

# CITY OF WATERVILLE

## DRINKING WATER CONSUMER CONFIDENCE REPORT FOR 2015



**FOR MORE INFORMATION ON  
THIS REPORT, PLEASE CALL  
419-878-8101**

**In 1998, a new Federal rule was  
passed to ensure that consumers  
community drinking water supplies  
receive annual documentation of  
their water's quality.**

**Lori Brodie, Mayor  
James Bagdonas, Municipal Administrator  
Ken Blair, Public Works Director**

## **WHERE DOES YOUR WATER COME FROM?**

The City of Waterville's water comes from Lake Erie. This means that the water you drink comes from a surface water supply, not a well. Raw water is collected by an intake crib, located approximately nine miles off shore. The intake crib is a circular concrete structure, 83 feet in diameter, extending 24 feet below the surface of the lake. Water flows into the crib through sixteen ten-foot square openings called ports. The water then flows by gravity through a nine-foot diameter pipe to the Low service pumping station located in Jerusalem Township. From there it is pumped to the Collins Park Water Treatment Plant in East Toledo for processing.

## **SOURCE WATER ASSESSMENT REPORT:**

The City of Toledo treats its water to meet and even surpass drinking water quality standards, but no single treatment protocol can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect Lake Erie. More detailed information is provided in the City of Toledo's Drinking Water Source Assessment Report, which can be obtained by calling 419-936-3021.

## **HEALTH AND SAFETY INFORMATION**

Drinking water, including bottled water, may contain small amounts of some contaminants. The presence of these contaminants does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling EPA's Safe Drinking Water Hotline, 800-426-4791. The sources of both tap and bottled drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive materials, and can also pick up substances resulting from animal or 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 and residential use; Pesticides and herbicides, which may come from a variety of sources such as agriculture 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, septic systems, and agricultural and urban runoff; or Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

To ensure that tap water is safe, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) establishes limits for contaminants in bottled water, which must provide the same protection for public health.

"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 Waterville 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 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 Hotline at <http://www.epa.gov/safewater/lead>."

**For more information call EPA's Safe Drinking Water Hotline at 800-426-4791**

**Information for Vulnerable Populations:** Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those undergoing chemotherapy, who have undergone organ transplants, with HIV/AIDS or other immune system disorders, and some elderly and infections. These people should seek advice about drinking water from their health care providers. Federal guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are also available from EPA's Safe drinking Water Hotline at 800-426-4791.



## 2015 Drinking water Quality Results

The table below shows the results of the water quality tests for 2015. The environmental Protection Agency (EPA) requires regular sampling to ensure drinking water safety. Samples were collected for dozens of different contaminants, most of which were not detected in the water supply. Those that were detected are included in the table below. The Ohio EPA

