

## Water Information

The City of Mattoon's primary source of drinking water is Lake Paradise. In an average year, the City will pump 800 million gallons of water out of Lake Paradise into our water system. We also rely on Lake Mattoon as a secondary source for our water. Mattoon's Water Treatment Plant is located near Lake Paradise and was built in 1999. The plant has a capacity to treat seven million gallons of water each day. Average daily pumpage is 2.2 million gallons per day to approximately 8,018 service connections and an estimated population of 19,787 people. Facilities that purchase water from Mattoon include the Village of Humboldt (0290150).

### Water Treatment Process

Your water is treated in a "treatment train" (a series of processes applied in a sequence) that includes coagulation, flocculation, sedimentation, filtration, and disinfection. Coagulation removes dirt and other particles suspended in the source water by adding chemicals (coagulants) to form tiny sticky particles called "floc," which attract the dirt particles. Flocculation (the formation of larger flocs from smaller flocs) is achieved using gentle, constant mixing. The heavy particles settle naturally out of the water in a sedimentation basin. The clear water then moves to the filtration process where the water passes through sand, gravel, charcoal or other filters that remove even smaller particles. A small amount of chlorine or other disinfection method is used to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water before water is stored and distributed to homes and businesses in the community.

Illinois EPA considers all surface water sources of public water supply to susceptible to potential pollution problems. Hence the reason for mandatory treatment of all public water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration and disinfection. Primary sources of pollution in Illinois lakes can include agricultural runoff, land disposal (septic systems) and shoreline erosion.

**Community Participation:** You are invited to voice your concerns about your drinking water at any Mattoon city council meeting. We meet the 1st and 3rd Tuesdays of each month beginning at 6:30 p.m. at City Hall, 208 North 19th Street, Mattoon.

PWS ID# ILO290250

**Questions?** For more information about this report, please contact David Basham, Water Plant Superintendent, 2941 Lake Road, Mattoon IL 61938 - (217) 234-2454 - bashamd@mattoonillinois.org

## \* Substances That Could be in Water

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 (800-426-4791). The sources of drinking water (both tap water and bottled water) include 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: microbial contaminants, such as viruses and bacteria, that 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 result from urban stormwater 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 stormwater runoff, and residential uses; organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### Cross Connection Control Survey

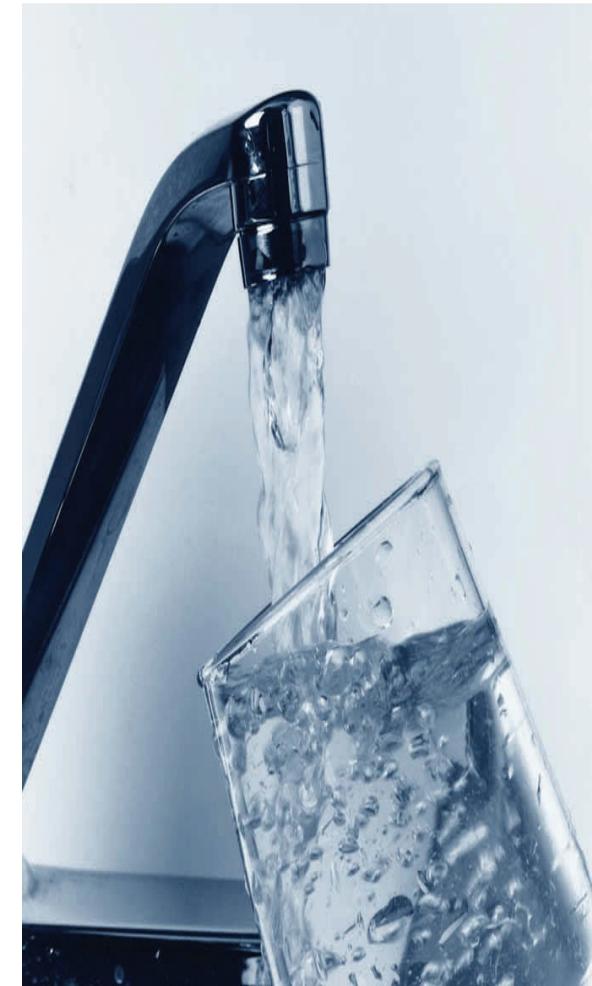
The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross-connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

City of Mattoon  
208 N. 19th St  
Mattoon IL 61938

# ANNUAL WATER QUALITY REPORT

Water Testing performed in 2012.



## Water Sample Results

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions to the right.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
<b>Disinfectants &amp; Disinfectant By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chloramine (as Cl <sub>2</sub> ) (mg/L)	4	4	1.9	1.4	2.2	2012	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	23	4.5	36	2012	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	57	31	80	2012	No	By-product of drinking water disinfection
Total Organic Carbon	NA	TT	NA	NA		2012	No	Naturally present in the environment
<b>Inorganic Contaminants</b>								
Barium (ppm)	2	2	0.029	0.029	0.029	2012	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	1.1	1.06	1.1	2012	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	8	0.06	8	2012	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (optional) (ppm)		MPL	8	8	14	2012	No	Erosion of natural deposits; Leaching
<b>Microbiological Contaminants</b>								
Turbidity (NTU)	NA	0.3	.19	NA		2012	No	Soil runoff
100% of the samples were below the TT value of 0.3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.19. Any measurement in excess of 1 is a violation unless otherwise approved by the state.								
<b>Radioactive Contaminants</b>								
Radium (combined 226/228) (pCi/L)	0	5	0.5	0.5	0.5	2008	No	Erosion of natural deposits
Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source	
<b>Inorganic Contaminants</b>								
Copper - action level at consumer taps (ppm)	1.3	1.3	0.051	2011	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	

\* **NITRATE INFORMATION:** Nitrates in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

\* **LEAD INFORMATION:** 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. City Of Mattoon 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>.

## Definitions

<b>mg/L:</b> Number of milligrams of substance in one liter of water
<b>ppm:</b> parts per million, or milligrams per liter (mg/L)
<b>ppb:</b> parts per billion, or micrograms per liter (µg/L)
<b>pCi/L:</b> picocuries per liter (a measure of radioactivity)
<b>NTU:</b> Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
<b>NA:</b> not applicable
<b>ND:</b> Not detected
<b>NR:</b> Monitoring not required, but recommended.
<b>Maximum Contaminant Level Goal:</b> 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.
<b>MCL:</b> 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.
<b>TT:</b> Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
<b>AL:</b> Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
<b>Variations and Exemptions:</b> State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
<b>MRDLG:</b> Maximum residual disinfection level goal. 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.
<b>MRDL:</b> Maximum residual disinfectant level. 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.
<b>MNR:</b> Monitored Not Regulated
<b>MPL:</b> State Assigned Maximum Permissible Level

\* **Language required by the EPA**

### \* 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).