

**EMWC NEWS**  
**East Monroe Water Corporation**  
**3428 S. Knightridge Road**  
**Bloomington, Indiana 47401**

**April 2015**

**ANNUAL MEETING.** EMWC is a cooperative venture. Each "customer" is a member and part owner. Your share is worth about \$2000. If you are interested in, or want to comment on, what we are doing with your share, here is your chance. The annual meeting for all members will be held at EMWC headquarters on Tuesday, May 12, at 6 PM. Light refreshments will be served. The agenda will include a few words of welcome from the president, the treasurer's report, discussion of work in progress, election of new board members, and an open forum for discussion from attendees. Don't miss it !!!

**ELECTIONS.** Our corporation is guided by a nine-member Board of Directors elected from our members. Our by-laws limit terms of members of our Board of Directors to three years. They do not limit the number of successive terms board members may serve. Elections for three members are held each year at the general meeting. Each year, as required, we announce that any member may nominate him/herself for a Board position. The announcement is made on your monthly bill. Nominations closed on March 13. Nominations are not allowed from the floor of the annual meeting. This year the nominees are: Joan Hall, a member with organizational and administrative experience at the University; Jeff Cook, current Board member, Secretary to the Board, and GPS consultant for the corporation; and, Damon Cappy and Ingrid Beery, both long-time members of the Board.

**WORLD WATER DAY.** Did you know that March 22 of this year was World Water Day? In some parts of the world, and even in parts of this country, water is an extremely precious commodity. Have you seen any of the newscasts about the California droughts? That state is considering rationing water. How would you feel about limiting flushing your toilet to once each day, or limiting your shower to one minute? In other areas of the world people may need to walk as much as a mile each day to secure enough water for their family needs. We are so very fortunate to have Lake Monroe available, and that we can get all the water we need by merely turning on the tap.

However, if you are interested in water conservation, here are a few tips on how you can conserve water, and incidentally, lower your water bill:

- Turn the water off while brushing your teeth and save four gallons per minute. That is 200 gallons per week for a family of four;
- Time your shower to under five minutes. This can save up to 1000 gallons per month;
- Use your dishwasher and washing machine only when it is full, and save 1000 gallons monthly;
- Don't use running water to thaw frozen food;
- Check for leaks in water taps or pipes. A slow leak can amount to 20 gallons a day, or 7000 gallons annually;
- Reduce rinsing dishes. Most dishwashers will clean them perfectly anyhow;
- Put food coloring in your toilet tank. If it seeps into the toilet bowl, you have a leak. It is easily fixed, and can save you 600 gallons monthly.

Are we suggesting that you use less water? Should we go back to the ritual of only the Saturday night bath? Or maybe an outhouse? Of course not!!! Just remember, water is indeed a precious commodity. And maybe, when World Water Day rolls around next year, we will drink a glass of water as a toast to Lake Monroe.

**OTHER TRIVIA.** Our corporation has over sixty miles of pipe in the ground, so as to serve our thirteen- hundred-plus members. These pipes may run along a road, across a pasture, under a creek, through a swamp or across your front yard. Our members may live in an urban-like subdivision, on a bluff overlooking Lake Monroe, or up a narrow rocky lane. Our area of eastern Monroe County is a rugged collection of ridges and valleys. And yet, we provide water to all those locations.

The city of Bloomington Utilities Department sells us the water we forward to you through meters at five different locations. This water is distributed through large mains throughout our service areas. The water from these mains is further sent either through individual service lines to your meters, or is further routed through lesser mains to more densely populated areas. There are ten of these minor mains. Each is monitored by its own sub-master meter. Until recently these sub-master meters were read manually. However, we recently have installed a system that allows these meters to be read from the office. Reading can be done daily, or at even lesser intervals. Deviations from normal can be determined almost at once. A major leak in a wooded area, which might not be noted normally, would show up immediately on the new system and located.

Our major trunk main is the one that runs along Highway 46 to Brown County. If a major break should occur in that line we may lose water distribution to a large percentage of our members. To reduce that possibility we are engaged in connecting many of the sub-mains along that road to each other so that in an emergency we could continue to provide water to most of those customers. This project is ongoing.

**MORE ABOUT EMWC.** If you really want to know all the intimate details of our organization you can check us out at our web page. Just go to [EMWC.us](http://EMWC.us). You will find information about our history, our staff members, the members of the Board and payment options. Find out about new projects, or boil orders. And all in an easy to use site.

