

2021 Timberlee Water Quality Report

This report covers the drinking water quality for Elmwood Township Timberlee Water System for the calendar year 2021. This information is a snapshot of the quality of the water that we provided to you in 2021. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards.

Your water source is provided by two ground water wells located at the bottom of Slope Drive; along with a booster station that serves Cottonwood Condominiums, Sun Perch, Blue Ridge Drive and East Orchard Way. A determination of the drinking water wells vulnerability due to contamination is moderate for Timberlee. The major contributing factors in the determination are geological formations protecting the groundwater.

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 **EPA's Safe Drinking Water Hotline (800-426-4791)** or on its website at www.epa.gov/safewater.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from Lake Michigan. 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 from 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, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- * **Pesticides and herbicides**, which may come from a variety of sources such as agriculture and residential uses.
- * **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
- * **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, urban storm water runoff, and septic systems.

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. Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.

Vulnerability of some populations to contaminants in drinking water:

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).

Terms and Definitions:

Below is a list of terms and abbreviations that you may see in this report:

- **Maximum Contaminant Level Goal (MCLG):** 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.
- **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 Residual Disinfectant Level (MRDL):** means 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):** means 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.
- **N/A:** Not applicable
- **ND:** not detectable at testing limit
- **ppt:** parts per billion or nanograms per liter
- **ppb:** parts per billion or micrograms per liter
- **ppm:** parts per million or milligrams per liter
- **pCi/L:** picocuries per liter
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Water quality issues are discussed at various monthly meetings of the Grand Traverse County Board of Public Works; public attendance and participation is encouraged.

The Board of Public Works meets the second (2nd) Thursday of each month at the Garfield Township Hall located at 3848 Veterans Drive in Traverse City. The Department of Public Works is located at 2650 La Franier Road.

For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/.

Water Quality Data

The table below lists all the drinking water contaminants that were detected during the 2021 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing performed January 1, 2021 to December 31, 2021. The State allows monitoring for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality, but some are more than one year old.

Monitoring and Reporting Requirements: The State and EPA require us to test our water on a regular basis to ensure health safety. We met all the monitoring and reporting requirements for 2021.

Regulated Contaminant	MCL	MCLG	Level Detected	Range	Year Sampled	Violation Yes / No	Typical Source of Contaminant
Fluoride (ppm)	4	4	0.38	0.34 – 0.41	2021	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	0.94	0.36-1.26	2021	No	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits
Nitrite (ppm)	1	1	ND	N/A	2021	No	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits
Iron (ppm)	0.3	0	ND	N/A	2021	No	Erosion of natural deposits
Per- and polyfluoroalkyl substances (PFAS)							
Regulated Contaminant	MCL	MCLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Hexafluoropropylene oxide dimer acid (HFPO-DA) (ppt)	370	N/A	ND	N/A	2021	NO	Discharge and waste from the industrial facilities utilizing the Gen X chemical process
Perfluorobutane sulfonic acid (PFBS) (ppt)	420	N/A	ND	N/A	2021	NO	Discharge and waste from industrial facilities; stain-resistant treatments
Perfluorohexane sulfonic acid (PFHxS) (ppt)	51	N/A	ND	N/A	2021	NO	Firefighting foam; discharge and waste from industrial facilities
Perfluorohexanoic acid (PFHxA) (ppt)	400,000	N/A	ND	N/A	2021	NO	Firefighting foam; discharge and waste from industrial facilities
Perfluorononanoic acid (PFNA) (ppt)	6	N/A	ND	N/A	2021	NO	Firefighting foam; discharge and waste from industrial facilities
Perfluorooctane sulfonic acid (PFOS) (ppt)	16	N/A	ND	N/A	2021	NO	Firefighting foam; discharge from electroplating facilities; discharge and waste from industrial facilities
Perfluorooctanoic acid (PFOA) (ppt)	8	N/A	ND	N/A	2021	NO	Discharge and waste from industrial facilities; stain-resistant treatments
Radionuclides	MCL	MCLG	Level Detected	Range	Year Sampled	Violation Yes / No	Typical Source of Contaminant
Gross Alpha (pCi/L)	15	0	0.532	± 0.988	2015	No	Erosion of natural deposits
Radium 226 (pCi/L)	5	0	0.667	± 0.453	2015	No	Erosion of natural deposits
Radium 228 (pCi/L)			0.564	± 0.356	2015	No	Erosion of natural deposits
Special Monitoring and Unregulated Contaminant *			Level Detected	Range	Year Sampled	Typical Source of Contaminant	
Chloride (ppm)			ND	N/A	2021	Erosion of natural deposits	
Sodium (ppm)			3.2	2.6-3.9	2021	Erosion of natural deposits	
Sulfate (ppm)			15	14-15	2021	Erosion of natural deposits	

Contaminant Subject to AL	Action Level	MCLG	90% of Samples ≤ This Level	Range	Year Sampled	Number of Samples Above AL	Typical Source of Contaminant
Lead (ppb)	15	0	0	0ppb-5ppb	2020	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.2	0.0ppm – 0.2ppm	2020	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

*Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

Information about lead: 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 Grand Traverse County Department of Public Works 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>.

We will update this report annually and will keep you informed of any problems occurring throughout the year, as required. Copies are available at the Grand Traverse County Department of Public Works. The contact person for water quality issues is John Divozzo, Director of Public Works, and he can be reached at 231-995-6039.