Stage 2 Disinfection By-Products								
HAA5	N/A	60	No Detect	ppb	N/A	2017	No	By-product of drinking water chlorination
TTHM	N/A	80	No Detect	ppb	N/A	2017	No	By-product of drinking water chlorination
Radioactive Contaminants								
Gross Alpha, Including RA, Excluding RN & U	15	15	1.67	pCi/1	NA	2015	No	Erosion of natural deposits
Radium, Combined (226, 228)	NA	5	1.11	pCi/1	NA	2015	No	Erosion of natural deposits
Inorganic Contaminants								
ARSENIC	0	10	1.75	Ppb	NA	2016	No	Erosion of natural deposits
BARIUM	2	2	0.292	Ppm	NA	2016	No	Erosion of natural deposits, discharge of drilling wastes
FLUORIDE	4	4	1.01	Ppm	NA	2016	No	Erosion of natural deposits, water additive which promotes strong teeth
SELENIUM	50	50	12.6	ppb	NA	2016	No	Erosion of natural deposits, discharge from petroleum and metal refineries.

Bacteriological Monitoring Data: Total Coli Form Data: June had the highest number of Total Coli Form Samples. **Total Coli Form Positives for that month: (5)** Coli forms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful, bacteria may be present.

2018 Consumer Confidence Report - System Assessment Information and Corrective Actions Required Under the Revised Total Coliform Rule (RTCR)

City of Flaxton; Public Water System (PWS) Number ND0700344.

- Our system is required to monitor monthly for total coliform bacteria in our drinking water. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that were found during these assessments.

- A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

- During the past year we were required to conduct one Level 1 assessment. One Level 1 assessment was completed.

- June 2018 had the highest number of positive Total Coliform samples. Five samples were positive for Total coliform that month. The Level 1 assessment was triggered on 6/25/2018. The assessment was completed on 7/16/2018.

- Corrective Actions: Sanitary defects were found during the assessment and the city was required to perform the following corrective actions:
  1. By August 18, 2018 the system needed to be flushed, refilled with treated water and treated water needed to be drawn into the distribution lines. Treatment levels needed to be optimized. Note: Completed 7/17/2018.
  2. By August 18, 2018 written logs of total water usage from each well, as well as Azone 15 usage rates (and peristaltic pump feed rates) needed to be kept and monitored. Corrected: 7/18/2018.
  3. By August 18, 2018 repair or replace the inadequate screen on the tower overflow. Corrected: 9/10/2018
  4. By October 1, 2018 the primary operator for the system must become certified. Corrected: date: Pending

  The North Dakota Department of Health also made the following recommendations:
  1. Replace standard well caps with watertight sanitary well caps.
  2. Replace sediment filter in the senior center and have the reverse osmosis system there serviced at regular intervals. Choose a different sampling site without on-site filters, etc.
  3. Close the valve near the tower's riser that used to supply the now-abandoned bulk fill line.

- Subsequent bacteriological samples have been satisfactory.

*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 Flaxton 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.**

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]

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.

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/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).

Please contact City Auditor, Amy Ones, @ (701) 596-3511 if you have questions regarding your water system.