2018 Drinking Water Quality Report
For
Waverly Water Division

We are very pleased to present to you the 2018 Annual Consumer Confidence Report. This report is designed to inform you about the quality of water and services 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 to protect our water resources. We are committed to ensuring the quality of your water.

The Waverly Water Division is pleased to report that our drinking water is safe and meets federal and state requirements. For the reporting period covering January 1, 2018, to December 31, 2018, the water supplied by the Waverly Water Division did not have any water quality violations. It met the water quality standards set forth by the Environmental Protection Agency (EPA) and the Iowa Department of Natural Resources (IDNR).

The Waverly water supply consists of four groundwater wells that draw water from the Silurian-Devonian aquifer. The wells range in depth from 150 to 220 feet deep. Chlorine is added to kill disease-causing organisms. Fluoride is added to promote dental health and supplements the natural fluoride level that already exists in the water.

This water supply obtains water from one or more groundwater aquifers. Every aquifer has a degree of susceptibility to contamination because of the characteristics of the aquifer, overlying materials and human activity. Susceptibility to contamination generally increases with shallower aquifers, increasing permeability of the aquifer and overlying material of nearby development or agricultural activity, and abandoned or poorly maintained wells

The Silurian-Devonian aquifer was determined to be highly susceptible to contamination because the characteristics of the aquifer and overlying materials allow contaminants to move through the aquifer fairly quickly. The City of Waverly wells are most susceptible to activities such as agricultural activities, dry cleaners, gas stations, industrial sites, and municipal wastewater discharges. A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources and is available from Justin McGlaun, Water and Sewer Line Maintenance Superintendent at (319) 352-6261 or Mike Cherry, Director of Public Works at (319) 352-9065.

The Waverly Water Division routinely monitors for contaminants in your drinking water according to federal and state laws. The State requires us to monitor for certain contaminants monthly, annually and some less than once per year because the concentrations of these contaminants are not expected to vary from year to year. The 2018 Water Quality Data table in this report shows the results for 2018. Not listed in this table are nearly one hundred contaminants for which the City tested for and which were not detected. A list of contaminants that the City tests for is available upon request. Unless otherwise noted, the data presented in this table is from testing done from January 1 to December 31, 2018.

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 posed a health risk. More information about contaminants or potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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 Waverly Water Division 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 http://www.epa.gov/safewater/lead.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provide

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)		Yes/No	
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	18.00	9/30/2018	No	By-products of drinking water chlorination
Lead (ppb)	AL=15 (0)	90th	7.70 (ND - 24) 1 sample exceeded AL	2017	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.262 (0.0472 - 0.268)	2017	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Fluoride (ppm)	4.0 (4.0)	RAA	.70 (.38 - 1.05)	2018	No	Water additive which promotes strong teeth; erosion of natural deposits
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	0.8 (0.32 - 1.42)	2018	No	Water additive used to control microbes
02 - FINISHED WATER SAMPLE TAP, #5						
Sodium (ppm)	N/A (N/A)	SGL	15.7	4/23/2018	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	8.87 (6.0 - 8.87)	2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
03 - FINISHED WATER SAMPLE TAP, #6						
Sodium (ppm)	N/A (N/A)	SGL	8	4/23/2018	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	7.70 (6.400 - 7.70)	2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
04 - FINISHED WATER SAMPLE TAP, #7						
Sodium (ppm)	N/A (N/A)	SGL	7.2	4/23/2018	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	8.80 (7.89 - 8.80)	2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
05 - FINISHED WATER SAMPLE TAP, #8						
Arsenic (ppb)	10 (0)	SGL	1.1	8/21/2018	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronic production wastes
Selenium (ppb)	50 (50)	SGL	2.5	8/21/2018	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Barium (ppm)	2 (2)	SGL	0.0863	8/21/2018	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Sodium (ppm)	N/A (N/A)	SGL	4.64	8/21/2018	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	9.90 (8.80 - 9.90)	2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

DEFINITIONS

- Maximum Contaminant Level (MCL) – 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 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.
- ppb -- parts per billion.

- ppm -- parts per million.
- pCi/L – picocuries per liter
- N/A – Not applicable
- ND -- Not detected
- RAA – Running Annual Average
- Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- 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 (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.
- SGL – Single Sample Result
- RTCR – Revised Total Coliform Rule
- NTU – Nephelometric Turbidity Units

CONTACT INFORMATION

If you would like to know more about this report or if you have any questions concerning your water utility, please contact Justin McGlaun at 352-6261 or Mike Cherry at 352-9065. We want our customers to be well informed about their water and the water utility. The Waverly City Council meeting is another source for information. They meet the first, third, and fourth Mondays of each month at 7:00 p.m. at the Civic Center located at 200 1st Street NE. City information can also be found on our website: www.waverlyia.com.