

VILLAGE OF GRASS LAKE

WATER DEPARTMENT

ISSUED 2023



2022 Consumer Confidence Report on Water Quality

**This report contains important
information about your drinking water.**

Public Information

You are invited to attend any
of the regularly scheduled
Village Council meetings:

When:

First and third Tuesday of every
month at 7pm

Where:

Village of Grass Lake Office
119 North Lake Street
Grass Lake, MI 49240

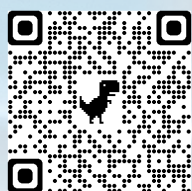
For more information:

Visit www.villageofgrasslake.com,

scan QR Code,

or call

(517)522-4550



Our Message To You

This report covers the drinking water
quality for Grass Lake water supply.
Included is a listing of results from
water quality tests as well as an
explanation of where our water
comes from and tips on how to
interpret the data.

We are proud to share the
results with you.

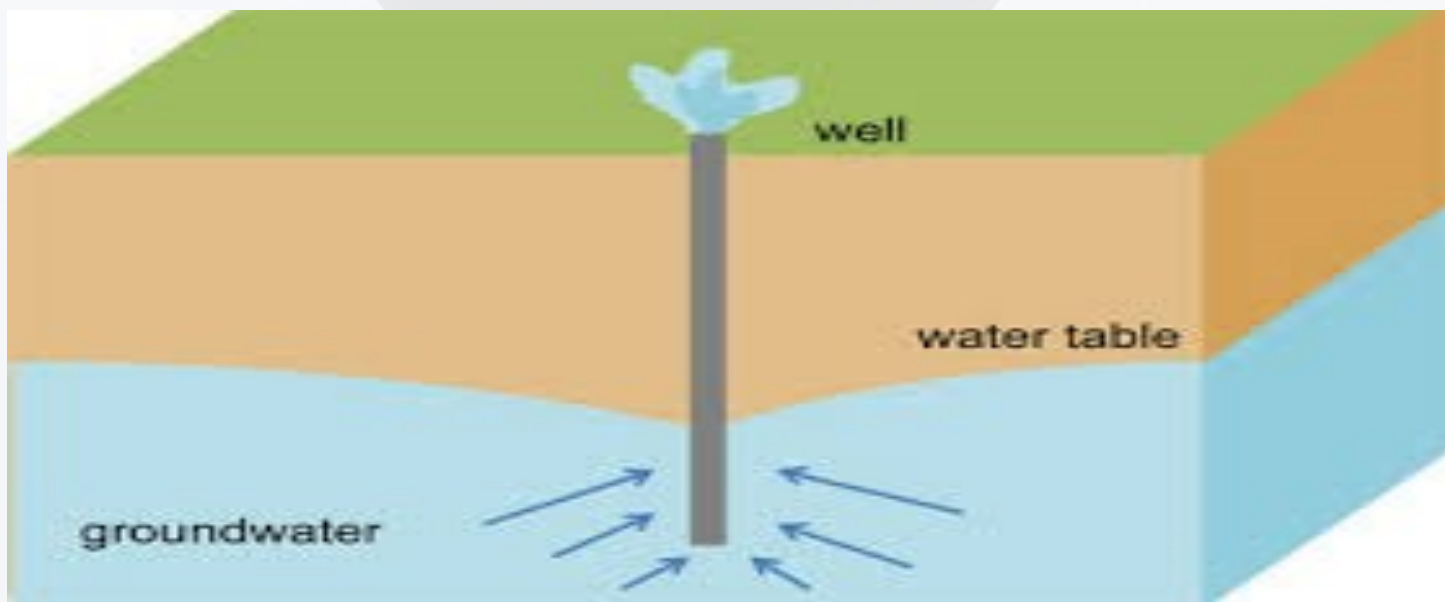
Frequently Asked Questions

Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and State of Michigan drinking water health standards. The Village of Grass Lake Public Works vigilantly safeguards its water supplies, and we are proud to report that our system has never violated a maximum containment level or any other water quality standard.

Where does my water come from?

Our water comes from two wells located within the Village of Grass Lake, one is 380 feet deep and the other is 400 feet deep. It is then disinfected and transferred to a 500,000-gallon storage reservoir located on Mt. Hope Road and finally pumped to our customers.



