



2024

Drinking Water Quality Report NOWS – City of Grand Haven



2024 Water Quality Report for the Northwest Ottawa Water Treatment Plant

Water Supply Serial Number: 4847

We are pleased to present the 2024 annual Consumer Confidence Report (CCR) for the water quality provided by the Northwest Ottawa Water Treatment System (NOWS). Ensuring the safety and quality of your drinking water is our top priority. This information is a snapshot of the quality of the water that we have provided to you in 2024. Included are details about where your water comes from, what it contains, and how it compares to United States Environmental Protection Agency (U.S. EPA) and state regulatory standards.

NOWS source: Water is collected through submerged intakes located several feet under the bottom of Lake Michigan. This buried design utilizes the natural sand layers above the intakes providing a pre-filter barrier that complements the plant's direct filtration process.

Source water assessment: The sources of drinking water (both tap and bottled water) include rivers, streams, lakes, 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, radioactive material and can pick up substances resulting from the presence of animals or from human activity. The State performed an assessment of our source water to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility rating is on a six-tiered scale from "very-low" to "high," based primarily on geologic sensitivity, water chemistry, and contaminant sources. Our source's susceptibility is "moderate." There are no significant sources of contamination in our water supply.

Contaminants and their presence in 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 [Safe Drinking Water Hotline - at 1-800-426-4791](tel:1-800-426-4791) or visit <http://www.epa.gov/laws-regulations/summary-safe-drinking-water-act>

Monitoring: The Northwest Ottawa Water System (NOWS) treatment plant and the City of Grand Haven routinely monitors our drinking water by rigorously testing our water at various stages of the treatment and distribution process for Microbiological Contaminants, Inorganic Contaminants, Organic Contaminants, Disinfection Byproducts, PFAS and other Water Quality Parameters pursuant to state and federal laws. Testing is performed by certified laboratory personnel using state-of-the-art equipment and methods.

Vulnerability of sub-populations: 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 systems 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. U.S. EPA/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the [Safe Drinking Water Hotline - at 1-800-426-4791](tel:1-800-426-4791) or visit <http://www.epa.gov/laws-regulations/summary-safe-drinking-water-act>

Questions about this report can be answered by contacting the NOWS Water Filtration Plant Superintendent Eric Law at 616-847-3488

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 stormwater 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 stormwater runoff, and septic systems.
- **PFAS**, are widely used, long lasting chemicals, components of which break down very slowly over time. Because of their widespread use and their persistence in the environment, many PFAS are found in the blood of people and animals all over the world and are present at low levels in a variety of food products and in the environment. PFAS are found in water, air, fish, and soil at locations across the nation and the globe. Scientific studies have shown that exposure to some PFAS in the environment may be linked to harmful health effects in humans and animals. There are thousands of PFAS chemicals, and they are found in many different consumer, commercial, and industrial products. This makes it challenging to study and assess the potential human health and environmental risks. *For more PFAS information go to: <http://michigan.gov/pfasresponse>*
- **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. City of Grand Haven 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 The City of Grand Haven Utilities Department at **(616) 847-3493** 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>.

Water Quality Data

In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations that limit the levels of certain contaminants in water provided by public water systems. Federal Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.

The table on the next page lists all the drinking water contaminants that we detected during the 2024 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 done January 1 through December 31, 2024. 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 significantly from year to year. All the data is representative of the water quality, but some are more than one-year-old.



Annually NOWS test for hundreds of different contaminant analytes with the majority of analysis producing non-detections. The contaminants listed represent only those that show a measurable detection. Analytes that have been measured and not detected are not listed.

Terms and abbreviations used below:

- **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.
- **N/A:** Not applicable
- **ND:** Not detectable at testing 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
- **pCi/l:** Picocuries per liter (a measure of radioactivity)
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **RAA:** Running annual average, a method used to calculate the average of a particular metric or data point over a rolling 12-month period. This calculation is updated continuously as new data becomes available, making it a dynamic measure that reflects trends over time.

