

**The City of Bloomington's
Utility Service Board (USB)
meets every other Monday at
5:00 pm. USB meetings are
public meetings and citizens
are welcome to attend,
observe and record what
transpires. For more
information concerning
meetings, contact the
Director's Office at
600 East Miller Drive
Bloomington Indiana 47401
812-349-3650**

www.bloomington.in.gov/utilities



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Front cover: Designed by Taylor Wray, intern in the T&D Department of Utilities
Inside Panel: Isaiah Giron, Noah Bengtson, Cade Bengtson, and Isaac Giron, grandsons of Michael Bengtson, Utilities Engineering
Inside Panel: Kayli, Carly & Colby Reed, nieces & nephew of Sheila McGlothlin, Utilities Engineering
Back page: Andrew Lucas, son of Tonia Lucas, Utilities Engineering
Back panel: Natalie Johnson, granddaughter of Rance Fawbush, Utilities Finance

WATER QUALITY REPORT 2011



**City of Bloomington Utilities
Water Quality Office**

Mark Kruzan, Mayor

www.bloomington.in.gov/utilities

Public Water System ID # IN 5253002

Once again, the City of Bloomington's water meets and exceeds all Federal, State and Local Guidelines!

In order to ensure that tap water is safe to drink, USEPA and the Indiana Department of Environmental Management prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. This publication describes those guidelines for the City of Bloomington's drinking water. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 their potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (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 (800-426-4791).



We don't often pause to consider the incredible value of a safe, reliable water supply — and the water system that delivers it — in our everyday lives. But consider what tap water does that no other water can do.

Only Tap Water Delivers ...

... public health protection.

In a world where an estimated 3 million people die every year from preventable waterborne diseases, our water systems allow us to drink from virtually any public tap with a high assurance of safety. Each community water supply must meet rigorous federal and state health-protective standards.

... fire protection.

A well-maintained water system is critical in protecting our communities from the ever-present threat of fire. A system that provides reliable water at an adequate pressure can be the difference between a small fire and an urban inferno. The ability to suppress fires also influences new home construction, business location decisions and insurance rates.

... support for the economy.

Businesses or housing developments do not succeed without a safe and sustainable water supply. Tap water is critical to businesses' day-to-day operations and is often a primary ingredient in the products they create.

Source: American Water Works Association

Este informe contiene información muy importante sobre el agua potable. Tradúzcalo o pídale a alguien que se lo explique.

이 서류는 식수에 관한 중요한 정보를 담고 있으니, 필요하면 다른이에게 번역이나 낭독을 하게하여 내용을 숙지하시기 바랍니다.

Your Drinking Water Source

The source of the City of Bloomington’s drinking water is surface water from Monroe Reservoir, located nine miles southeast of Bloomington. The City of Bloomington has received a copy of the Indiana-Monroe Reservoir Source Water Assessment. Federal guidelines require the State of Indiana to issue Source Water Assessments in order to identify significant or possible sources of contamination. Information concerning Monroe Reservoir’s Source Water Assessment is available by contacting the City of Bloomington’s Water Quality Office.

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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- 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, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic waste water 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, include synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.



Detected Contaminants Table					
Substance	Highest Level Allowed (EPA's MCL*)	Highest Level Detected	Ideal Goals (EPA's MCLGs*)	Meets Limits?	Sources of Contamination
Microbiological Contaminants					
Total Coliform Bacteria	5 percent ¹	1.3 percent	0	yes	Naturally present in the environment
Total Organic Carbon (TOC)	minimum 35% removal	46.2% removal average ²	None	yes	Naturally present in the environment
Turbidity	Treatment Technique	0.18 turbidity units ³	None	yes	Soil runoff
Inorganic Contaminants					
Barium	2 ppm*	0.015 ppm	2 ppm	yes	Erosion of natural deposits
Copper	Action Level* = 1.3 ppm	0.025 ppm ^{(90th Percentile)*}	1.3 ppm	yes	Corrosion of household plumbing systems; erosion of natural deposits
Chloramines (as Chlorine)	4.0 ppm (MRDL)*	2.7 ppm	4 ppm (MRDLG)*	yes	Water additive to control microbes
Fluoride	4 ppm	1.44 ppm ⁴	4 ppm	yes	Water additive which promotes strong teeth
Nitrate (as Nitrogen)	10 ppm	0.02 ppm	10 ppm	yes	Runoff from fertilizer; leachate from septic systems, sewage; erosion of natural deposits
Lead	Action Level = 15 ppb*	4.0 ppb ^(90th Percentile)	0	yes	Corrosion of household plumbing systems; erosion of natural deposits
Volatile Organic Contaminants					
Total Trihalomethanes (TTHM)	80 ppb	64.2 ppb average ⁵	0	yes	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	60 ppb	46.3 ppb average ⁶	0	yes	By-product of drinking water disinfection
LISTED ABOVE are 11 contaminants detected in Bloomington's drinking water during 2010. All are within allowable levels. Not listed are the over 60 primary contaminants for which we tested that were not detected.					
*DEFINITIONS:					
90th Percentile - Ninety percent of samples had lower values than the value indicated.					
Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.					
Colony Forming Unit - An area of visually distinct bacterial growth which may result from a single bacterium or pairs, clusters or chains of bacteria.					
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.					
Maximum Contaminant Level Goal (MCLG) - The level of 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 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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.					
NTU - Nephelometric turbidity unit is a measure of the clarity of the water. Turbidity in excess of 5 NTU is just noticeable to the average person.					
ppm - parts per million. Equivalent to milligrams per liter (mg/l).					
ppb - parts per billion. Equivalent to micrograms per liter (ug/l).					
Total Organic Carbon (TOC) - a measurement of natural and man-made organic material in the water. TOC reacts with disinfectants to form disinfection by-products.					
Treatment Technique (TT)- A required process intended to reduce the level of a contaminant in drinking water.					
ADDITIONAL INFORMATION:					
1 No more than 5.0 percent of the samples collected in a calendar month may test positive for total coliform bacteria.					
2 Total Organic Carbon (TOC) removal percentages ranged from 29.6% to 54.7%.					
3 Turbidity levels ranged from 0.10 to 0.18 with an average of 0.13 turbidity units. CBU was always in compliance; therefore the lowest level of compliance on a monthly basis was 100%					
4 Fluoride levels ranged from 0.00 to 1.44 with an average of 0.88 ppm.					
5 Total trihalomethane levels ranged from 28.5 to 137.6 ppb. Some people who drink water containing trihalomethanes in excess of the MCL over many years could experience problems with their liver, kidneys, or central nervous systems, and may have increased risk of getting cancer.					
6 Haloacetic acids (HAA5) levels ranged from 19.6 to 76.3 ppb. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.					