

2015 CONSUMER CONFIDENCE REPORT

AN ANNUAL REPORT OF THE PROCESS AND PRECAUTIONS TAKEN TO PROVIDE QUALITY WATER TO CITY OF FRANKLIN CONSUMERS



In this report, you will find:

- Information about the source of your drinking water
- The treatment process that ensures you of the highest-quality water
- Results of water-quality testing and compliance with water-quality laws
- Additional educational information

The U.S. Environmental Protection Agency (EPA) requires drinking water utilities to provide an annual Consumer Confidence Report to help consumers understand where their drinking water comes from so they can make informed decisions about their health and protection of the environment.

TREATED WATER QUALITY

Listed on the following pages are contaminants detected in Franklin's drinking water during 2015. All detects are less than what federal and state regulations allow. Not listed are the results of nearly 3,000 tests conducted for approximately 150 contaminants that were not found during water testing.

The State Department of Natural Resources allows the Franklin Water Utility to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data, though representative, is more than one year old.

The information enclosed is based on the testing conducted in the year 2015. Every year testing occurs; results for the year 2016 will be available in the next annual report. The Franklin Water Utility is committed to providing its 8,100 customers with the highest-quality drinking water that meets and exceeds standards more stringent than federal and state requirements. Please read this brochure for additional information.

SPECIAL HEALTH INFORMATION AVAILABLE

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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

There have been some sensational news stories this past year and we want you to know that Franklin has no similarities to the situation in Flint, Michigan. Although your water staff has no connection with Flint Michigan, we have researched information and can offer our understanding. Flint is an older community and much of their development occurred when lead service lines and lead joints in pipes were accepted construction materials. Throughout the years, the water hardness and iron particles accumulated on the inside of the pipes and coated over the lead parts of the service lines.

As lead was found to be harmful, new construction materials replaced the lead-based materials but the very old materials were generally left in place and functioned well enough because the water was protected with interior coatings. Approximately two years ago the water supply was changed. The new water wasn't necessarily harmful, but the pH was different and corroded the accumulated coatings inside the pipes, thus exposing the lead which leached into the drinking water.

The City of Franklin did not create a water utility until 1977 and it is believed that all materials in our watermains and individual service lines are made of products suitable for contact with your drinking water. The City has never failed any tests for lead or other heavy metals. Since the beginning, Franklin's Water Utility has been diligent in design standards for our facilities. You can be assured that our Water Utility will continue to provide you the highest-quality, healthful water possible.

LEAD AND COPPER

Lead in drinking water is primarily from materials and components associated with older service lines and home plumbing. The Franklin Water Utility is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components within your home. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for at least 30 seconds (two minutes should be long enough) before using water for drinking or cooking.

Drinking water, including bottled water, may be reasonably expected to contain small amounts of some contaminants. The presence of contaminants does *not* necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at **(800) 426-4791** or at www.epa.gov/safewater/lead.

WATER CONSERVATION

Factors such as drinking water treatment, facility improvements, wastewater treatment, and the energy used for treating, pumping, and heating water are factored into the price that we charge for water. Although tap water is a bargain at \$4.82 per 1,000 gallons when compared to most other products we consume, the total cost of water usage can add up quickly.

We must also remember that water is a limited resource; we will never have any more water on earth than what we have right now. So while water use is necessary for us to survive and to produce and process most of the products we use on a daily basis, it also pays for us to protect it as a natural resource for use by future generations.

Most water is used in the bathroom. The largest water user in any household is the toilet with 2 to 7 gallons per flush. Flushes account for approximately 27% of the water used in a typical home. Showers, with a flow rate of 2 gallons per minute, account for around 17% of the water used, while other bathroom uses such as baths and faucets account for around 10%. The second highest water user is the washing machine. At around 41 gallons per load, clothes washing accounts for about 22% of the water used in a typical household.

MONITORING AND REPORTING VIOLATIONS

Last year the Franklin Water Utility reported only Oak Creek's and not Franklin's results for HAA5, Trihalomethanes, Copper and Lead, and failed to report Sulfate results. Please find the 2014 results listed for those contaminants (note asterisk shown).

