**Source Water Assessment Summary:** The Illinois EPA has compiled source water assessments for all community water supplies including the City of Bloomington. The Illinois EPA considers all surface water sources of public water supply to be 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.

The Illinois EPA Source Water Assessment for our water supply is available upon request by calling Kevin Whitehouse at 309-434-2150. To view a summary version of the completed Source Water Assessment, including: importance of source water, susceptibibility 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

**Water Supply Protection and Planning:** The City of Bloomington is actively involved in watershed protection and lake management activities. 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 webpage:

https://www.cityblm.org/government/departments/public-works/resident-community/water-conservation

**Security:** The City of Bloomington Public Works Water Division is working to continually improve the security of our water system. 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 Division at (309) 434-2225.

# The 2019 Water Quality Report for Bloomington may be viewed online at URL: www.cityblm.org/waterquality

### DEMONSTRATING INNOVATION AND COLLABORATION

We rely upon Lake Bloomington and Evergreen Lake to supply water to over 80,000 people. The City, along with many partners, continues to develop and implement the source water protection program that began in the mid 1980's. Our long time partnership with the McLean County Soil and Water Conservation District (SWCD) and a good working relationship with landowners and producers in the watershed are important to the success of the program.

Our source water protection vision is to achieve the highest possible water quality in our reservoirs through cooperative actions with landowners, citizens and local governments to improve conditions in the catchments, streams and lakes. In addition to providing excellent source water, our lakes will support premier fisheries and provide recreational and educational opportunities to residents and visitors.

Our source water goals are to reduce nitrate nitrogen, sediment and phosphorus loadings to the reservoirs to acceptable levels. Lower phosphorus and nitrate concentrations in both reservoirs will decrease the occurrence and severity of excessive algal growth. Reducing sediment loading will increase the longevity of the reservoirs as water supplies by decreasing the rate of storage loss to sedimentation.

Our action plans for both reservoirs can be found in the watershed plans written by local watershed committees. The actions described in the plans range from storm water best management practices, lawn care practices and onsite waste system education for urban areas to nutrient management programs, stream restoration, lake shoreline stabilization, lake destratification, wetland construction and other activities in the drainage basin and in the lakes.

We are fortunate to be partnering with many different groups. Our long term partner, McLean County SWCD assists us in implementing our source water protection program with their Watershed Conservationist. Besides implementing the practices outlined in the watershed plans, the District provides coordination for the committees and oversees plan updates. Illinois State University is a major partner, with data collection and active research projects, by both students and faculty in many different departments, particularly Hydrogeology, Sociology and Economics. We work with The Friends of EverBloom (FOE) to stabilize the lake shorelines and the streams that feed our reservoirs. The FOE obtained grants to install rock riffle structures and stone toe protection in a tributary stream to Evergreen Lake, and for fish habitat that was incorporated into a shoreline stabilization project on Lake Bloomington. We are also fortunate to have good representation by state, federal and local agencies (especially McLean County Parks) and citizen groups in our program. One of the most innovative characteristics of our program is the extreme diversity of the partners. The ability of all the varied interests to pull together in one direction is truly remarkable.







# 2019 Annual Consumer Report on the Quality of Tap Water

The City of Bloomington Public Works Water Division 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 Public Works Water Division'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 Public Works Water Division 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 McLean County Soil and Water Conservation District, Illinois State University, the University of Illinois, the Nature Conservancy, Friends of Everbloom 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 process that affect drinking water quality, please feel welcome to attend any of the regularly scheduled council meetings. The City Council meets on the 2nd and 4th Mondays every month in the City Hall Council Chambers on the 2nd Level. All City Council meetings are open to the public and are handicap accessible.

#### Water Sources

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.

Public Works Department 309-434-2225 • info@cityblm.org

# 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.

#### **Table Definitions and Abbreviations**

**Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. **Average:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Highest Level Detected: In most cases, the "Highest Level Detected" is the annual average of all samples collected during the calendar year. It may represent a single sample, if only one sample was collected. For contaminants monitored quarterly, a quarterly average is calculated using all routine/confirmation samples collected during the quarter. For chloramines, a running annual average is calculated each month by adding the monthly averages and dividing by twelve. For disinfection by-products, a running annual average is calculated for each location by adding the quarterly results and dividing by four. The highest average of all locations is used in the table.

