

Annual Drinking Water Quality Report

**WEE-MA-TUK WATER DISTRICT**

IL0570040

Annual Water Quality Report for the period of January 1 to December 31, 2015

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by WEE-MA-TUK WATER DISTRICT is Purchased Surface Water

For more information regarding this report contact:

Name Joe Carruthers  
 Phone 309-224-7100

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Source of Drinking Water
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 pickup substances resulting from the presence of animals or from human activity.
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 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 can also come from gas stations, urban storm water runoff, and septic systems. - Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

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 which must provide the same protection for public health.

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 (800-426-4791).

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. We 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>.

Source Water Information

Source Water Name	Type of Water	Report Status	Location
CC01 - MASTER METER	FF IL0570300 CC01		

Source Water Assessment

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or call our water operator at 309-224-7100. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

Source of Water: CANTON Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems; hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection.

**Lead and Copper**

**Definitions:**

**Action Level Goal (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

**Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/21/2013	1.3	1.3	0.185	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	09/21/2013	0	15	3.8	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

**Water Quality Test Results**

**Maximum Contaminant Level Goal or 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 Contaminant Level or 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 residual disinfectant level goal or 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 or 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.

**Definitions:** The following tables contain scientific terms and measures, some of which may require explanation.

**ppb:** micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

**na:** not applicable.

**Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**ppm:** milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

**Regulated Contaminants**

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2015	0.6	0.2 - 1.5	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)*	2015	3	2.7 - 2.7	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2015	5	4.975 - 4.975	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

# CITY OF CANTON ANNUAL WATER QUALITY REPORT

## January 1 to December 31, 2015

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and to protect our water resources. We are committed to ensuring the quality of your water. I am pleased to report that our drinking water is safe and meets state and federal requirements.



### Importance of Source Water...

Drinking water for the City of Canton, Illinois (Facility No. 0570250) is supplied by the Canton community water supply (CWS). Lake Canton is a source of this drinking water. Two surface water intakes (IEPA #58089 & #01374) are located in the lake. Our radial collector well located at 19847 N. Banner Dike Rd. (IEPA #01853) is being used at this time as our drinking water source drawing an average of 2.26 million gallons per day, providing water to approximately 5,888 service connections and an estimated population of 20,000 people in Canton and the surrounding area. Facilities that purchase water from Canton include Dunfermline - St. David Water Commission (0575150), Fairview (0570450), Norris (0570750), and Cuba (0570300) with Cuba having an extension of service to Wee-Ma-Tuk and Fiatt.

### Source of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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.

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.

### 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 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 can also, come from gas stations, urban storm water runoff, and septic systems.

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 which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 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 (800-426-4791).

### Source Water Assessment

Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems; hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection.

In a national effort to ensure adequate protection against groundwater contamination from the herbicide Atrazine, USEPA made significant changes to the Atrazine use label in 1990. It is a violation of law to apply, mix, or load Atrazine within 50 feet of any well, including water wells, irrigation wells, livestock water wells, abandoned wells or sinkholes. In 1992, the Atrazine label was further amended to protect surface waters by requiring a 200-foot application setback for lakes and reservoirs. In addition, there is a 66-foot setback from any point where field surface water runoff enters a stream or river. A concerted effort to incorporate best management practices for Atrazine applications is on-going; an atrazine BMP document is available from Novartis Corp Protection, or by contacting the Illinois Fertilizer & Chemical Association at (800) 892-7122.

In an effort to minimize the impact of livestock facilities on water resources on a statewide basis, livestock facilities are now regulated under the Livestock Management Facilities Act. This legislation is designed to keep Illinois' livestock industry productive and environmentally responsible by establishing requirements for design, construction, operation and management of livestock facilities and waste-handling structures. Detailed information on the Livestock Management Facilities Act may be found at the website <http://www.agr.state.il.us>. In addition, further watershed protection efforts and priorities of the Illinois EPA, Illinois Department of Agriculture, Illinois Department of Natural Resources, U.S. Department of Agriculture's Natural Resources Conservation Service, U.S. Army Corps of Engineers, and the Nature Conservancy are described and illustrated at the web site: <http://www.epa.state.il.us/water/unified-watershed-assessment/index.html>.

The source water assessment for our supply has been completed by the Illinois EPA. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation / recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl> or by calling the Groundwater Section of the Illinois EPA at 217-785-4787.

### Questions...

If you have any questions about this report or concerning your water utility, please contact Gregory Pollitt, Superintendent of the Water Department, at (309) 647-0288. We want our valued customers to be informed about their water quality. If you want to learn more, please attend any of our regularly scheduled meetings. The Water and Sewer Committee, and the Lake, Buildings and Grounds Committee meet on the first and third Tuesdays of each month at 6:30pm in the Historic Depot at 50 N. 4th Ave. Canton, IL.