| Parameter:  | Sample Year        | Unit        | Level Found        | Range Detected | MCLG   | MCL                                    | Violation | Likely Sources   |
|---|--------------------|-------------|--------------------|----------------|--|--|-----------|--|
| <b>Regulated Inorganic Parameters (sampled at the plant tap)</b>  |                    |             |                    |                |  |  |           |  |
| Barium  | 2015               | ppm         | 0.010              | NA             | 2  | 2                                      | No        | Erosion of natural deposits, discharge from drilling Wastes and metal refineries |
| Fluoride  | 2015               | ppm         | 1.05               | 0.82 – 1.17    | 4  | 4                                      | No        | Water additive to promote strong teeth   |
| Chlorite  | 2015               | ppm         | 0.37               | 0.053 – 0.5    | 0.5  | 1.0                                    | No        | Byproduct of drinking water disinfection   |
| Nitrate   | 2015               | ppm         | 3.12               | nd – 3.12      | 10   | 10                                     | No        | Fertilizer runoff; septic tank leaching, sewage; erosion of natural deposits     |
| <b>Regulated Organic Parameters (TTHM and HAA5 sampled in the distribution system)</b>  |                    |             |                    |                |  |  |           |  |
| TTHM  | 2015               | ppb         | 69.7               | 22.1 – 96.0    | 0  | 80                                     | No        | Byproducts of drinking water disinfection  |
| HAA5  | 2015               | ppb         | 13.3               | 4.1 – 31.2     | none   | 60                                     | No        | Byproducts of drinking water disinfection  |
| <b>Synthetic Organic Parameters including Pesticides and Herbicides –</b>   |                    |             |                    |                |  |  |           |  |
| Atrazine  | 2015               | ppb         | 0.089              | nd – 0.089     | 3  | 3                                      | No        | Runoff from herbicide used on row crops  |
| Simazine  | 2015               | ppb         | 0.060              | nd – 0.060     | 4  | 4                                      | No        | Herbicide runoff   |
| <b>Regulated Microbiological Parameters (sampled at the plant tap)</b>  |                    |             |                    |                |  |  |           |  |
| Turbidity   | 2015               | ntu         | 0.24               | 0.04 – 0.24    | none   | TT                                     | No        | Soil runoff, suspended matter in lake water                                      |
| TOC   | 2015               | see note 3  | 3.02               | 2.58 – 3.87    | none   | TT                                     | No        | Naturally present in the environment   |
| <b>Residual Disinfectants</b>   |                    |             |                    |                |  |  |           |  |
| Total Chlorine  | 2015               | ppm         | 1.06               | 0.49 – 1.52    | 4  | 4                                      | No        | Additive used to control microbes  |
| <b>Copper and Lead Testing (sampled in the distribution system at individual taps)</b>  |                    |             |                    |                |  |  |           |  |
| Copper  | 2014               | ppm         | <.60               | nd – 0.60      | 1.3  | AL=1.3                                 | No        | Corrosion of household plumbing system   |
| Lead  | 2014               | ppb         | <11                | nd - <11       | 15   | AL=15                                  | No        | Erosion of natural deposits  |
| <b>Radioactive Testing</b>  |                    |             |                    |                |  |  |           |  |
| Alpha   | 2015               | piC/L       | 8                  | NA             | NA   | 15                                     | No        | Erosion of natural deposits  |
| <b>Unregulated Parameters (sampled at the plant tap)</b>  |                    |             |                    |                |  |  |           |  |
| Sodium*1  | 2015               | ppm         | 32.4               | 6.8 – 32.4     | na   | na                                     | No        | Naturally occurring  |
| *1. This information is provided for those concerned with sodium in their diet; 33.2 ppm of sodium equates to 7.90 milligrams of sodium per 8 ounce glass of water.   |                    |             |                    |                |  |  |           |  |
| <b>Parameter:</b>   | <b>Sample Year</b> | <b>Unit</b> | <b>Level Found</b> | <b>Range</b>   | <b>Threshold</b>   | <b>Likely Sources</b>                  |           |  |
| Microcystin*2   | 2015               | ppb         | ND                 | ND             | 0.3 Children under the age of 6<br>1.6 Anyone 6 or older | Toxin produced by harmful algal blooms |           |  |
| *2. Micocystin is a toxin produced by harmful algal blooms. The 1.00 ppb Do Not Drink Advisory Threshold was established by OEPA and Ohio Department of Public Health. For information on Harmful Algal Bloom Response Strategy go to <a href="http://epa.ohio.gov/Portals/28/documents/HABs/PWS_HAB_Response_Strategy_2014.pdf">http://epa.ohio.gov/Portals/28/documents/HABs/PWS_HAB_Response_Strategy_2014.pdf</a> . |                    |             |                    |                |  |  |           |  |

1. TTHM stands for Total Trihalomethanes. HAA5 stands for Haloacetic Acids. MCL compliance for both TTHM and HAA5 is based on the highest annual average (shown as level found). The range shows the highest and lowest single detects from quarterly compliance monitoring at two different sites in the distribution system. On July 14, 2015 the TTHM samples were above the MCL of 80 ppb detected but were below the running annual average required.
2. Turbidity is a measure of the cloudiness of the water. We monitor it daily because it is a good indication of the effectiveness of our filtration system. The turbidity limit set by the EPA states that all samples must be below 1 ntu and that 95% of the daily samples must be lower than 0.3 ntu. In 2014, 99% of our samples were below 0.3 ntu.
3. TOC stands for Total Organic Carbon. The value reported under “Level Found” for TOC is the lowest running annual average ratio between the percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one (1.0) indicates that the water system is in compliance with TOC removal requirements. A value of less than one indicates a violation of the TOC removal requirements. The value reported under the “Range” for TOC is the lowest monthly ratio to the highest monthly ratio. Toledo remained in compliance with TOC removal requirements.
4. Compliance for copper and lead is based on the 90<sup>th</sup> percentile, where 9 out of 10 samples must be below the action level (AL).