**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.

Maximum Residual Disinfectant Level or 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.

Maximum Residual Disinfectant Level Goal or MRDLG: The level of disinfectant in drinking water below which there is no known of expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**NA:** Not applicable

NTU (Nephelometric Turbidity Units): Unit of turbidity (cloudiness) measurement.

ppm (parts per million): One part substance per million parts water or milligrams per liter (mg/L).

ppb (parts per billion): One part substance per billion parts water or micrograms per liter (µg/L).

**Range of Detections:** The range of individual sample results, from lowest to highest that were collected during the sample period. It may represent a single measurement (S) if only one sample was collected.

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

**Year Sampled:** While most monitoring was conducted in 2019, certain substances are monitored less than one per year because the levels do not change frequently.

#### 2019 Table of Detected Contaminants

Contaminant	Year Sampled	Unit	MCLG	MCL	Highest Level Detected	Range Of Detections	Violation			
Inorganic	Contamina	nts – Mea	sured in th	ie water leav	ving the drinking	water treatment pla	nt			
Barium	2019	ppm	2	2	0.0073	Single measurement	No			
	Typical so	Typical sources: Discharge of drilling wastes, metal refineries; erosion of natural deposits.								
Fluoride	2019	ppm	4	4	0.801	0.546 - 0.801	No			
	Typical sources: Water additive which promotes strong teeth									
Iron	2019	ppm	NA	1	0.016	Single measurement	No			
	Typical s	ources: E	rosion froi	n naturally	occurring deposits.					
Nitrate (as Nitrogen)	2019	ppm	10	10	Highest quarterly average 5	0.72 - 5.7	No			
	Typical sources: Runoff from fertilizer wastes, leaching from septic tanks, sewage; erosion of natural deposits. Quarterly averages are calculated using all routine and confirmation samples collected during a quarter.									
Sodium	2019	ppm	NA	NA	21	Single measurement	No			
	Typical sources: Erosion of naturally occurring deposits; used in water softening									
	Typical so	urces: Ei	osion of r	aturally oc	curring deposits:	used in water sof	tening			
Synthetic ()	1 **					•				
Synthetic O	rganic Chem	icals - M	easured in	the water le		g water treatment p	lant			
Synthetic On Atrazine	2019	ppb	easured in	the water le	eaving the drinking	•				
Atrazine	rganic Chem 2019 Typical Sou	ppb prces: Ru	asured in 3	the water le	aving the drinking  1 ed on row crops.	g water treatment p 0 - 0.58	lant			
Atrazine	rganic Chem 2019 Typical Sou fection/ Disi	ppb prces: Ru	easured in 3 noff from h	the water le	aving the drinking  1 ed on row crops.  ed in the water dis	g water treatment p 0 - 0.58 stribution system	olant No			
Atrazine	2019 Typical Sou fection/ Disi 2019	ppb prces: Ru infectant	asured in 3 noff from h By-Produc MRDLG=4	the water let 3 nerbicide use ts - Measur MRDL=4	aving the drinking  1 ad on row crops.  ed in the water dis  3.2*	g water treatment p 0 - 0.58	lant			
Atrazine  Disin  Chloramines  *For chloramines, a dividing by twelve.	rganic Chem 2019 Typical Sou fection/ Disi 2019 Typical sou a running ann	ppb prces: Ru infectant ppm rces: Wa	asured in 3 noff from h By-Produc MRDLG=4 ter additive ge is calcul	the water let  3 nerbicide use ts – Measur MRDL=4 to control related each measure	eaving the drinkin.  1 ed on row crops.  ed in the water dis 3.2*  microbes.  onth by adding the listed. Some data	g water treatment p 0 - 0.58  stribution system 3.2 - 3.2  e monthly averages	No No and			
Atrazine  Disin Chloramines *For chloramines, a dividing by twelve, in this calculation.	rganic Chem 2019 Typical Sou fection/ Disi 2019 Typical sou a running ann	ppb prces: Ru infectant ppm rces: Wa	asured in 3 noff from h By-Produc MRDLG=4 ter additive ge is calcul	the water let  3 nerbicide use ts – Measur MRDL=4 to control related each measure	aving the drinking  1  and on row crops.  and in the water discovery  3.2*  microbes.  anoth by adding the	g water treatment p 0 - 0.58  stribution system 3.2 - 3.2  e monthly averages	No No and			
Atrazine  Disin Chloramines *For chloramines, a dividing by twelve. in this calculation.  Haloacetic Acids	rganic Chem 2019 Typical Sou fection/ Disi 2019 Typical sou running ann The highest 2019	ppb urces: Ru infectant ppm rces: Wa nual avera a annual a	anoff from h By-Produc MRDLG=4 ter additive ge is calcul verage of a	the water let 3 aperbicide usets – Measur MRDL=4 to control related each mill months is	raving the drinkin.  1 ed on row crops.  ed in the water dis 3.2* microbes. north by adding the listed. Some data  27* Highest locational	g water treatment p 0 - 0.58  stribution system 3.2 - 3.2  e monthly averages from the previous y	No No and ear is used			
Atrazine  Disin Chloramines *For chloramines, a dividing by twelve. in this calculation.  Haloacetic Acids	rganic Chem 2019 Typical Sou fection/ Disi 2019 Typical sou running ann The highest 2019	ppb urces: Ru infectant ppm rces: Wa nual avera a annual a	anoff from h By-Produc MRDLG=4 ter additive ge is calcul verage of a	the water let 3 aperbicide usets – Measur MRDL=4 to control related each mill months is	aving the drinkin 1  ed on row crops.  ed in the water dis  3.2* microbes.  sonth by adding the listed. Some data  27* Highest locational running average	g water treatment p 0 - 0.58  stribution system 3.2 - 3.2  e monthly averages from the previous y	No No and ear is used			

