Hartland Township

2024 Water Quality Report

Hartland Township's Water System

Hartland Township presents the 2024 Annual Consumer Confidence Report on Water Quality. Once again, our water quality standards have surpassed the requirements mandated by the U.S. Environmental Protection Agency (EPA) and the State of Michigan's Department of Environment, Great Lakes and Energy (EGLE). Hartland Township's water treatment plant currently receives source water from three active submersible wells. The wells are capable of an output of 2.594 million gallons per day. The treatment plant uses an iron/manganese removal system to treat source water prior to the distribution process. The current water system is comprised of approximately 24 miles of water mains ranging in size from 4" to 18" in diameter. Hartland Township currently distributes water to over 836 homes and businesses.

Safe Water

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) has placed regulations that limit the level of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration's (FDA) regulations establish limits for contaminants in bottled water, which must provide the same level of public health protection. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants, but the mere presence of contaminants alone does not indicate that the 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). Contaminants that may be present in "source water" (untreated surface or groundwater) include:

- **Microbial contaminants**, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants,** such as salts and metals, which can occur 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, urban storm water runoff, and residential uses.
- **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.

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

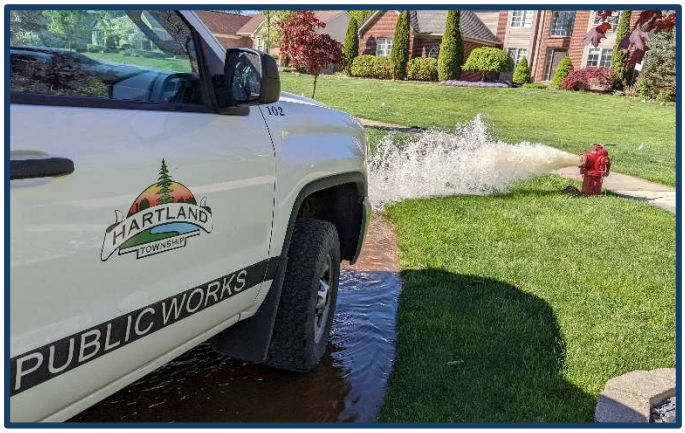
Hartland Township remains committed to meeting state and federal water quality standards and consistently delivering safe drinking water to our community. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as people with cancer undergoing chemotherapy, people 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).

Source Water Assessment and its Availability

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from wells. 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. Hartland Township municipal water is sourced from three groundwater wells with depths in excess of 100 feet. The EGLE in partnership with the U.S. Geological Survey, Hartland Township, and the Michigan Public Health Institute performed an assessment of Hartland Township's source water to determine the water system's susceptibility to potential contamination. The assessment's susceptibility rating is a seven-tiered scale ranging from very low to very high, based primarily on geologic sensitivity, water chemistry, and contaminant sources. Hartland Township's water is categorized as having a moderately low susceptibility to potential contaminant sources. Additionally, the water treatment plant has consistently provided satisfactory treatment of this source water to meet national drinking water standards.

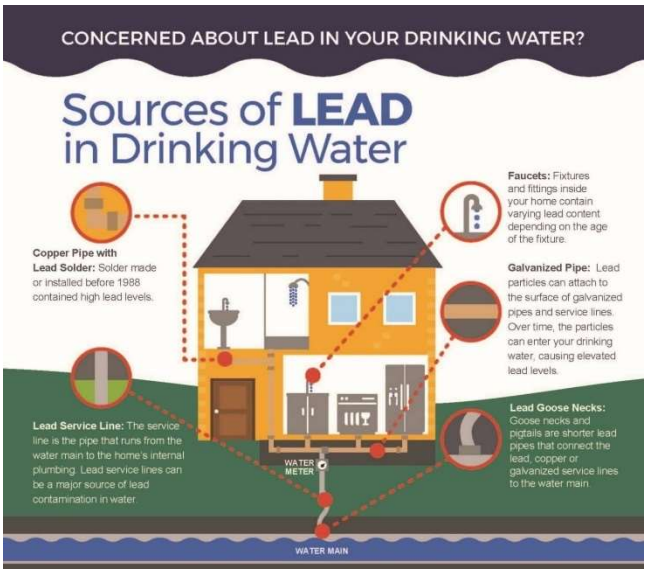
Lead in Water Systems

Lead enters drinking water through corrosion of plumbing materials, especially where the water has high acidity or low mineral content that corrodes pipes and fixtures. Homes built before 1986 are more likely to have lead pipes, fixtures and lead-based solder. However, new homes are also at risk: even legally "lead-free" plumbing may contain up to eight percent lead.