Contaminant Monitoring at the Northwest Ottawa Water Treatment Plant

Substance	MCL	MCLG	Level	Range	Year	Violation	Typical Source of Contaminant
Bromodichloromethane (ppb)	80	N/A	2.2	N/A	2024	NO	A byproduct of drinking water disinfection
Chlorodibromomethane (ppb)	80	N/A	2.1	N/A	2024	NO	A byproduct of drinking water disinfection
Chloroform (ppb)	80	N/A	1.6	N/A	2024	NO	A byproduct of drinking water disinfection
Chloride (ppm)	N/A	N/A	16.0	N/A	2024	NO	Runoff from road de-icing, fertilizers, and Leaching from septic tanks
Fluoride (ppm)	4	4	0.84	0.59-0.84	2024	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Sodium (ppm)	N/A	N/A	10	N/A	2024	NO	Erosion of natural deposits
Perfluorooctanoic Acid (PFOA) (ppt)	4	N/A	2.9	RAA <2.33	2024	NO	Chemicals used to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water
Perfluorooctane Sulfonic Acid (PFOS) (ppt)	4	N/A	2.6	RAA <2.17	2024	NO	Chemicals used to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water
Barium (ppb)	2000	2000	20	N/A	2022	NO	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits.
Alpha emitters (pCi/L)	15	0	-1.32	-1.32 ± 0.59	2024	NO	Erosion of natural deposits
Combined radium (pCi/L)	5	0	1.01	0.27 ± 0.74	2024	NO	Erosion of natural deposits

Disinfection Byproducts Monitoring – City of Grand Haven Distribution System – WSSN 2750

Substance	MCL	MCLG	Level (RAA)	Range	Year	Violation	Typical Source of Contaminant
Total Trihalomethanes (TTHM) (ppb)	80	N/A	34.4	15.5 to 64.1	2024	NO	A byproduct of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	60	N/A	14.6	6.3 to 21.3	2024	NO	A byproduct of drinking water disinfection
Chlorine (ppm)	4	4	1.17	0.42 to 1.60	2024	NO	Water additive used to control microbes

Lead & Copper Monitoring – City of Grand Haven Distribution System – WSSN 2750

Substance	AL	MCLG	Level	Range	Year	# of samples Above AL	Typical Source of Contaminant
Lead (ppb)	15	0	0	0-1	2022	0	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0	0	2022	0	Corrosion of household plumbing systems; Erosion of natural deposits.

Lead & Copper Monitoring – City of Grand Haven Distribution System – WSSN 2750

Lead Service Line Inventory – City of Grand Haven WSSN 2750 – Distribution System

Lead Service Lines	666
Service Lines of Unknown Materials	1267
Total Number of Service Lines	4751

Did you Know:

Lawn irrigation accounts for nearly two-thirds of homeowner water usage in the summer. Many homeowners irrigate too often and for too short a period to meet lawn and especially landscaping (tree and shrub) needs. Others tend to leave the water running too long, resulting in wasted water. Turf studies show that most lawns only require irrigation once every 4 to 8 days to stay healthy and green. Shallow rooted plants result from irrigating every day. Irrigating less often and applying more water per irrigation results in deeper rooted plants and a healthier turf. Grass roots grow deeper into the soil and the plants become stronger if enough water is applied when you do irrigate. If grass doesn't spring back after being stepped on, it's probably time to irrigate. It takes less water to maintain a green lawn if soil fertility is high. Weed levels also tend to be lower in a well fertilized lawn.

Fact:

The NOWS Water Treatment Plant produced a record 2.6 billion gallons of drinking water in 2024. It is estimated that lawn irrigation from May to August accounts for 1.1-billion-gallons of that 2.6-billion-gallon total. This surge in summer lawn irrigation demand is forcing NOWS officials and engineers to start planning for future plant expansion because this peak demand is approaching the water plants capacity limits. Preliminary estimates on the cost to expand the NOWS Water Treatment Plant are in the tens-of-millions of dollars.