



## 2010 Annual Consumer Report on the Quality of Tap Water

The City of Bloomington Water Department is committed to providing residents with a safe and reliable supply of high-quality drinking water. We test our water using sophisticated equipment and advanced procedures. The City of Bloomington Water Department's water meets state and federal standards for both appearance and safety. This annual "Consumer Confidence Report," required by the Safe Drinking Water Act (SDWA), tells you where your water comes from, what our tests show about it, and other things you should know about drinking water.

### Overview

We at the Bloomington Water Department are grateful for the opportunity to provide safe drinking water to our customers. In order to ensure that your water is the best quality possible, the City is continually making improvements to our treatment facilities and is actively engaged in reservoir and watershed management.

The City performs monitoring for the Illinois Environmental Protection Agency Clean Lakes Program for the Lake Bloomington and Evergreen reservoirs. Information on the conditions of the reservoirs, sources of possible contamination, and plans for improving our reservoirs will be part of the study reports. We are or have been actively engaged in research projects with Illinois State University, the University of Illinois, the Nature Conservancy, McLean County Soil and Water Conservation District and many other agencies. The goal of these projects is to lessen the impact that farming, construction and other activities on the land that drains into our reservoirs have upon water quality.

If you would like to learn more about the decision making processes that affect drinking water quality, please feel welcome to attend any of the regular scheduled council meetings. The City Council meets on the 2nd and 4th Mondays every month at 7:30 PM in the City Hall Council Chambers on the 2nd Level. All City Council meetings are open to the public and are handicap accessible.

### Water Source

The City of Bloomington obtains water from two man-made reservoirs, the Lake Bloomington reservoir and Evergreen Lake reservoir. The Lake Bloomington reservoir is fed by runoff from 70 square miles of land while the drainage area for the Evergreen Lake reservoir is 41 square miles.

### Water Supply Protection and Planning

The City of Bloomington is actively involved in watershed protection and lake management activities. An oversight committee holds regular meeting to implement watershed and lake management plans for both reservoirs. The committee members are from the City the Town of Normal, McLean County, various agriculture agencies and citizen organizations. Long term water supply planning includes management of our existing resources and development of new sources. Our interim water supply plan is linked at the City of Bloomington website: <http://www.cityblm.org/water>.

### Source Water Assessment Summary

Community water suppliers are required to report a summary of their source water susceptibility determination. The Illinois EPA has compiled source water assessments for all community water supplies including the City of Bloomington. Primary sources of pollution in Illinois lakes can include agricultural runoff, land disposal (septic systems) and shoreline erosion. This assessment is available upon request by calling Rick Twait at 434-2150 or by accessing the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

## An Explanation of the Water-Quality Data Table

The table shows the results of our water quality analyses. Every regulated contaminant that we detected in the water, even the minutest traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health (MCLG), the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement. Definitions of MCL and MCLG are important. The data presented in this report are from the most recent testing done in accordance with regulations.

**Maximum Contaminant Level or MCL:** The highest level of 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 or MCLG:** The level of a contaminant in drinking-water below which there is no known or expected risk to health. MCLGs allow for margin of safety.

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

**Maximum Residual Disinfectant Level or MRDL:** The highest level of disinfectant allowed in drinking water.

**Maximum Residual Disinfectant Level Goal or MRDLG:** The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLGs allow for a margin of safety.

