



## **2016 Consumer Confidence Report**

**An annual report on the quality of Iowa City's drinking water**

**The City of Iowa City – Water Division is pleased to report another year of providing clean, safe, esthetically pleasing drinking water to residents of Iowa City and University Heights!**

Iowa City's water system is operated and managed by professional, state certified water treatment and distribution operators. Treatment Plant Operators perform over 200 water quality tests daily and collect samples for testing at the State Hygienic Laboratory to ensure that the water meets all State and Federal Safe Drinking Water Act (SDWA) Standards.

SDWA requires all community water suppliers, including the Iowa City Water Division to participate in a Lead and Copper Sampling Program. Since 1992, the Water Division has routinely sampled for lead and copper in designated locations throughout the drinking water system. The action level of 0.015 mg/L (15 parts per billion) lead concentration in the 90<sup>th</sup> percentile of samples is required. Iowa City water has always remained in compliance with this rule. In 2014, the most recent sampling session, the 90<sup>th</sup> percentile lead concentration was 0.004 mg/L (4 parts per billion), well below the EPA action level. Lead and Copper sampling is scheduled to commence in June of 2017.

The Iowa City water system consists of a computerized water treatment plant with a maximum capacity of 16.7 million gallons per day. The treatment plant utilizes raw water from a variety of sources, primarily relying on the high quality water from our collector wells in the Alluvial Aquifer. Our deep wells and river intake are available for quality or quantity needs. Lime softening and Granular Activated Carbon filtration highlight an array of treatment processes designed to create a safe, high quality product.

We believe that the best way to assure you that our drinking water is safe and reliable is to provide you with accurate facts. Although the information in this report may appear technical, the Environmental Protection Agency (EPA) requires municipal utilities to inform water customers of the content of their drinking water. Each year, we provide a Consumer Confidence Report that explains where our water comes from and how it is treated to make it safe and good-tasting. This year's report lists Iowa City's performance regarding EPA water quality regulations and level of detectable compounds in the water in 2016.

The Iowa City Water Division will continue to work around the clock to provide the best quality water. We will continue to partner with our customers to protect and conserve water resources, and to provide an economical, safe and dependable water supply now and into the future. We are proud to report that our water far surpasses all federal and state water quality standards.

# 2016 WATER QUALITY REPORT FOR IOWA CITY WATER DEPARTMENT

This report contains important information regarding the water quality in our water system. The source of our water is surface water. Our water quality testing shows the following results:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation Yes/No	Source
		Type	Value & (Range)			
Total Organic Carbon Removal Ratio	(N/A)	RAA	1.70	2016	No	Total Organic Carbon (TOC) is a sum measure of the concentration of all organic carbon atoms covalently bonded in the organic molecules of a given water sample.
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	41.00(18-48)	3/31/2016	No	By products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	8.00 (4 - 12)	03/31/2016	No	By-products of drinking water disinfection
Copper (ppm)	AL=1.3 (1.3)	90th	0.02 (ND - 0.02)	2014	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15 (0)	90th	4.00 (ND - 14)	2014	No	Corrosion of household plumbing systems; erosion of natural deposits
<b>950 - DISTRIBUTION SYSTEM</b>						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.1 (0.48 - 1.37)	12/31/2016	No	Water additive used to control microbes
Total Coliform Bacteria	TT (TT)	RTCR	1 sample(s) positive	08/31/2016	No	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other waterborne pathogens may be present, or that a potential pathway exists through which contamination may enter the drinking water.
<b>03 - S/EP IA RIVER, J WELLS, S WELLS, C WELLS</b>						
Fluoride (ppm)	4 (4)	SGL	0.61	01/13/2016	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	(N/A)	SGL	13	04/04/2016	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	7.2 (4.1 - 7.2)	2016	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
*Turbidity (NTU)	(N/A)	TT	0.07 NTU 100% compliance		No	Soil runoff

Water testing was performed for the presence of Cryptosporidium from October – December of 2016, there was no detection.

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

## GENERAL INFORMATION

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. IOWA CITY WATER DEPARTMENT 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>.

## ADDITIONAL HEALTH INFORMATION

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 provider.

## SOURCE WATER ASSESSMENT INFORMATION

This water supply obtains its water from the sandstone and dolomite of the Cambrian-Ordovician aquifer. The Cambrian-Ordovician aquifer was determined to have low susceptibility to contamination because the characteristics of the aquifer and overlying materials provide natural protection from contaminants at the land surface. The Cambrian-Ordovician wells will have low susceptibility to surface contaminants such as leaking underground storage tanks, contaminant spills, and excess fertilizer application.

A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources, and is available from the Water Operator at 319-356-5162 .

This water supply obtains its water from the sand and gravel of the Alluvial aquifer. The Alluvial aquifer was determined to be highly susceptible to contamination because the characteristics of the aquifer and overlying materials provide little protection from contamination at the land surface. The Alluvial wells will be highly susceptible to surface contaminants such as leaking underground storage tanks, contaminant spills, and excess fertilizer application. A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources, and is available from the Water Operator at 319-356-5162 .

This water supply obtains water from one or more surface waters. Surface water sources are susceptible to sources of contamination within the drainage basin.

Surface Water Name	Susceptibility
Iowa River (Sand Pit)	high
Iowa River	high

#### **OTHER INFORMATION**

\*Turbidity is an indicator of treatment filter performance and is regulated as a treatment technique.

#### **CONTACT INFORMATION**

##### Public Meeting Information

We encourage our customers to attend and participate in the meetings about our water utility. The Iowa City Council meets the first and third Tuesday of each month at 7 p.m. in:

Emma J. Harvat Hall

410 E. Washington Street

Iowa City, IA 52240-1826

For meeting information call (319)356-5040

For additional information on the Consumer Confidence Report or other water issues please view [www.icgov.org](http://www.icgov.org) or call the Iowa City Water Division, 319-356-5160.

Iowa City Water Division

80 Stephen Atkins Drive

Iowa City, IA 52240