

# DID YOU KNOW?

Dubuque's **Eagle Point Water Plant** produces an average of **7.2 MILLION GALLONS** of treated water per day. The plant has the capacity to produce up to **18 MILLION GALLONS** per day. The current wells have the capacity to pump nearly **24 MILLION GALLONS** per day.

Dubuque's water distribution system consists of over **321 MILES OF WATER MAINS**, over **8,000 CONTROL VALVES**, almost **2,900 FIRE HYDRANTS**, and over **23,500 SERVICE CONNECTIONS**.

100 gallons  
of City of  
Dubuque  
water costs **47¢**

Compare to 100 gallons of bottled water (16.9 oz. at an average \$1.59 each at a convenience store)...

...That's over **\$1,200!**

Quality AND Quantity

## 2016 Drinking Water Summary

Dubuque's Water Department is proud of the high quality of our water supply, which meets all state and federal drinking water quality requirements.

*We are pleased to inform you that Dubuque had no drinking water violations for 2016.*

Our water quality testing results include substances that were detected in our water. Some of these have maximum contaminant levels established by the Safe Drinking Water Act. The EPA also requires us to monitor for certain unregulated substances while they consider whether or not to enforce limits on them. Testing is not required for each parameter every year.

For questions regarding this information, please visit [www.cityofdubuque.org/water](http://www.cityofdubuque.org/water) or contact Water Department Manager Denise Ihrig, P.E., at 563-589-4291 or Water Distribution Supervisor Brant Schueller at 563-589-4303.

# Water Quality Report 2017

THE CITY OF  
**DUBUQUE**  
*Masterpiece on the Mississippi*



## Source Water Information

The City of Dubuque obtains water from the Apple-Plum Alluvial aquifer\* and the Jordan (Cambrian-Ordovician) Aquifer.

Every aquifer has a degree of susceptibility to contamination because of the characteristics of the aquifer, overlying materials, and human activity.

Susceptibility to contamination generally increases with shallower aquifers, increasing permeability of the aquifer and overlying material, nearby development or agricultural activity, and abandoned or poorly maintained wells.

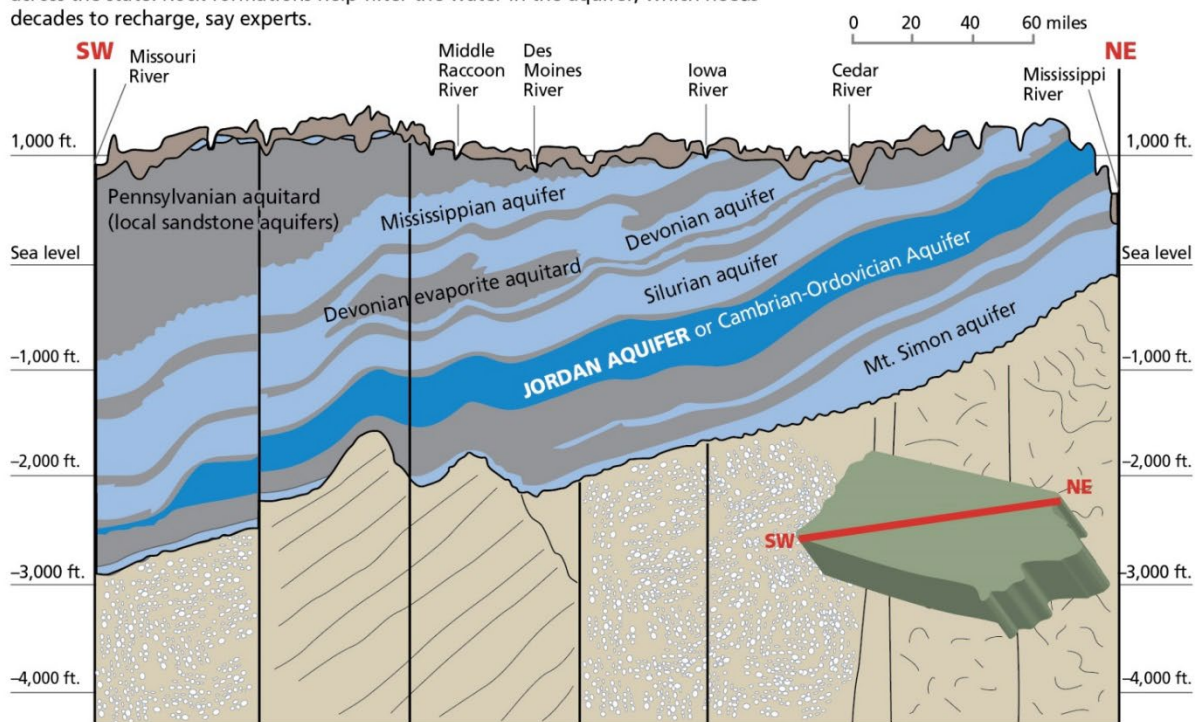
The Apple-Plum Alluvial aquifer is considered to be highly susceptible to contamination, while the Jordan (Cambrian-Ordovician) aquifer has a low degree of susceptibility.

