

CONSUMER CONFIDENCE REPORT



For more than 140 years, Marshalltown Water Works has been committed to providing safe, high quality drinking water. As our customers and partners in the community, it is important for you to know where our water comes from, how we treat it, and that the quality continues to meet or exceed state and federal regulations. This report gives you an overview of our system from the source to your faucet.

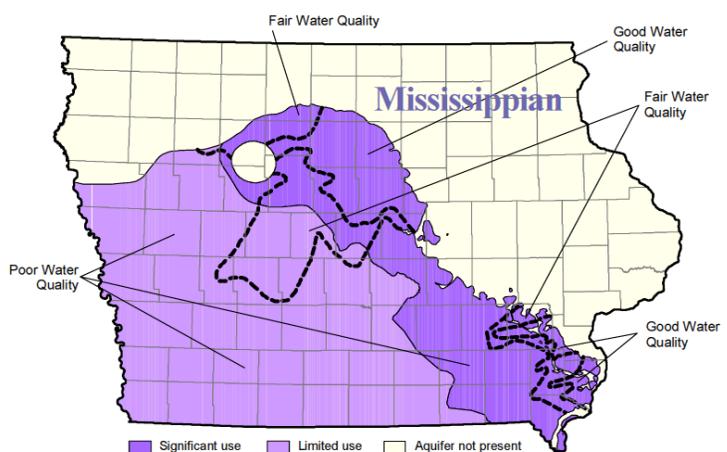
We believe that the best way to demonstrate that your drinking water is safe and reliable is to provide you with the facts. The *Drinking Water Quality Report* on the second page of this publication lists U.S. Environmental Protection Agency (EPA) water quality regulations and the level of contaminants detected in our water last year.

If you want to learn more or if you have questions or comments, call us or stop in for a visit. Marshalltown Water Works office hours are 8:00 a.m. to 5:00 p.m. weekdays. You may also obtain more information by visiting our website at www.marshalltownwater.com.

SOURCE WATER AND TREATMENT

The Marshalltown Water Works obtains a portion of its water from the Mississippian Aquifer. The aquifer was determined to be not susceptible to contamination because the characteristics of the aquifer and overlying material prevent easy access of contaminants to the aquifer. The Mississippian wells will not be susceptible to most contaminant sources except through pathways to the aquifer such as abandoned or poorly maintained wells. A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources and is available from the Marshalltown Water Works at (641) 753-7913.

The source of your water is nine deep wells located on the north side of the Iowa River drawing water from the Mississippian and Pleistocene Aquifers. The water is pumped to the treatment plant where it first goes through aeration to remove iron, radon, and hydrogen sulfide. It then travels to the softening basin for removal of the excess hardness and the remaining iron. The water is then pH adjusted and flows to sand filters, where remaining very small particles are removed. Chlorine is added as a disinfectant and fluoride is added to prevent tooth decay before being pumped to the distribution system for your use.



Marshalltown Water Works staff collect samples hourly at the water plant and daily from the distribution system at various locations around the city to ensure the safety and purity of the water supplied to you.

AGING INFRASTRUCTURE

The news regularly reports on the nation's aging infrastructure and the need to invest money to maintain our roads and our utilities. We can see and feel the need to repair our highways as we get caught in traffic jams or feel the potholes we drive over. It is harder to see the age in our water systems, but the wells, treatment plants and distribution systems that deliver drinking water in our communities are often 50 – 100 years old. Marshalltown's drinking water system is no exception.

Marshalltown's first water treatment plant was built in 1876 – nearly 145 years ago! With many upgrades through the years, the plant finally reached the end of its useful life. It was replaced with our current water treatment plant in 1977. It is a complex plant with a lot of moving parts, and Marshalltown Water Works has done a great job of keeping it working so that it continuously provides great-tasting, high-quality water to residential, commercial and industrial customers. However, with the treatment plant approaching its 45th birthday, it is time to replace a number of those parts to ensure uninterrupted service. The nearly 45 year-old pumps, valves, chemical feed systems, and basins are showing their age.

The distribution system is a network of buried pipes and valves, hydrants, storage towers and meters that deliver the treated water to your homes and businesses. Like the treatment plant, the Marshalltown Water Works' distribution system is also growing old. The flushing and valve maintenance programs that have been in place for decades have helped them far exceed their life expectancies, but some of our oldest water mains are over 100 years old and are in need of replacement.

In a 1935 document, the Marshalltown Water Works Trustees noted, "All water works equipment has a definite age limit." The Marshalltown Water Works equipment is approaching that limit. The Board of Trustees recognizes the need to maintain the system so that you can continue to count on safe, great-tasting water. That is why you will soon see Marshalltown Water Works moving forward with replacement of our aging infrastructure. Costs and funding sources for these projects are being researched, as we strive to keep our rates affordable and competitive. Please watch our website, www.marshalltownwater.com, where information will be posted to keep you informed of our progress.



IMPORTANT HEALTH INFORMATION

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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health. Any bottled water that is labeled “drinking water” has to meet EPA’s drinking water regulations. 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 Environmental Protection Agency’s (EPA) Safe Drinking Water Hotline.

SAFE DRINKING WATER HOTLINE 1-800-426-4791 www.epa.gov/ground-water-and-drinking-water

MARSHALLTOWN WATER WORKS 2018 DRINKING WATER QUALITY REPORT

ANALYTE	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION
Lead (ppb)* (90th percentile)	0	AL = 15	3.00	2016	ND - 4	No
TYPICAL SOURCE: Corrosion of household plumbing systems; Erosion of natural deposits						
Copper (ppm) (90th percentile)	1.3	AL = 1.3	0.02	2016	ND - 0.03	No
TYPICAL SOURCE: Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives						
Fluoride (ppm)	4	4	0.7	2018	0.6 - 0.8	No
TYPICAL SOURCE: Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories						
Sodium (ppm)	N/A	N/A	14	2016	14	No
TYPICAL SOURCE: Erosion of natural deposits; Added to water during treatment process						
Chlorine (ppm) †	MRDLG = 4.0	MRDL = 4.0	2.2	2018	1.6 - 2.6	No
TYPICAL SOURCE: Water additive used to control microbes						

* 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. Marshalltown Water Works 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 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 www.epa.gov/safewater/lead.

† These values are a Running Annual Average. A running annual average is determined by calculating the arithmetic average of quarterly compliance values covering any consecutive four quarter period.

UNREGULATED CONTAMINANTS: The U.S. Environmental Protection Agency required cities our size to take samples in 2018 for the fourth phase of an assessment monitoring program for the Unregulated Contaminant Monitoring Rule (UCMR). Detection levels were set at the parts per billion range (ppb). The EPA will review the findings of this nationwide assessment to determine if any new regulations are needed. Four contaminants were detected in our testing.

LOCATION	CONTAMINANT	AVERAGE	RANGE
Groundwater Before Treatment	Bromide (ppb)	50.2	40.3-60
	Total Organic Carbon (ppb)	1700	1600-1800
Groundwater After Treatment	Manganese (ppb)	2.5	1-4
Distribution System	Dichloroacetic Acid (ppb)	0.63	0.35-0.99

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.

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.

ppb – parts per billion

ppm – parts per million

N/A – Not applicable

ND – Not detected