Source Water Assessment

The State of Michigan 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 six-tier scale from “very low” to “high” based primarily on geologic sensitivity, water chemistry and contamination sources. The susceptibility of our source is “high.” The susceptibility determination may change in the future as the village belongs to and supports an active wellhead protection plan. This effort has identified the ground water recharge area for our wells and has provided action to prevent contamination from entering the groundwater.

Is the water safe for everyone to drink?

To ensure that tap water is safe to drink, the EPA has developed regulations limiting the amount of certain contaminants in water provided by public water systems. The (FDA) has established similar regulations for bottled water, which must provide the same protection for public health.

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).

All drinking water, including bottled water, may be reasonably 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).

The sources of drinking water (both tap and bottled water) include 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, in some cases, radio-active material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in untreated water include:

- Microbial contaminants; such as viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife. Examples of such organisms are *Cryptosporidium* and *Giardia*. When ingested, these microscopic organisms can cause diarrhea, fever and other gastrointestinal symptoms. The best defense against these organisms is an effective water treatment process.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or results from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides which may come form a variety of sources such as agriculture, urban storm water runoff and residential use.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- Radioactive contaminants which can be naturally occurring or be the result of oil and gas production and mining activities.

Terms & Definitions

The following terms and definitions are used in the following tables.

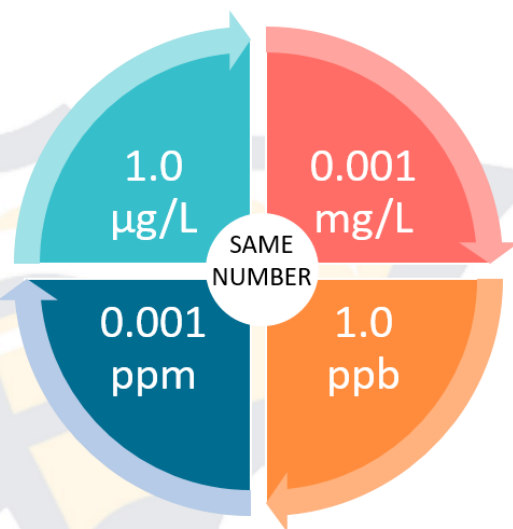
N/A = Test not applicable

ND = Not detected =contaminants not detected in test

mg/L = Milligrams per liter =one part per million units

ppm = Parts per million =one part per million units

ppb = Parts per billion = one part per billion units



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

Maximum level Detected: Results of our testing.

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

Maximum Contaminant Level Goal: The “Goal” (MCLG) is the level of a contaminant in drinking water that is below, the expected health risk. MCLG allows for a margin of safety.

Maximum Residual Disinfection 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 Disinfection Level Goal (MRDLG): The level of a drinking water disinfectant, which there is no known or expected risk to health. MRDLG does not reflect the benefits of disinfectants to control microbial contaminants.

The following tables show the results of our drinking water testing for 2022

The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary from year to year. All the data is representative of the water quality, but some are more than a year old.

Table 1 Inorganic Contaminants

Contaminant	Violation Y/N	Maximum Level Detected	Range	Sample Date	MCL	MCLG	Most Likely Sources of Contamination
Fluoride	No	0.33 mg/L	N/A	9/29/2022	4.0 mg/L	4.0 mg/L	Erosion of natural deposits, water additive that promotes strong teeth, discharge from fertilizer and aluminum factories.

Table 2 Contaminants Detected at Consumers Tap

Contaminant	Violation Y/N	Maximum Level Detected	Range	Sample Date	MCL	MCLG	Most Likely Sources of Contamination
Total Trihalomethanes	No	19.0 ppb	N/A	9/15/2022	80 ppb	None	By-product of drinking water disinfection
Haloacetic acids	No	5 ppb	N/A	9/15/2022	60 ppb	None	By-product of drinking water disinfection
Contaminant	Violation Y/N	Maximum Level Detected	Range	Sample Date	MCL	MCLG	Most Likely Sources of Contamination
Chlorine	No	.4 mg/L	.02 - .51	Monthly	4 mg/L	4 mg/L	Water additive used to control microbes