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This Newsletter is written/edited by Bob Klausmeier. He can be reached for questions/comments until May12 in our office on Tuesday mornings.  
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**WATER QUALITY.** The source of the water we provide is Lake Monroe. The lake's water source is surface water. As water travels over or through the land it can pick up naturally occurring minerals, radioactive materials, and in some cases materials resulting from human or animal activity. This water is treated and decontaminated to insure that it is safe to drink. To insure its safety, the federal Environmental Protection Agency prescribes regulations that limit the amount of certain contaminants in water provided for public consumption. Drinking water may reasonably be expected to contain some low level contaminants. These contaminants do not indicate a health risk.

The quality of water we provided to our members during 2014 exceeded all water quality standards. However, we are required by law to report annually to our users the quality of water we provide. The following constitutes that report. All water we provide is sold to us by the City of Bloomington Utilities (CBU), and many of the analyses listed below are provided by CBU and would not change after passing through our procurement meters..

In addition we ourselves have had some testing performed, as required. These tests are performed by qualified laboratories. Periodically we are required to have the water supplied to our members tested for copper, lead, asbestos and certain halogenated products. All were satisfactory. In addition, each month we collect five samples for testing for microbial contamination. All have proven satisfactory. Each work day we check "in house" to ensure that the chlorine level is adequate. We have never found a level below that prescribed.

The following table provides detailed information about the water we provide and contains data generated by CBU laboratories as well as that collected by our contract laboratories.

# 2014 EMWC Water Quality Report

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. U.S. Environmental Protection Agency and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

**Detected Contaminants Table**

Substance	Highest Level Allowed (EPA's MCL*)	Highest Level Detected	Ideal Goals (EPA's MCLG's*)	Sources of Contamination
<b>Microbiological Contaminants</b>				
Cryptosporidium	Treatment Technique (TT)*	0.1 oocysts*/L	0	Naturally present in the environment
Heterotrophic Plate Count	Treatment Technique	75 CFU/ml	None	Natural lake bacteria, wildlife, septic systems
Total Organic Carbon (TOC)	minimum 35% removal	41.4% removal average <sup>1</sup>	None	Naturally present in the environment
Turbidity	Treatment Technique	0.35 turbidity units <sup>2</sup>	None	Soil runoff
<b>Inorganic Contaminants</b>				
Barium	2 ppm*	0.018 ppm	2 ppm	Erosion of natural deposits
Chloramines (as Chlorine)	4.0 ppm (MRDL)*	2.60 ppm	4 ppm (MRDLG)*	Water additive to control microbes
Copper	TT; Action Level* = 1.3 ppm	0.010 ppm <sup>3</sup> (90th Percentile)*	1.3 ppm	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride	4 ppm	1.04 ppm <sup>4</sup>	4 ppm	Water additive which promotes strong teeth
Lead	TT; Action Level = 15 ppb*	0.10 ppb <sup>3</sup> (90th Percentile)	0	Corrosion of household plumbing systems; erosion of natural deposits
<b>Organic Contaminants</b>				
Atrazine	3 ppb	0.2 ppb	3 ppb	Runoff from herbicide used on row crops
Haloacetic Acids (HAA5)	60 ppb	53.5 ppb average <sup>5</sup>	0	By-product of drinking water disinfection
Hexachlorocyclopentadiene	50 ppb	0.1 ppb	50 ppb	Discharge from chemical factories
Total Trihalomethanes (TTHM)	80 ppb	66.2 ppb average <sup>4</sup>	0	By-product of drinking water chlorination

LISTED ABOVE are 13 contaminants detected in Bloomington's drinking water during 2014. All are within allowable levels. Not listed are the over 75 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.

**CFU/ml** - Colony forming units per milliliter.

**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.

**Oocysts** - The germ cell within the ovary of a protozoa.

**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 Total Organic Carbon (TOC) removal percentages ranged from 30.9% to 57.9%.

2 Turbidity levels ranged from 0.09 to 0.35 with an average of 0.14 turbidity units. The lowest level of compliance on a monthly basis was 100%.

3 Data listed are from 2012 and are the most recent testing done in accordance with regulations. None of the samples tested exceeded the action level.

4 Fluoride levels ranged from 0.00 to 1.04 with an average of 0.74 ppm.

5 Total trihalomethane levels ranged from 55.4 to 88.1 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 46.0 to 78.4 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.