\*For disinfection by-products, a running annual average is calculated for each location by adding the quarterly results and dividing by four. The highest locational running annual average of all locations is listed. Some data

rom the previous year is used in this calculation

Lead and Copper - Measured in the water distribution system											
Contaminant	Year Sampled	Unit	MCLG		AL	90 <sup>TH</sup> Percentil		# Sites over AL	Violation		
Copper	2017	ppm	1.3		1.3	0.059		0	No		
	Typical sources: Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.										
Lead	2017	2017 ppb			15	3.9		2	No		
	Typical sources: Corrosion of household plumbing systems; erosion of natural deposits										
Turbidity - Measured in the water leaving the drinking water treatment plant											
	Year Tested	Limit (TT	) I	Level Detected			Violation				
Turbidity Highest single	2019	1 NTU		0.18 NTU			No				
measurement	Typical sources: Soil runoff										
Lowest monthly % meeting limit	2019	0.3 NTU	100 %			%	No				
	Typical sources: Soil runoff										
Total Organic Co	arbon – Med	sured in the	untreated	wat	ter an	id the wate	r leavin	g the water treatm	ent plant		
The percentage of system met all T				) re	emov	/al was n	neasure	d each month a	nd the		



## ABOUT THE DATA

**Nitrate:** Nitrate in drinking water at levels above 10 ppm is a health risk for infants 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 for advice from your health care provider.

**Sodium:** This contaminant is not currently regulated and there is no MCL for sodium. Monitoring is required to provide information to consumers and health officials who are concerned about sodium intake due to dietary precaution. If you are on a sodium restricted diet, consult a physician about this level.

**Turbidity:** Turbidity is a measure 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. 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.

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 2020. 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 Bloomington 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 cold 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 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

**Required Additional Health Information:** To ensure that tap water is safe to drink, the US Environmental Protection Agency (USEPA) 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 EPA'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, 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. Environmental Protection Agency/ Communicable Disease Control (EPA/CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

**Other Monitoring:** In addition to the required testing of our water system for regulated contaminants, the Bloomington Public Works Water Division 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 Kevin Whitehouse, Superintendent of Water Purification, or Jill Mayes, Laboratory Manager, at (309) 434-2150.