Beginning January 2014, changes to the EPA's Safe Drinking Water Act further reduced the maximum allowable lead content of pipes, pipe fittings, plumbing fittings, and fixtures to 0.25 percent. Lead can cause serious health effects in people of all ages, especially

pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Hartland Township is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for at least 5 minutes to flush water from both your home plumbing and the lead service line. If you are concerned about lead in your water and wish to have your water tested, contact Hartland Township Public Works at 810-632-7498 for available resources. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.



To address corrosion of lead and copper into drinking water, the EPA issued the Lead and Copper Rule (LCR) under the authority of the Safe Drinking Water Act (SDWA). The LCR requires corrosion control treatment to prevent lead and copper from contaminating drinking water. Corrosion control treatment means systems must make drinking water less corrosive to the materials it comes into contact with on its way to consumers' taps. While corrosive water is not the norm, it is generally associated with surface water. Surface water refers to lakes, streams and rivers. Surface water is relatively susceptible to environmental contaminants; however, it is easily treatable. Many metropolitan areas use surface water as the source water for their water systems.

Our water system has a total of 721 water service lines. There are no lead lines within the township. We recently completed visual verification of just over 20% of all our service lines and will continue to verify the rest of the existing services as well as add new build service line information to our systems inventory spreadsheet. All water service lines are assumed to be either copper or plastic due to design standards that have been in place since the systems inception. A physical copy of the distribution system inventory list can be printed at the township hall at 2655 Clark Rd Hartland, MI 48353 if any customer wants information on if their service has been visually inspected.

Water Quality Data Table

The following tables list all the drinking water testing results for 2024. The presence of contaminates 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 done in the calendar year of the report. The EPA or the State requires the Township to monitor for certain contamination less than once per year because the concentrations of the contaminates do not change frequently.

2024 Hartland Township Water Quality Report								
Disinfectants and Disinfection By-Products								
Contaminants	*MCLG or MRDLG*	*MCL, TT or MRDL*	*Hartland Water*	*Range*		*Date*	*Violation Yes/No*	*Typical Source*
				Low	*High*			
Chlorine as Cl2 (ppm)	4	4	1.33 RAA	0.20	1.44	2024	No	Water additive used to control microbes
HAA5 (ppb)	NA	60	3.5	2	5	2024	No	By-product of drinking water chlorination
TTHMs [Trihalomethanes] (ppb)	NA	80	18	15	21	2024	No	By-product of drinking water chlorination
Inorganic Contaminants								
Contaminants	*MCLG, MRDLG or AC*	*MCL, TT or MRDL*	*Hartland Water*	*Range*		*Date*	*Violation Yes/No*	*Typical Source*
				Low	*High*			
Fluoride (ppm)	4	4	0.27	NA	0.27	2024	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Arsenic (ppb)	0	10	3	NA	3	2018	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production waste
Nitrate (ppm)	10	10	ND	ND	ND	2024	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	250	250	100	NA	100	2024	No	Erosion of natural deposits; leaching

Copper and Lead Monitoring (June 1st, 2022 thru Sept 30, 2022)								
Copper - Action level at consumer taps (ppb)	1300	1300	200	10	240	2022	No	Corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Lead - Action level at consumer taps (ppb)	15	15	5	ND	6	2022	No	Lead service lines, corrosion of household plumbing systems, solder, or fixtures; Erosion of natural deposits

Microbiological Contaminants

Contaminants	*MCLG or MRDLG*	*MCL, TT or MRDL*	*Hartland Water*	*Range*		*Date*	*Violation Yes/No*	*Typical Source*
				Low	*High*			
Fecal Coliform/E.coli (positive samples)	0	0	0	NA	NA	2024	No	Human and animal fecal waste
Total Coliform (positive samples/month)	0	NA	0	NA	NA	2024	No	Naturally present in the environment; indicators of possible contaminants

