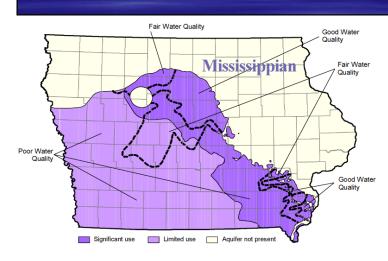
# CONSUMER CONFIDENCE REPORT



#### 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.

For 140 years the Marshalltown Water Works has been committed to providing the safest, highest quality, and most reliable drinking water. This report gives you an overview of our treatment process from the source to your faucet.

You will see that the contaminants detected in your drinking water are very minute compared to the standards set by the Environmental Protection Agency (EPA) Guidelines for Drinking Water.

The source of your water is ten 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 the filters where it passes through the sand filters to remove the remaining very small particles. Chlorine is added as a disinfectant and fluoride is added to prevent tooth decay before being stored in the underground clear well. The water is pumped from the clear well to the distribution system for public use.

The Marshalltown Laboratory and Production 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.

#### **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 systems 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.

#### MARSHALLTOWN WATER WORKS RECEIVES TWO PRESTIGIOUS AWARDS IN 2016

ATER

WORL

SINCE 1876

Marshalltown Water Works (MWW) is among the first utilities to achieve the Directors Award in the *Partnership for Safe Water's* Water Treatment and Water Distribution System Optimization Program in the same year. MWW received these awards for successfully completing a comprehensive self-assessment of both their conventional lime softening treatment process, and their distribution system operations, a significant achievement towards ensuring the delivery of safe, high-quality water to the community. MWW is only the second utility in Iowa to receive the Directors Award for Treatment, and the first in the State to receive the Award for their Distribution System.

The *Partnership for Safe Water* is a voluntary self-assessment and optimization program for water treatment plant and distribution system operation nationwide. More than 250 utility subscribers, collectively serving more than 100 million people, are committed to the *Partnership's* goals of providing safe, high-quality drinking water through achieving operational excellence. *Partnership* members participate in a rigorous four-phase self-assessment and peer review process, developed by industry experts, and are recognized broadly for their commitment to delivering safe water to their communities.

#### WATER WORKS PLANT IMPROVEMENTS

A \$6.7M contract was awarded to Gridor Construction in March 2016. Gridor is based out of Buffalo, MN and specializes in water and wastewater construction projects. The following items will be addressed as part of the Plant Improvements Project.

- Replace an existing 1.5 million gallon ground storage reservoir (GSR) with a new 2.0 million gallon GSR and associated pump building. Replacement of the existing reservoir is necessary since repairs are not feasible at the existing location.
- 2. Rehabilitate an existing 1.0 million gallon GSR.
- 3. Replace lime slakers and repair high service pumps.
- 4. Replace supervisory control system.
- 5. New 1.5 MW standby emergency generator in order to provide reliability.
- 6. New switchgear and outdoor transformer to work in conjunction with the standby emergency generator.
- 7. Sandblasting, painting and rehabilitation of the lime softening basins.

Why are these improvements necessary? The equipment being replaced and rehabilitated at the treatment plant is original equipment from 39 years ago. The 1.5 million gallon reservoir being replaced is over 80 years old and has reached the end of its useful life. It is our mission and responsibility to preserve and maintain utility assets that previous generations have invested in. Our predecessors had the foresight to construct these facilities in order to provide a robust water system for the community.

#### WATER RATES

We recently completed a rate study covering a 5 year planning period. Based on the results of the rate study a rate adjustment is recommended in 2016. The need for this rate adjustment is driven by the following factors. Our water production has declined nearly 14% over the last 9 years. The decrease in water sales coupled with increasing chemical costs has a dramatic affect. The need to reinvest in our infrastructure by fully funding our capital improvement plan. Our capital improvement plan includes the treatment plant improvements currently under way as well as water main replacement and water tower maintenance.

Marshalltown Water Works continues to participate in the City of Ames water rate comparison survey. The survey compares the rates of cities in Iowa with a population of 10,000 or greater. Marshalltown was included with the 25 communities that soften their water. Our average customer uses 600 cubic feet per month. For this volume of softened water there is only 1 utility in the state that charges less than Marshalltown.

QUALITY 

AFFORDABLE 

RELIABLE



Tap Water is a Bargain! Domestic Bottled Water Imported Bottled Water: Marshalltown Tap Water:

\$2.00/gal \$5.50/gal **\$.0023/gal** 



P.O. Box 1420 Marshalltown, IA 50158

For the price of a single, 20-ounce bottle of water, you could fill up the same container with Marshalltown tap water once a day for more than <u>11 years</u>.

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/OGWDW

For more detailed information on water analysis call Water Production Plant 753-3997 or Customer Service 753-7913

# MARSHALLTOWN WATER WORKS 2015 DRINKING WATER QUALITY REPORT

ANALYTE	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETEC- TION	VIOLATION
Lead (ppb)* (90th percentile)	0	AL = 15	4	7/18/2013	ND - 21	No
TYPICAL SOURCE: Corr	osion of household plum	bing systems; Erosion	of natural deposits		· · · · · · · · · · · · · · · · · · ·	
<b>Copper</b> (ppm) (90th percentile)	1.3	AL = 1.3	0.03	7/18/2013	ND - 0.03	No
TYPICAL SOURCE: Corr	osion of household plum	bing systems; Erosion	of natural deposits; Leacl	hing from wood preserv	atives	
Fluoride (ppm) †	4	4	0.70	Daily	0.6 - 0.8	No
TYPICAL SOURCE: Wate	er additive which promo	tes strong teeth; Erosior	n of natural deposits; Dis	charge from fertilizer ar	nd aluminum factories	
Sodium (ppm)	N/A	N/A	16	10/14/2013	16 - 19.3	No
TYPICAL SOURCE: Eros	ion of natural deposits; A	Added to water during the	reatment process			
Chlorine (ppm) †	MRDLG = 4.0	MRDL = 4.0	2.2	Daily	1.8 - 2.5	No
TYPICAL SOURCE: Wat						

\* 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

† 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.

#### **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

### WATER WAGON IS A SUCCESS!

Our staff developed the water wagon to provide drinking water at community events. It provided chilled drinking water at 10 events in 2015. The water provided by the Water Wagon was equivalent to nearly 3,800 bottles of water. It was used in cooperation with Marshalltown Parks & Recreation, Marshall County Conservation, Iowa Valley Continuing Education and Iowa State Extension and Outreach to educate the public about the cost and the environmental impacts of bottled water. Call the Water Works office at 641-753-7913 if you would like to reserve the Water Wagon for your event.



