



2016 Annual

Water Quality Report

Clinton District
PWS ID: IA2326048



I O W A
AMERICAN WATER

To Our Valued Customer:

Iowa American Water is proud to be your local water service provider, and I am pleased to share with you good news about the quality of your drinking water. Each year, we provide you with our Annual Water Quality Report – and like so many years prior – you’ll find that we continue to supply water that meets or surpasses all state and federal water quality regulations.

This doesn’t happen by chance. It requires having the right team of experts and technologies in place. Delivering high-quality, reliable water service to your tap around the clock also requires significant investment in our water infrastructure. In 2016, we invested about \$15.2 million in water system improvements statewide. From upgrading our treatment facilities to replacing aging water pipelines, we invest prudently and with purpose. And, because we invest our dollars responsibly, we provide our water for about a penny per gallon—an exceptional value for a service that is so essential to our daily lives.

We hope you agree, it’s worth every penny and worth learning more about. Please, take the time to review this report. It provides details about the source and quality of your drinking water using the data from water quality testing conducted for your local water system from January through December 2016.

At Iowa American Water, our customers are our top priority, and we are committed to providing you with the highest quality drinking water and service possible in 2017 and the future to come.

Best Regards,

Randy A. Moore
President

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Chi tiết này thật quan trọng.
Xin nhờ người dịch cho quý vị.

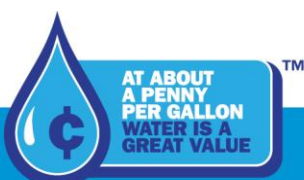
What is a Water Quality Report?

To comply with state and U.S. Environmental Protection Agency (U.S. EPA) regulations, Iowa American Water issues a report annually describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and the need to protect your drinking water sources. This report provides an overview of last year’s (2016) water quality. It includes details about where your water comes from and what it contains.

Where Does My Water Come From?

The Clinton District obtains its water from the Cambrian-Ordovician and Jordan aquifers. Clinton’s water source is seven deep wells in four well fields in the Clinton area. The wells average 2,200 feet in depth and supply water of excellent quality. Chlorine is added to the water supply to assure microbiological quality, and fluoride is added to promote strong teeth. A phosphate compound is added to treat the small amount of iron that occurs naturally in well water and to minimize corrosion.

Several years ago, as a result of naturally occurring and rising background radium and iron levels, Iowa American Water invested about \$5 million to install a Hydrous Manganese Oxide (HMO) treatment plant for Wells # 10 & 11.



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WE CARE ABOUT WATER. IT’S WHAT WE DO.®

Protecting Your Water Source

The Source Water Assessment Program (SWAP) is a result of the 1996 amendments to the Federal Safe Drinking Water Act (SDWA). Those amendments require all states to establish a program to assess the vulnerability of public water systems to potential contamination. The Iowa Department of Natural Resources (DNR) has prepared Source Water Assessment Reports and Summaries for all public water systems.

Due to the depth and confining beds of rock above the aquifers, Clinton's source of supply has excellent protection from potential sources of contamination. Clinton District's wells are not susceptible to most contaminant sources except through pathways to the aquifer such as abandoned or poorly maintained wells from other municipal or private wells. A summary report is available upon request from Iowa American Water by contacting Abdul Bouagadi, Operations Superintendent, at (563)242-9231, or e-mail Abdul.Bouagadi@amwater.com.

Iowa American Water takes pride in promoting the protection and enhancement of the habitats on our property and those affected by our operations. This includes efforts such as:

- Promoting and working on environmental stewardship projects in our communities, through both financial support and employee volunteerism.
- Looking for opportunities to incorporate stewardship activities in our capital projects.
- Leading by example in our environmental responsibilities (e.g. recycling paper, double-sided printing, turning out the lights).
- Using water wisely, including practicing and encouraging water conservation and source water protection programs.

Investing in Our Communities

Delivering quality water service requires continued infrastructure investment. Iowa American Water invested over \$3.4 million in water system improvements in Clinton in 2016 to continue to preserve water quality, maintain reliability and continue to meet the needs of customers. Some of the largest investments include:

- \$1 million investment in Clinton to replace and upgrade nearly one mile of aged water main with larger diameter main to improve system reliability and enhance fire protection.
- \$1 million investment in upgraded water meters to replace existing touch pad meters with automated meter reading devices. This new equipment gathers

meter readings remotely as workers drive through a neighborhood. This equipment will result in more efficient meter readings through advanced technology and eliminate estimated meter readings, which ultimately provides enhanced service to customers. Because of this upgrade program, Iowa American Water plans to transition to monthly billing in April 2017.