Per- and polyfluoroalkyl Substances (PFAS)

Contaminants	*MCLG or MRDLG*	*MCL, TT or MRDL*	*Hartland Water*	*Range*		*Date*	*Violation Yes/No*	*Typical Source*
				Low	*High*			
Hexafluoropropylene oxide dimer acid (HFPO-DA) (ppt)	370	NA	ND	ND	ND	2024	No	Discharge and waste from industrial facilities utilizing the Gen X chemical process
Perfluorobutane sulfonic acid (PFBS) (ppt)	420	NA	ND	ND	ND	2024	No	Discharge and waste from industrial facilities; stain-resistant treatments
Perfluorohexane sulfonic acid (PFHxS) (ppt)	51	NA	ND	ND	ND	2024	No	Firefighting foam; discharge and waste from industrial facilities
Perfluorohexanoic acid (PFHxA) (ppt)	400,000	NA	ND	ND	ND	2024	No	Firefighting foam; discharge and waste from industrial facilities
Perfluorononanoic acid (PFNA) (ppt)	6	NA	ND	ND	ND	2024	No	Discharge and waste from industrial facilities; breakdown of precursor compounds
Perfluorooctane sulfonic acid (PFOS) (ppt)	16	NA	ND	ND	ND	2024	No	Firefighting foam; discharge from electroplating facilities; discharge and waste from industrial facilities
Perfluorooctanoic acid (PFOA) (ppt)	8	NA	ND	ND	ND	2024	No	Discharge and waste from industrial facilities; stain resistant treatments

Terms and Abbreviations Used Above	
Terms	*Description*
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.
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.
MRDL	Maximum Residual Disinfection Level - 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.
MRDLG	Maximum Residual Disinfection Level Goal - means 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.
NA	Not Applicable
ND	Not Detectable at test limit
ppm	Parts per million or milligrams per liter
ppb	Parts per billion or micrograms per liter
ppt	Parts per trillion or nanograms per liter
AL	Action Level - The concentration of a contaminant which, if exceeded triggers treatment or other requirements that a water system must follow.
RAA	Running annual average - Highest Quarterly Average for 12 Months
TT	Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water

Setting Up a Water Softener

Hartland Township recommends installing a water softener in every home due to the area's consistently hard water. When setting up a water softener for a household, it's important to account for the naturally high mineral content, which can fluctuate over time. Use the data provided in the calibration table to accurately adjust filtration and softening devices to ensure optimal performance and water quality. Proper calibration helps prevent mineral buildup in plumbing and appliances, extending their lifespan and improving overall water usability for residents.

Water Softener Setup Information					
Contaminants	*Hartland Water System Results*	*Range*		*Date*	*Typical Source*
		Low	*High*		
Hardness as CaCO3 (ppm)	590	426	590	2024	Natural deposits, calcium in ground water
Iron (ppm)	0.13	0.01	0.7	2024	Natural deposits, ground water
Manganese (ppm)	0.03	0.02	0.049	2024	Natural deposits, ground water

**The distribution system hardness is around 34.5 grains per gallon as CaCO3*

PFAS Testing in Hartland

Per- and polyfluoroalkyl substances, commonly known as PFAS, are contaminants of emerging concern. PFAS are a large group of human-made chemicals that are fire resistant and repel oil, stains, grease, and water. They have been widely used in fire-fighting foams, stain repellants, nonstick cookware, waterproof clothing and shoes, fast food wrappers, personal care products, and many other consumer goods. PFAS chemicals are very persistent, meaning that they do not easily break down in the environment.

These chemicals are widely used and can ultimately move into our groundwater and surface waters such as lakes, rivers, and streams. Some public water supplies obtain their water from groundwater, some from surface waters, and some from a blend of groundwater and surface water sources. Approximately 75 percent of Michigan residents get their drinking water from a community water supply.

In October 2019, the Michigan Department of Environment, Great Lakes, and Energy (EGLE) submitted draft PFAS drinking water rules to Governor Whitmer. The final rules took effect of August 3, 2020. These rules amend current drinking water rules by establishing maximum contaminant levels (MCLs) and sampling requirements for seven PFAS compounds, affecting approximately 2,700 water supplies in Michigan.