The Canton Water Plant routinely monitors for contaminants in your drinking water according to Federal and State laws. The following tables show the results of our monitoring for the period of January 1st to December 31st, 2015 some constituents may not have been tested for in 2015 so previous testing data was used. If test results are from an earlier year the test date is listed on the Water Quality Data Table. Also, in the tables you will find many terms and abbreviations you might not be familiar with, to help you better understand these terms we've provided their definitions.

### 2015 Water Quality Data -Definition of Terms-

**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 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.

**Level Found:** This column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.

**Range of Detections:** This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.

**Date of Sample:** If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the Consumer Confidence Report calendar year.

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

**Action Level Goal (ALG):** The level of a contaminant in drinking water below, which there is no known or expected risk to health. ALG's allow for a margin of safety.

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

**nd:** Not detectable at testing limits.

**n/a:** Not applicable

**Note:** The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

**ppm:** milligrams per liter or parts per million - or one ounce in 7,350 gallons of water, ug/l: micrograms per litre or ppb: parts per billion or one ounce in 7,350,000 gallons of water.

**ppb:** micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

**pCi/l:** picoCuries per liter (measurement of radioactivity)

**Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**Maximum Residual Disinfectant Level (MRDL):** 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.

**Oocysts:** A thick-walled structure in which sporozoan zygotes develop.

**Maximum Residual Disinfectant Level 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.

There is not a 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.

Manganese is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.

\*MCL Statement: The maximum contaminant level (MCL) for TTHM and HAA5 is 80 ppm and 60 ppm respectively and is currently only applicable to surface water supplies that serve 10,000 or more people. These MCLs will become effective 01/01/2004 for all groundwater supplies and surface supplies serving less than 10,000 people. Until 01/01/2004, surface water supplies serving less than 10,000 people, any size water supply that purchase from a surface water source, and groundwater supplies serving more than 10,000 people must meet a state imposed TTHM MCL of 100 ppm. Some people who drink water containing trihalomethanes in excess of the MCL over many years' experience problems with their - livers, kidneys, or central nervous systems, and may have increased risk of getting cancer.

## 2015 Regulated Contaminants Detected

Lead & Copper	Collection Date	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation
Copper	8/9/13	1.3	1.3	0.012	0	ppm	no
<b>Likely Source</b> Erosion of natural deposits, Leaching from wood preservatives Corrosion of household plumbing systems							
Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Likely Source</b> Corrosion of household plumbing systems; Erosion of natural deposits							
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. We (City of Canton) are responsible for providing high quality drinking water, but we 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a> .							

### Regulated Contaminants

Disinfectants & Disinfection By Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation
Haloacetic Acids (HAA5)	2015	3	0 - 8.28	N/A	60	ppb	NO
TTHMs [Total Trihalomethanes]	2015	4	2.869 - 4.44	N/A	80	ppb	NO
<b>Likely Source</b> By-product of drinking water disinfection							
Chlorine	12/31/15	2.9	2 - 3	MRDLG=4	MRDL=4	ppm	NO
<b>Likely Source</b> Water additive used to control microbes							
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation
Barium	2015	0.022	0.022 - 0.022	2	2	ppm	NO
<b>Likely Source</b> Erosion of natural deposits; Discharge of drilling wastes & metal refineries.							
Fluoride	2015	1	1 - 1	4	4	ppm	NO
<b>Likely Source</b> Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer & aluminum factories							
Nitrate (AS Nitrogen)	2015	0.05	0 - 0.05	10	10	ppb	NO
<b>Likely Source</b> Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits							
Sodium	2015	50	50 - 50			ppm	NO
<b>Likely Source</b> Erosion from naturally occurring deposits: Used in water softener regeneration.							
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation
Combined Radium 226/228	7/8/14	0.0725	0.725 - 0.725	0	5	pCi/L	NO
<b>Likely Source</b> Erosion of naturally deposits.							
Gross alpa excluding radon and uranium	7/8/14	0.982	0.982 - 0.982	0	15	pCi/L	NO
<b>Likely Source</b> Erosion of naturally deposits.							
<b>Likely Source</b> Runoff from herbicide used on row crops.							
Turbidity	Limit (Treatment Technique)			Level Detected		Violation	
Highest Single Measurement	1 NTU			0.133		NO	
Lowest Monthly % meeting limit	0.3 NTU			100%		NO	
<b>Likely Source</b> Soil Runoff							
NTU = Nephelometric Turbidity Units							

**Information Statement:** Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

**Total Organic Carbon** The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA, unless a TOC violation is noted in the violations section.

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future