- \$600,000 investment in Clinton to replace an aged underground booster station at the Galbraith water storage standpipe that had come to the end of its useful life.

Dedicated Workforce

Iowa American Water is proud of its professional and dedicated workforce. Our commitment to customer service and operational integrity remains (and always will be) paramount.

About Iowa American Water

Iowa American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water services to approximately 212,000 people. With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly-traded water and wastewater utility company. The company employs more than 6,700 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 15 million people in 47 states and Ontario, Canada. More information can be found by visiting www.amwater.com.

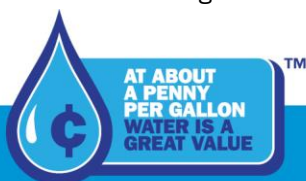
How to Contact Us

Our customer service center is available Monday through Friday from 7 a.m. to 7 p.m. to answer your questions or schedule a service appointment. Just call (866) 641-2108, and we'll be pleased to assist you.

Our online self-service tool, My Account, is available anytime for account information, payments and turning water service on and off at www.iowaamwater.com.

In case of EMERGENCY, you can contact us 24 hours a day/7 days a week at (866) 641-2108. Water emergencies don't keep business hours, so we're available 24/7 to assist you at those critical times. You can also visit our website at www.amwater.com.

For more information about this report or for any questions related to your drinking water, please call Abdul Bouagadi, Operation Superintendent, at (563) 242-9231 or e-mail Abdul.Bouagadi@amwater.com.



What's in My Water?

The source of drinking water (both tap water and bottled water) includes 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 may 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 may also come from gas stations, urban storm water runoff and septic systems.

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

To ensure that tap water is of high quality, U.S. EPA prescribes regulations limiting the amount of certain substances in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Iowa American Water's treatment processes are designed to reduce any such substances to levels well below any health concern.

Important Health 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 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 (800) 426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

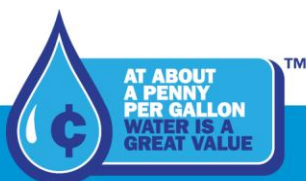
U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or by calling our 24-hour customer service line at (866) 641-2108 for more information.

How to Read This Table

Iowa American Water conducts extensive monitoring to ensure that your water meets all water quality standards. The results of our monitoring are reported in the data tables. While most monitoring was conducted in 2016, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting these tables, see the Table Definitions and footnotes.

Definitions of Terms Used in This Report

- **Action Level:** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
- **Amount Detected:** Unless otherwise noted in the footnotes, an average of all sample results for the year, or results from a single sample if only one was collected. With multiple entry points to the distribution system, the data from the entry point with the highest value is reported. Amount detected for distribution samples represents an average of all samples collected.
- **Compliance Achieved:** Indicates that the levels found were all within the allowable levels as determined by the EPA.
- **MCL (Maximum Contaminant Level):** 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.
- **MCLG (Maximum Contaminant Level Goal):** 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.
- **MRDL (Maximum Residual Disinfectant Level):** The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **MRDLG (Maximum Residual Disinfectant Level Goal):** The level of drinking water disinfectant below which there is no known or expected risk to health.
- **NA:** Not applicable
- **ND:** Not detected
- **pCi/L (picocuries per liter):** Measurement of the natural rate of disintegration of radioactive contaminants in water.
- **ppm (parts per million):** One part substance per million parts water, or milligrams per liter.
- **ppb (parts per billion):** One part substance per billion parts water, or micrograms per liter.



- **Range of Detections:** Indicates individual sample results (SS), or a range from lowest to highest, that were collected during the sample period.
- **SS:** Single Sample
- **Typical Source:** Indicates where the substance usually originates.



Water Quality Results

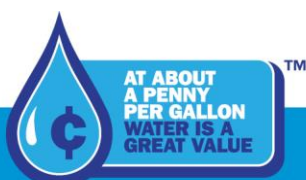
Iowa American Water conducts thousands of water quality analyses annually to ensure that your water meets all water quality standards. The following tables show what substances were detected in our drinking water in 2016. Many more contaminants are tested for each year but fall below laboratory detection limits. Although all of the substances listed below are under the maximum contaminant level (MCL) set by U.S. EPA, we feel it is important that you know exactly what was detected and how much of the substance was present in the water. For help interpreting this table, see the “How to Read This Table” section.

