



Report to Consumers on Water Quality 2018 Calendar Year

We are pleased to present a summary of the quality of the water provided to you during the past year. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence" report to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. The Village of Farwell Municipal Water System is committed to providing you with the safest and most reliable water supply. Informed consumers are our best allies in maintaining safe drinking water. The Village of Farwell's Municipal Water System is supplied by groundwater pumped from four wells (three active and one standby) located south of Maple Grove Road between Superior Street and Corning Street. We are proud to report that the water provided by Village of Farwell Municipal Water System meets or exceeds established water-quality standards. If you have any questions regarding this report or the water quality for the Village, please contact Russ Hamilton at the Village of Farwell Water Department at 989-588-9530. If you would like to learn more, please attend the Village Council meetings, which are held the first Monday of the month at 6:00 PM.

How to Read This Table

The following table shows the results of our water-quality analyses. Every regulated contaminant that we detected in the water, even in 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, the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement. We have also attached a list of all the contaminants your drinking water is tested for. The definitions of MCL and MCLG are important and are as follows:

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment 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. MCLG's allow for a margin of safety.

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

Maximum residual disinfectant level goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial and contaminants.

Maximum residual disinfectant level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

TEST RESULTS

Contaminant	Violation Y/N	Level Detected	Unit Measur ement	MCLG	MCL	Likely Source of Contamination
Inorganic Regulated Chemicals						
1. Arsenic Most recent analysis – 10/23/17	N	Avg 0.002 Max 0.003 Min ND	ppb	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
2. Barium Most recent analysis – 6/28/17	N	0.08	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
3. Copper 90 th Percentile Most recent analysis -	N	290	ppb	1300	AL=1300	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
4. Fluoride * 10/31/18	N	0.26	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth
5. Lead 90 th Percentile Most recent analysis -10/31/18	N	4	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
6. Nitrate (as Nitrogen) Most recent analysis-10/31/18	N	ND	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
7. Nitrite Most recent analysis 10/31/18	N	ND	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Volatile Organic Chemicals						
8. Total Haloacetic Acid Most recent Analysis – 9/11/18	N	ND	ppb	70	70	Discharge from industrial chemical factories
9. TTHM [Total trihalomethanes] Most recent Analysis – 9/11/18	N	0.8	ppb	0	80	By-product of drinking water chlorination
Un-Regulated Chemicals						
10. Sulfate 10/31/18	N	ND	ppm			Natural occurring element in water supply.
11. Chlorine	N	Avg 0.94 Max 1.46 Min 0.09	ppm	MRDLG = 4	MRDL = 4	Water additive to control microbials.
12. Sodium Most recent analysis-10/31/18	N	11	ppm			Natural occurring element in water supply.
13. Chloride 10/31/18	N	ND	ppm			Natural occurring element in water
14. Hardness as CaCO3 10/31/18	N	189	ppm			Natural occurring element in water

Key to Table

Average (Avg) - A running average of all samples collected during the reporting period.

Maximum (Max) - The maximum value of all samples used to calculate the Average. This is the upper part of the range of sample values.

Minimum (Min) - The minimum value of all samples used to calculate the Average. This is the lower part of the range of sample values.

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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

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

Maximum Contaminant Level (MCL) - The "Maximum Allowed" is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Your public water system is tested continuously for the presence of total coliform at each water source (well) and throughout the water distribution system. No positive tests were obtained from the water sources or the distribution system.

Your drinking water meets the EPA's standard for arsenic and it did not contain a detectable level. The EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Additional Health Information

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water 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:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

(B) 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.

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff and residential uses.

(D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.

(E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than is 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 are available from the Safe Drinking Water Hotline (800-426-4791).

Our water system also tests for other substances and microscopic organisms found in water for which no standards have been set. We take the initiative to watch for things that have concerned people in our area even though we are not required to do so. As a part of our water quality testing, we have tested for non-regulated contaminants as recommended, but not required, by the Michigan Department of Environmental Quality and have not found any. We are active in protecting our community, and we will notify you immediately of any waterborne health threat.

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 Village of Farwell 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 Water Hotline or at <http://www.epa.gov/safewater/lead>.

On November 12, 2018 the state of Michigan collected PFAS and PFOS samples from all of the village's wells. All samples were non-detect (ND).

Your water comes from four groundwater wells, located within the Tittabawassee watershed. The three active wells are each over 150' deep. The State performed an assessment of our source water in 2003 to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "high" base primarily on geologic sensitivity, water chemistry and contaminant sources. A complete copy of the Source Water Assessment is available for your review at the Village of Farwell Water Department. The susceptibility of our wells is as follows:

Well #1	Very low
Well #2	Very Low

Well #3
Well #4

Moderate low
Moderately Low

(stand by well not normally used)

If you would like to know more about the report, please contact the Village of Farwell Water Department Supervisor Mr. Jason Walters at 989-588-9530.