*A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources, and is available on our website at [www.cityofdubuque.org/water](http://www.cityofdubuque.org/water).*

*You may also call 563-589-4291 to obtain a copy of the report.*

### Jordan across Iowa

A cross-section of Iowa shows how the Jordan aquifer changes elevation as it runs across the state. Rock formations help filter the water in the aquifer, which needs decades to recharge, say experts.



Source: Iowa Department of Natural Resources

THE REGISTER

\*Apple-Plum Alluvial aquifer, not shown above, is present along the Mississippi River in depths ranging from 50 feet up to an estimated 250 feet.

For additional information, call 563.589.4291 or visit [www.cityofdubuque.org/water](http://www.cityofdubuque.org/water)



# General Information

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses 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 (1-800-426-4791).

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.

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. The City of Dubuque 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

# Table Definitions

**Action Level (AL)** - The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

**LRAA** - Locational Running Annual Average

**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 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.

**Maximum Residual Disinfectant Level (MRDL)** - The highest level of a drinking water disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG)** - The level of a drinking water disinfectant below which there is no known or expected risk to health.

**N/A** - Not Applicable

**ND** - Not Detected

**ppb** - parts per billion

**ppm** - parts per million

**RAA** - Running Annual Average

**RTCR** - Revised Total Coliform Rule

**SGL** - Single Sample Result

**Treatment Technique (TT)** - A required process intended to reduce the level of contaminant in drinking water.



CONTAMINANT	MCL - (MCLG)	COMPLIANCE		DATE	VIOLATION	TYPICAL SOURCE
		TYPE	VALUE & (RANGE)			
Total Trihalomethanes (ppb)	80 (N/A)	LRAA	40.00 (40 - 40)	09/30/2016	NO	By-products of drinking water chlorination
Total Haloacetic Acids (ppb)	60 (N/A)	LRAA	8.00 (8 - 8)	09/30/2016	NO	By-products of drinking water chlorination
Lead (ppb)	AL = 15 (0)	90th	1.00 (ND - 6)	2015	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Copper (ppm)	AL = 1.3 (1.3)	90th	0.02 (ND - 0.02)	2015	NO	Corrosion of household plumbing systems; Erosion of natural deposits
<b>DISTRIBUTION SYSTEM</b>						
Total Chlorine (ppm)	MRDL = 4.0 (MRDLG = 4.0)	RAA	1.1 (0.06 - 1.76)	9/30/2016	NO	Water additive used to control microbes
Total Coliform Bacteria	TT (TT)	RTCR	3 Samples Positive	10/31/2016	NO	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other water-borne pathogens may be present, or that a potential pathway exists through which contamination may enter the drinking water.
<b>FINISHED WATER TAP</b>						
Fluoride (ppm)	4 (4)	SGL	0.6	09/04/2012	NO	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Barium (ppm)	2 (2)	SGL	0.0201	09/04/2012	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Sodium (ppm)	N/A (N/A)	SGL	16	07/21/2015	NO	Erosion of natural deposits; Added to water during treatment process