Regulated Substances (Measured on the Water Leaving the Treatment Facility)¹

Substance (units)	Year Sampled	MCLG	MCL	Amount Detected	Range of Detections	Compliance Achieved	Typical Source
Alpha Emitters (pCi/L)	2015	0	15	9.45	6.4 - 12.5	Yes	Erosion of natural deposits
Barium (ppm)	2016	2	2	ND	ND	Yes	Erosion of natural deposits
Combined Radium (pCi/L)	2015	0	5	4.65	3.4 - 5.9	Yes	Erosion of natural deposits
Fluoride (ppm) ²	2016	4	4	0.73	0.61 - 1.00	Yes	Erosion of natural deposits; Water additive which promotes strong teeth
Nitrate as Nitrogen (ppm)	2016	10	10	0.02	0.01 - 0.04	Yes	Erosion of natural deposits
Arsenic (ppb)	2016	0	10	ND	ND	Yes	Erosion of natural deposits
Selenium (ppb) ³	2016	50	50	ND	ND	Yes	Erosion of natural deposits

Other Regulated Substances (Measured in the Distribution System)

Substance (units)	Year Sampled	MRDLG or MCLG	MRDL or MCL	Amount Detected	Range of Detections	Compliance Achieved	Typical Source
Chlorine (ppm) ⁴	2016	4	4	1.07	0.46 - 1.86	Yes	Water additive used to control microbes
TTHMs [Total Trihalomethanes] (ppb) ⁵	2016	NA	80	4.9	1.6 - 8.2	Yes	By-product of drinking water chlorination
HAA5s [Haloacetic Acids] (ppb)	2016	NA	60	ND	ND	Yes	By-product of drinking water chlorination



Tap Water Samples: Lead and Copper Results ⁶

Substance (units)	Year Sampled	Action Level	MCLG	Amount Detected in 90 th Percentile Sample	Amount Detected in 95 th Percentile Sample	Number of Samples Collected	Compliance Achieved	Number of Samples Above Action Level	Typical Source
Copper (ppm)	2016	1.3	1.3	0.678	NA	32	Yes	0	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead (ppb)	2016	15	0	3.0	NA	32	Yes	0	Corrosion of household plumbing systems; Erosion of natural deposits

Other Substances of Interest (Measured on the Water Leaving the Treatment Facility)

Substance (units)	Year Sampled	Amount Detected	Range of Detections	Typical Source
Hardness (mg/L as CaCO ₃)	2013	266	237 - 313	Erosion of natural deposits
Hardness (gpg)	2013	15.5	13.8 - 18.3	Erosion of natural deposits
Iron (ppm)	2016	0.05	ND - .11	Erosion of natural deposits
Sodium (ppm) ⁷	2015	55.9	10.1 -110.7	Erosion of natural deposits
Sulfate (ppm)	2016	57	46.6 - 67.4	Erosion of natural deposits

Unregulated Contaminant Monitoring Rule⁸

Substance (units - ppb)	Year Sampled	Amount Detected	Range of Detections	Typical Source
Strontium	2016	1950	1800 -2100	An alkaline earth metal found commonly in nature
Chromium	2016	3.0	ND - 7.0	Chromium is an odorless and tasteless metallic element found naturally in rocks, plants, soil and volcanic dust, humans and animals
Chlorate	2014	361	ND - 1040	Product of the breakdown of Sodium Hypochlorite (Bleach)

¹ The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

² Fluoride is added to the water to help promote strong teeth.

³ Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

⁴ Chlorine is a disinfecting agent added to control microbes that otherwise could cause waterborne diseases or other water quality concerns. Most water systems are required by law to add disinfecting agents, such as chlorine. The values reported reflect multiple locations in the service area.

⁵ THM's and HAA5's are now regulated under the Stage 2 Disinfection Byproduct regulation. Your water supply became active under this regulation beginning the third quarter of 2013.

⁶ 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 American Water 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>.

⁷ There is no state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

⁸ The purpose of the Unregulated Contaminant Monitoring Rule is to collect occurrence data for contaminants that may be in drinking water but have no health-based standards in the Safe Drinking Water Act.