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

Contaminant	Date Tested	Unit	MCLG	MCL	Highest Detected Level	Range (Lowest to Highest Detected Level)	Violation
<i>Inorganic Contaminants</i>							
Barium	2010	ppm	2	2	0.026	n/a	No
	Major sources: Discharge of drilling wastes, metal refineries; erosion of natural deposits.						
Copper	2008	ppm	1.3	AL=1.3	0.082	n/a	No
	Major sources: Corrosion of household plumbing systems; erosion of natural deposits						
Fluoride	2010	ppm	4	4	1.2	0.9—1.2	No
	Major sources: Water additive which promotes strong teeth						
Lead	2008	ppb	0	AL=15	2.4	n/a	No
	Major sources: Corrosion of household plumbing systems; erosion of natural deposits						
Nitrate (as N)	2010	ppm	10	10	4.2	0.092—4.2	No
	Major sources: Runoff from fertilizer waste, leaching from septic tanks, sewage; erosion of natural deposits						
Sodium	2010	ppm	n/a	n/a	11	n/a	No
	Major sources: Erosion of naturally occurring deposits; used in water softening This amount of sodium is equal to 3 milligrams per gallon.						
<i>Microbiological Contaminants</i>							
Total Coliform Bacteria	2010	%pos/mo	5	5	2.3	0—2.3	No
	Naturally present in the environment						
Turbidity Compliance	2010	%≤0.3 NTU	n/a	TT	100	100 -100	No
	Major sources: Soil runoff						
Turbidity	2010	NTU	n/a	TT=1 NTU Max	0.28	0.08—0.28	No
	Major sources: Soil runoff						
<i>Disinfection/ Disinfectant By-Products</i>							
Chloramines	2010	ppm	MRDLG=4	MRDL=4	3.4	3.2—3.4	No
	Major sources: Water additive to control microbes						
Total Haloacetic Acids	2010	ppb	n/a	60	21*	3—24	No
	*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. Major sources: By-product of drinking water chlorination						
Total Trihalo-methane	2010	ppb	n/a	80	35*	30—44	No
	*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. Major sources: By-product of drinking water chlorination						
<i>Unregulated Contaminant Monitoring</i>							
N-NITROSO-DIMETHYL-AMINE (NDMA)	2010	ppb	n/a	n/a	Water Treatment Plant	nd – 0.0054	No
					Distribution system	nd—0.0056	No
	The average level of NDMA found at the water treatment plant was 0.00135 ppb. The average level of NDMA found in the distribution system was 0.00195 ppb. Major sources: Nitrosamines can form as byproducts of disinfection, as intermediates and byproducts in chemical synthesis and manufacture of rubber, leather, andastics; can form spontaneously by reaction of precursor amines with nitrosating agents (nitrate and related compounds), or by action of nitrate-reducing bacteria. Foods such as bacon and malt beverages can contain nitrosamines; there is also evidence that they form in the upper GI tract.						
<b>Key to Table:</b> AL = Action Level MCL = Maximum Contaminant Level MCLG = Maximum Contaminant Level Goal MRDL = Maximum Residual Disinfectant Level MRDLG = Maximum Residual Disinfectant Level Goal n/a = Not Applicable nd = none detected NTU = Nephelometric Turbidity Units ppb = parts per billion or micrograms per liter (µg/l) ppm = parts per million, or milligrams per liter (mg/l) TT = Treatment Technique %≤0.3 NTU = Percent samples less than or equal to 0.3 NTU %pos/month = percent of samples positive per month							

## **About the Data**

### *Turbidity*

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants. As a treatment requirement, turbidity levels of water leaving the water treatment plant cannot be greater than 0.3 Nephelometric Turbidity Units (NTU) in more than 5% of our routine measurements and is never to exceed 1.0 NTU.

### *Unregulated contaminants*

A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language been set. The purpose of unregulated contaminant monitoring is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

## **Required Additional Health Information**

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes limits on the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled 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 Safe Drinking Water Hotline 1-800-426-4791.

The sources of drinking water (both tap 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 radioactive material, and can pick up 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 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, storm water runoff, and residential use.
- Organic chemical contaminants, including synthetic and volatile organics, 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.

Some people may be more vulnerable to contaminants in drinking-water than the general population. Immuno-compromised persons such as those with cancer undergoing chemotherapy or those who have undergone organ transplants, of 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. Environmental Protection Agency/ Communicable Disease Control (EPA/CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline 1-800-426-4791.

## **A Statement about Pharmaceutical Compounds**

Recently, there has been media attention concerning the detection of a broad class of chemicals known as pharmaceutically active compounds in the environment and drinking water. Pharmaceutically active compounds include prescription and over the counter drugs, veterinary drugs, fragrances, and cosmetics. Advanced testing methods can detect these compounds at a level of parts per trillion. People expose themselves to products containing these compounds at much higher concentrations through foods, beverages, medicines, and cosmetics. The presence of these compounds at levels of concern is not likely in our source waters and the water purification process in the City's water treatment facility is well-suited to optimize removal of these compounds. The City of Bloomington is a subscriber to the American Water Works Association Research Foundation, which provides research on emerging topics. Citizens can help keep water

clean by not flushing prescription drugs down the toilet unless the drug information instructs it is safe to do so. For information regarding collection programs and medication disposal drop off locations contact your local pharmacy or visit [www.epa.state.il.us/medication-disposal/](http://www.epa.state.il.us/medication-disposal/).

### **Lead Monitoring**

Due to consistently low results, the IEPA placed lead and copper sampling for our system on a reduced schedule. Our next round of sampling is scheduled for summer 2011. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home could be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water you may wish to have your water tested. For additional protection, flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

### **Other Monitoring**

In addition to the required testing of our water system for regulated contaminants the Bloomington Water Department performs voluntary tests for additional substances and microscopic organisms to make certain our drinking water is safe and of high quality. If you are interested in more detailed information, contact Rick Twait, Superintendent of Water Purification, or Jill Mayes, Laboratory Manager, at 434-2150.

### **Security**

The City of Bloomington Water Department is working to continually improve the security of our water system. A thorough security assessment was completed and we are working to implement the recommendations of that assessment. Since our water supply and distribution system is large, we ask all of our customers to be aware of any suspicious activities involving the water system. If anything suspicious is noted, please call the Water Department at 434-2426.

**Bloomington's drinking water meets or surpasses  
all federal and state drinking-water standards.**

More information is available from  
the Safe Drinking Water Hotline  
1-800-426-4791 or visit the EPA website at  
<http://www.epa.gov/safewater>

For more information about the  
City of Bloomington visit our website at:  
<http://www.cityblm.org>



**ILLINOIS**