REGULATED CONTAMINANTS

SUBSTANCE	MCLG (Ideal Goals)	MCL (Highest Level Allowed)	LEVEL DETECTED	VIOLATION	SOURCE OF CONTAMINANT
Antimony	6 ppb	6 ppb	0.1 ppb	NO	Fire retardants, ceramics, electronics, solder.
Arsenic	N/A	10 ppb	1 ppb	NO	Natural deposits.
Barium	2 ppm	2 ppm	0.020 ppm	NO	Natural deposits.
Coliform (TCR)	0	Presence of coliform bacteria in >=5% of monthly samples	1 count	NO	Naturally present in the environment.
Copper (Oak Creek) Sample Date 9/8/2014	1.3 ppm	AL = 1.3 ppm	0.28 ppm (90 th percentile value) 0 of 30 results exceeded AL	NO	Natural deposits. Corrosion of household plumbing systems.
* Copper (Franklin) Sample Date 9/6/2014	1.3 ppm	AL = 1.3 ppm	0.43 ppm (90 th percentile value) 0 of 30 results exceeded AL	NO	Natural deposits. Corrosion of household plumbing systems.
Fluoride	4 ppm	4 ppm	0.7 ppm	NO	Natural deposits. Water additive that promotes strong teeth.
HAA5 (Site D15)	60 ppb	60 ppb	14 ppb average Range: 11 – 16 ppb	NO	Byproduct of drinking water disinfection.
HAA5 (Site D45)	60 ppb	60 ppb	21 ppb average Range: 15 – 25 ppb	NO	Byproduct of drinking water disinfection.
HAA5 (Site FWU-0009)	60 ppb	60 ppb	18 ppb average Range: 12 – 23 ppb	NO	Byproduct of drinking water disinfection.
HAA5 (Site FWU-0020)	60 ppb	60 ppb	13 ppb average Range: 10 – 15 ppb	NO	Byproduct of drinking water disinfection.
HAA5 (Site FWU-0063)	60 ppb	60 ppb	17 ppb average Range: 14 – 23 ppb	NO	Byproduct of drinking water disinfection.
HAA5 (Site FWU-0065)	60 ppb	60 ppb	17 ppb average Range: 15 - 20	NO	Byproduct of drinking water disinfection.
* HAA5 (Site FWU-0009)	60 ppb	60 ppb	16 ppb average Range: 12 – 20 ppb	NO	Byproduct of drinking water disinfection.
* HAA5 (Site FWU-0020)	60 ppb	60 ppb	10 ppb average Range: 8 – 11 ppb	NO	Byproduct of drinking water disinfection.
* HAA5 (Site FWU-0063)	60 ppb	60 ppb	12 ppb average Range: 7 – 15 ppb	NO	Byproduct of drinking water disinfection.
* HAA5 (Site FWU-0065)	60 ppb	60 ppb	15 ppb average Range: 11 – 17 ppb	NO	Byproduct of drinking water disinfection.
Lead (Oak Creek) Sample Date 9/8/2014	0 ppb	AL = 15 ppb	3.2 ppb (90 th percentile value) 1 of 30 results exceeded AL	NO	Natural deposits. Corrosion of household plumbing systems.
* Lead (Franklin) Sample Date 9/6/2014	0 ppb	AL = 15 ppb	4.7 ppb (90 th percentile value) 1 of 30 results exceeded AL	NO	Natural deposits. Corrosion of household plumbing systems.
Nickel		100 ppb	0.62 ppb	NO	Natural deposits.
Nitrate (NO ₃ -N)	10 ppm	10 ppm	0.36 ppm	NO	Natural deposits, fertilizer, animal, waste, sewage.
Radium, combined	0 pCi/L	5 pCi/L	0.7 pCi/L	NO	Natural deposits.
Selenium	50 ppb	50 ppb	4 ppb		
Sodium	N/A	Unregulated	8.80 ppm	NO	Natural deposits.
Trihalomethanes, Total (Site D15)	0 ppb	80 ppb	22.8 ppb average Range: 14.6 – 29.9 ppb	NO	Byproduct of drinking water disinfection.
Trihalomethanes, Total (Site D45)	0 ppb	80 ppb	48.6 ppb average Range: 23.6 – 41.4 ppb	NO	Byproduct of drinking water disinfection.
Trihalomethanes, Total (Site FWU-0009)	0 ppb	80 ppb	41.2 ppb average Range: 27.6 – 65.8 ppb	NO	Byproduct of drinking water disinfection.
Trihalomethanes, Total (Site FWU-0020)	0 ppb	80 ppb	26.0 ppb average Range: 19.8 – 38.0 ppb	NO	Byproduct of drinking water disinfection.
Trihalomethanes, Total (Site FWU-0063)	0 ppb	80 ppb	33.8 ppb average Range: 24.1 – 53.4 ppb	NO	Byproduct of drinking water disinfection.
Trihalomethanes, Total (Site FWU-0065)	0 ppb	80 ppb	43.5 ppb average Range: 26.9 – 63.8 ppb	NO	Byproduct of drinking water disinfection.
* Trihalomethanes, Total (Site FWU-0009)	0 ppb	80 ppb	38.0 ppb average Range: 26.4 – 47.2 ppb	NO	Byproduct of drinking water disinfection.
* Trihalomethanes, Total (Site FWU-0020)	0 ppb	80 ppb	21.1 ppb average Range: 17.6 – 24.7 ppb	NO	Byproduct of drinking water disinfection.
* Trihalomethanes, Total (Site FWU-0063)	0 ppb	80 ppb	27.4 ppb average Range: 18.7 – 34.4 ppb	NO	Byproduct of drinking water disinfection.