The standard monitoring schedule for community and nontransient noncommunity public water supplies is quarterly. A water supply must sample quarterly if a contaminant is detected above the reporting limit in any sample. A supply may be reduced to annual monitoring based on satisfactory results of prior sampling. Compliance with a PFAS MCL is based on the running annual average at each sampling point. A supply is not in violation until either one year of quarterly sampling has been completed or fewer samples cause the running annual average to exceed an MCL. If a supply fails to collect all required quarterly samples, compliance is based on the running annual average of the samples collected. If the supply is determined to be out of compliance with a PFAS MCL, the supply must notify the public within 30 days.

There are many other PFAS compounds that currently do not have LHA levels. For information on PFOA, PFOS, and other PFAS, including possible health outcomes, you may visit these websites: www.epa.gov/pfas, www.michigan.gov/pfasresponse or www.michigan.gov/PFASDrinkingWaterRules.

This report is updated annually, and Hartland Township will keep you informed of any problems that may occur throughout the year, as they happen. Additional copies are available at Hartland Township Offices, 2655 Clark Rd, Hartland, MI 48353. Electronic copies can be requested at DPW@HartlandTWP.com as well. For more information about safe drinking water rules and regulations, visit the U.S. Environment Protection Agency at www.epa.gov/safewater.

COVID-19 and Drinking Water

The Environmental Protection Agency (EPA) recommends that Americans continue to use and drink tap water as usual. The World Health Organization (WHO) has stated that the "presence of the COVID-19 virus has not been detected in drinking-water supplies and based on current evidence the risk to water supplies is low." According to the Center for Disease Control (CDC), COVID-19 is mainly thought to spread between people who are in close contact with one another. Further, EPA's drinking water regulations require treatment at public water systems to remove or kill pathogens, including viruses. Read more from the CDC about transmission of COVID-19 at www.cdc.gov/coronavirus/2019-ncov/index.html.

Service Disruption

As Hartland Township continues to develop along the M-59 Corridor, the Public Works Department may be required to interrupt water service in your area for new connections. In the event of a large water service disruption that results in decreased pressure for an isolated section of the distribution system, the Public Works Department may issue a "boil water advisory." This is a precautionary measure meant to protect the public from potential bacteriological contamination. In addition to hand-delivered flyers, the

boil water advisory is sent to media outlets that reach beyond the affected area. This is done to ensure the greatest coverage of the event. Boil advisories are generally 48 hours long and are lifted 48 hours after the pressure is restored and the system is put back in service. During this time, a bacteriological sample is then taken and tested. Two tests performed back-to-back (24-hours apart) must be completed before the service area is able to receive a rescind notice of the boil water advisory. In the event you experience any discoloration in your water please run your COLD water for up to ten minutes. The discoloration can be caused by sediment disruption in the mains themselves, this is not harmful in any fashion. DO NOT run hot water during this time as it would allow the sediment into your hot water tank and could cause a sulfur smell or clogging of the tank.

Additional Tips

Public Works Department and Utility Billing
(810)-632-7498

Hours of Operation
Monday – Thursday
Public Works Operations: 7:00am-5:00pm
Township Hall: 8:30am-6:00pm

Water Emergency or Repair (after hours)
(810)-632-9405

We invite public participation in decisions that affect drinking water quality. The Township Board occasionally acts regarding the Hartland Water System, and Township Board Meetings are held the first and third Tuesdays of the month at 7:00 pm at the Township Hall, located at 2655 Clark Road Hartland, Michigan 48353. Contact the Township Hall office at 810-632-7498 or visit the Township's website at www.HartlandTWP.com for specific meeting dates and agendas.

Public Works Department
2655 Clark Rd
Hartland, MI 48353

NOTICE TO NON-RESIDENTIAL WATER CUSTOMERS

Federal regulations require that as the billing customer, it is your responsibility to ensure that all water consumers at your facility (whether business, educational institute, apartment complex, etc.) have access to this report. Please post this CCR in a visible area. Additional copies are available for your distribution by contacting the Public Works Department at 810-632-7498.

The Michigan Department of Environmental Quality (MDEQ) officially reorganized into the Michigan Department of Environment, Great Lakes and Energy (EGLE) effective April 22,2019