Table 3 Special Monitoring Test Results for 2022

Contaminant	Violation Y/N	Maximum Level Detected	Range	Sample Date	MCL	MCLG	Most Likely Sources of Contamination
Sodium*	No	66 mg/L	N/A	9/29/2022	N/A	N/A	Naturally present in groundwater
Hardness	No	245 mg/L	N/A	9/29/2022	N/A	N/A	Naturally present in groundwater
Iron	No	.28 mg/L	N/A	9/29/2022	N/A	N/A	Naturally present in groundwater

*Sodium is considered special monitoring-there is no MCL associated with it. Sodium monitoring is required to inform the residents and the local health department of sodium levels in the community.

Table 4 Monthly Bacterial Samples for 2022

Regulated Contaminant	Violation Y/N	Level Detected	Range	Year Sampled	MCLG or MRDLG	MCL, TT, or MRDL	Most Likely Sources of Contamination
Total Coliform (total number or % of positive samples/month)	No	ND	N/A	Monthly	N/A	Colilert-18	Naturally present in groundwater
E. coli in the distribution system positive sam-	No	ND	N/A	Monthly	0	Colilert-18 See E. coli [1] note	Human and animal fecal waste
Fecal Indicator E. coli at the source (positive samples)	No	ND	N/A	Monthly	N/A	Colilert-18	Human and animal fecal waste

[1]

E. coli MCL violation occurs if: (1) routine and repeat samples are total coliform-positive and either is *E. coli*-positive, or (2) the supply fails to take all required repeat samples following *E. coli*-positive routine sample, or (3) the supply fails to analyze total coliform-positive repeat sample for *E. coli*.

Table 5 Lead and Copper Test Results for the Village of Grass Lake

Contaminant	Violation Y/N	90th Percentile of Samples	Samples Above AL	Sample Date	Range of Individual	AL	MCLG	Most Likely Sources of Contamination
Lead (ppb)	No	12 ppb	0	7/27/2022	0 ppb - 12 ppb	15 ppb	0 ppb	Corrosion of household plumbing system Erosion of natural deposits.
Copper (ppm)	No	.5 ppm	0	7/27/2022	0.0 ppm - 0.7 ppm	1.3 ppm	0 ppm	Corrosion of household plumbing system Erosion of natural deposits.

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

What does all this mean?

The tables indicate that The Village and Township of Grass Lake had no water quality violations in 2022, however we did receive a violation for not reporting one months bacteriological results within the specific time frame do to a computer error. "EGLE records show that you collected two out of two samples during the August 1 to August 31, 2022, monitoring period but failed to report the sample results until September 26, 2022. EGLE's investigation consisted of a review of DWEHD files for laboratory reports received for compliance monitoring and a request for laboratory results from the above water supply via email on September 20, 2022. EGLE's investigation is considered complete. The above water supply was out of compliance on September 11, 2022, and returned to compliance on September 26, 2022."

We have learned through monitoring and testing that some constituents have been detected but are not a health risk. We are proud that our drinking water meets or exceeds all Federal and State requirements. This report is intended to show our water quality and what it means.

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 Grass Lake Water Dept 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 cooking or drinking. 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> or scan QR Code



Water Costs Money Don't Waste It!

The most common cause for a high-water bill is usually a leaky faucet or a toilet. Yet as common as the problem is, it may be difficult to understand. Because it's running down the overflow pipe it may be difficult to hear or see the leak and it can be hard to believe that a toilet can use that much water!!!

A continual leak running at a very slow rate of $\frac{1}{4}$ gallon per minute for three months can add up to \$100 to a water bill.

The Village of Grass Lake works around the clock to provide the best quality of water possible to every tap. We ask that all our residents please help us protect our water sources. We also want our valued residents and customers to be informed about their water quality.

This report will not be mailed to our residents. Copies of this report will be available at Grass Lake Village Hall 119 N. Lake St. (517) 522-4550 or contact the Department of Public Works at (517) 522-4530, 132 Clark St.

Thank you for the opportunity to serve you. We take our job seriously and enjoy making Grass Lake A Great Place To Have A Clean Reliable Potable Water System!