This table shows results from 2013 Unregulated Contaminants Monitoring Rule 3 (UCMR3) results. These test results will assist USEPA in developing new regulatory requirements to protect the public health and safety. Any contaminant found in the UCMR3 quarterly sampling will not have an MCLG or MCL and will be listed below:

| Parameter:   | Sample Year | Units | Level Found | Range         | MCLG | MCL | Violation |
|--|-------------|-------|-------------|---------------|------|-----|-----------|
| <b>Unregulated Contaminants in Drinking Water</b>      |             |       |             |               |      |     |           |
| Chromium, Hexavalent                                   | 2013        | ppb   | 0.232       | 0.19 – 0.232  | na   | na  | No        |
| Chromium, Total  | 2013        | ppb   | 0.24        | 0.20 – 0.24   | na   | na  | No        |
| Chlorate   | 2013        | ppb   | 100.0       | 39.6 – 100.0  | na   | na  | No        |
| Molybdenum, Total                                      | 2013        | ppb   | 2.11        | nd – 2.11     | na   | na  | No        |
| Strontium, Total                                       | 2013        | ppb   | 151.0       | 0.086 – 151.0 | na   | na  | No        |
| Vanadium, Total  | 2013        | ppb   | 0.850       | 0.423 – 0.850 | na   | na  | No        |
| <b>Unregulated Contaminants in Distribution System</b> |             |       |             |               |      |     |           |
| Chromium, Hexavalent                                   | 2013        | ppb   | 0.26        | 0.21 – 0.26   | na   | na  | No        |
| Chromium, Total  | 2013        | ppb   | 0.389       | 0.21 – 0.389  | na   | na  | No        |
| Chlorate   | 2013        | ppb   | 111.0       | 43.4 – 111.0  | na   | na  | No        |
| Molybdenum, Total                                      | 2013        | ppb   | 3.0         | 1.20 – 3.0    | na   | na  | No        |
| Strontium, Total                                       | 2013        | ppb   | 200.0       | 98.0 – 200.0  | na   | na  | No        |
| Vanadium, Total  | 2013        | ppb   | 0.820       | 0.502 – 0.820 | na   | na  | No        |

For more information on UCMR3 go to: <http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/basicinformation.cfm>.

## **DRINKING WATER QUALITY RESULTS**

The City of Toledo continuously monitors your drinking water and it remains above and beyond Federal and State laws. On the inside page it will show our monitoring results for the period of January 1 to December 31, 2015, unless otherwise noted. **The test results show that your drinking water meets all Federal and State requirements.**

### **Drinking Water Notice**

On May 18, 2015 Waterville received a notification from the City of Toledo Public Water System for failure to meet the contact time treatment technique requirements. Because Waterville is a satellite system of Toledo Water, we were required to notify our customers of this violation. It was felt that the amount of contact time with the chlorine in the water before it reached our system was more than adequate to provide sufficient disinfection as needed. A copy of the Tier 2 SWTR Notice was attached to the 2014 CCR report and was made available on the City's website with notification via the monthly water bill.

### **Our system also monitors our supply on a continuing basis for the following:**

1. **Bacteria** – Six samples per month.
2. **Chlorine** – Daily tests to verify the proper residual is maintained.

### **License to Operate (LTO) Status Information**

In 2015 The City of Waterville had an unconditioned license to operate our water system.

### **Information about cryptosporidium**

In 2015, 18 samples were taken from the Toledo's raw water supply. Cryptosporidium was not detected in any of these samples.

## **TERMINOLOGY DEFINITIONS**

**Parts per million (ppm) and parts per billion (ppb)**- One ppm can be equated to a single penny in \$10,000. One ppb is a single penny in \$10,000,000.

**Maximum contaminant Level Goal (MCLG)** – The MCLG is the level of a contaminant in drinking water below which there is no known or expected risk, to health, MCLs allow for a margin of safety.

**Maximum Contaminant Level (MCL)** – The MCL is 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. MCLs are set at very stringent levels by the State and Federal government.

**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 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.

**Nephelometric Turbidity Unit (ntu)** – measures clarity.

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

**Thresholds** – Recommended levels of unregulated contaminants not to exceed. If levels are exceeded, this will generate a form of response or course of action.

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

**Picocuries per liter (pCi/l)** – Common measurement of radioactivity.

**nd** – not detectable.

**na** – not applicable.