



2018 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 2018, we invested about \$16 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 2018.

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 2019 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 (2018) 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.

Learn more about local waterways in your area at <https://watersgeo.epa.gov/mywaterway>.



American Water Works Company, Inc., together with its subsidiaries, is referred to as American Water. “Iowa American Water” and the star logo are the registered trademarks of American Water Works Company, Inc. All rights reserved.

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 Joshua Lighton, Supervisor Water Quality & Environmental Compliance, at (563) 322-8814, ext.2 or Joshua.Lighton@amwater.com.**

What Are We Doing?

Our vision is *Clean Water for Life*. Our priority is to provide reliable, quality drinking water for our customers. The source of supply is an important part of that mission. We work to understand and reduce potential risks to your drinking water supply. 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. In 2018, four organizations received grant funds totaling \$8,000 for local watershed projects. For more information on the program visit: <https://amwater.com/iaaw/news-community/environmental-grant-program>.
- 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.

What Can You Do?

Protecting drinking water at its source is an important part of the process to treat and deliver high quality water. It takes a community effort to protect our shared water resources. This includes utilities, businesses, residents, government agencies and organizations. Everyone who lives, works, and plays in the area has a role and stake in clean water supplies.

Quality drinking water starts upstream. Everyone can help maintain and improve drinking water supplies through the following actions:

- Dispose of pharmaceuticals, household chemicals, oils and paints at proper waste collection sites. Materials can impact water ways if poured down the drain, flushed down the toilet, or dumped on the ground. Contact your county waste authority to find out how to dispose of these materials properly.
- Check for leaks from automobiles and heating fuel tanks. Clean up any spills using an absorbent material like cat litter. Sweep up the material and put it in a sealed bag in the trash.
- Clean up after your pets and limit the use of fertilizers and pesticides.
- Look for local opportunities to take part in watershed activities.
- Report any spills, illegal dumping or suspicious activity to the Iowa Department of Natural Resources.

Investing in Our Communities

Delivering quality water service requires continued infrastructure investment. From projects to replace water mains, pipelines, and hydrants, and the installation of advanced metering technology that helps reduce water leaks, to enhanced treatment capabilities that improve efficiency and reliability, the investments made into the system ensure that Iowa American Water is well positioned to continue to meet customer and public safety needs in its service communities every day. By supporting needed improvements, customers and Iowa American Water are working together to keep the water flowing now and well into the future.

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 7,100 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to more than 14 million people in 46 states and Ontario, Canada. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on [Twitter](#), [Facebook](#) and [LinkedIn](#).



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 will 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 Joshua Lighton, Supervisor Water Quality & Environmental Compliance, at (563) 322-8814, ext.2 or Joshua.Lighton@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.

We take steps to reduce the potential for lead to leach from your pipes into the water. This is accomplished by adding a corrosion inhibitor to the water leaving our treatment facilities. There are steps that you can take to reduce your household's exposure to lead in drinking water. For more information, please review our Lead and Drinking Water Fact Sheet at <https://amwater.com/iaaw/water-quality/lead-and-drinking-water>.

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 2018, 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.
- **Revised Total Coliform Rule:** The RTRC establishes a maximum contaminant level (MCL) for E. coli and uses E. coli and total coliforms to initiate a “find and fix” approach to address fecal contamination that could enter into the distribution system. It requires public water systems (PWSs) to perform assessments to identify sanitary defects and subsequently take action to correct them.

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 2018. 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.



There's a lot more to your water bill than just water.

When you turn on the tap, it's easy to see what your water bill buys. What's not as easy to see is what it takes to bring that water to your home. The miles of pipeline hidden below the ground. The facilities that draw water from the source. The plant where it's treated and tested. The scientists, engineers, and maintenance crews working around the clock to make sure that water is always there when you need it. Your water payments are helping to build a better tomorrow by supporting needed improvements that will keep water flowing for all of us—today and well into the future. All for about a penny a gallon.

AT ABOUT A PENNY PER GALLON WATER IS A GREAT VALUE™ WE CARE ABOUT WATER. IT'S WHAT WE DO. FIND OUT WHY YOU SHOULD, TOO, at amwater.com.

© 2012 American Water. "American Water" and the Star logo are the registered trademarks of American Water Works Company, Inc. All rights reserved.



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)	2018	2	2	ND	ND	Yes	Erosion of natural deposits
Combined Radium (pCi/L)	2018	0	5	3.96	3.4 - 5.9	Yes	Erosion of natural deposits
Fluoride (ppm) ²	2018	4	4	0.55	0.74 - 0.85	Yes	Erosion of natural deposits; Water additive which promotes strong teeth
Nitrate as Nitrogen (ppm)	2018	10	10	0.02	0.01 - 0.04	Yes	Erosion of natural deposits
Arsenic (ppb)	2018	0	10	ND	ND	Yes	Erosion of natural deposits
Selenium (ppb) ³	2018	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 (Free) (mg/L) ⁴	2018	4	4	1.22	0.74 - 2.20	Yes	Water additive used to control microbes
THMs [Total Trihalomethanes] (ppb) ⁵	2018	NA	80	.0041 mg/L	ND - 0.0041	Yes	By-product of drinking water chlorination
HAA5s [Haloacetic Acids] (ppb)	2018	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)	2018	240	SS	Erosion of natural deposits
Hardness (gpg)	2018	14.1	SS	Erosion of natural deposits
Iron (ppm)	2018	0.11	ND - 0.11	Erosion of natural deposits



Manganese	2018	ND	ND	Erosion of natural deposits
Sodium (mg/L) ⁷	2018	68.1	47.2 – 89.1	Erosion of natural deposits
Sulfate (ppm)	2018	81.6	SS	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	2018	ND	ND – 0.7	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 TTHM'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.