SUBSTANCE	MCLG (Ideal Goals)	MCL (Highest Level Allowed)	LEVEL DETECTED	VIOLATION	SOURCE OF CONTAMINANT
* Trihalomethanes, Total (Site FWU-0065)	0 ppb	80 ppb	38.4 ppb average Range: 24.6 – 54.6 ppb	NO	Byproduct of drinking water disinfection.
Turbidity	N/A	TT = 1 NTU TT < 0.3 NTU 95% of the time	0.04 NTU average Range: 0.03 – 0.05 NTU 100% of samples below MCL	NO	Natural sediment

***2014 Sampling Results**

UNREGULATED CONTAMINANTS

Unregulated contaminants are those for which the federal Environmental Protection Agency (EPA) has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. EPA requires us to participate in this monitoring.

SUBSTANCE	LEVEL DETECTED	SUBSTANCE	LEVEL DETECTED
Chlorate	122.827 ug/L average* Range: 77.255 - 213.435 41.209 ug/L average** Range: 39.554 - 42.864 ug/L	Molybdenum	0.702 ug/L average * Range: nd - 1.087 1.042 ug/L average** Range: 1.02 - 1.063 ug/L
Chromium	0.246 ug/L average* Range: 0.209 - 0.286 0.261 ug/L average** Range: 0.257 - 0.264	Strontium	132.626 ug/L average* Range: 126.28 - 139.091 143.598 ug/L average** Range: 141.491 - 145.704 ug/L
Chromium-6	0.208 ug/L average* Range: 0.189 - 0.225 0.236 ug/L average** Range: 0.235 - 0.237 ug/L	Vanadium	0.157 ug/L average* Range: nd - 0.253 nd**
Sulfate	23 ppm**	Sulfate	24 ppm (2015 results)

*Data from 2013 UCMR sampling period

**Data from 2014, the most recent UCMR sampling period

DEFINITIONS

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

MCL = Maximum Contaminant Level: 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.

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

MFL = million fibers per liter

MRDL = Maximum Residual Disinfectant Level: 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.

ND = No Detect: Contaminant was not detected as a result of chemical analysis.

MRDLG = Maximum Residual Disinfectant Level

Goal: 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 contaminants.

mrem/year = millirems per year (a measure of radiation absorbed by the body).

NTU = Nephelometric Turbidity Units

pCi/L = picocuries per liter (a measure of radioactivity)

ppm = parts per million, or milligrams per liter (mg/l)

ppb = parts per billion, or micrograms per liter (ug/l)

ppt = parts per trillion, or nanograms per liter

ppq = parts per quadrillion, or pictograms per liter

TCR = Total Coliform Rule

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

CUSTOMER QUESTIONS WELCOME

Numerous opportunities exist to learn more about the Franklin Water Utility and water quality. If you have questions about drinking water quality, this report, or Water Commission meetings, please call the Engineering Department at **(414) 425-7510**.

Information regarding drinking water production can be obtained by visiting the Oak Creek Water & Sewer website at www.water.oak-creek.wi.us or by visiting the City of Franklin website at www.franklinwi.gov.