

Charter Township of White Lake, Michigan

CONSUMER CONFIDENCE REPORT 2024

This report covers the drinking water quality for White Lake Township, for the calendar year 2024. This information is a snapshot of the quality of the water that we provided to you in 2024. 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 comes from nine (9) groundwater wells, each over eighty (80) feet deep. The State performed an assessment of the water source 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 "very high" based on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility for our wells is **HIGH**.

There are no known significant sources of contamination in our water supply. We are making efforts to protect our sources by participating in a Wellhead Protection Program, signage, security measures, site plan reviews, periodic water analysis and other water management programs.

For more information about your water, additional copies of this report, or to participate on issues that affect your water quality contact Aaron D. Potter, Director, Department of Public Services (certified operator D-1, S-1) at (248) 698-7700. We want our valued customers to be informed about their water quality. Information can be found online at www.whitelaketwp.com or www.miwaterstewardship.org.

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 **EPA Safe Drinking Water Hotline (800) 426-4791**.

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 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.

Sources of Drinking Water: 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.

Contaminants that may be present in source water 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 be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharge, 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 are naturally occurring or can 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 runoff, and septic systems.
- In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations established limits for contaminants in bottled water, which provide the same protection for public health.

Water Quality Data

The table below 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 from January 1 to December 31, 2024. The state allows us to monitor certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All data is representative of the water quality, but some are more than one year old.

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 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):** 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.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **N/A:** Not applicable.
- **ND:** Not detectable at testing limit.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Level 1 Assessment:** A study of the water supply to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- **ppm:** Parts per million or milligrams per liter.
- **ppb:** Parts per billion or micrograms per liter.
- **ppt:** Parts per trillion or nanograms per liter.
- **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.

| Inorganic Contaminants | MCL, TT, or MRDL | MCLG | Highest Level Detected | Range of Detections | Sample Date | Violations | Typical Sources of Contaminants |
|---|------------------|-------|------------------------|----------------------|-----------------------|------------|---|
| Arsenic *(1) | 0.010 ppm | 0 | 0.003 ppm | N/A | 5/5/2021 | No | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics productions wastes |
| Barium | 2 | 2 | 0.15 mg/L | N/A | 5/5/2021 | No | Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits |
| Fluoride | 2 ppm | 2 ppm | 0.44 ppm | 0.00 ppm to 0.44 ppm | 1/8/2024 to 12/9/2024 | No | Discharge of drilling wastes; Discharge from metal refineries & Erosion of natural deposits |
| Sodium * (2) | N/A | N/A | 60 ppm | 4.7 ppm to 60 ppm | 1/8/2024 to 12/9/2024 | No | Erosion of natural deposits |
| Disinfection By-Products | | | | | | | |
| Distribution System #1 Total Trihalomethanes (TTHM) | 0.080 ppm | N/A | 0.0210 ppm | N/A | 6/11/2024 | No | Byproduct of water disinfection |
| Distribution System #2 Total Trihalomethanes (TTHM) | 0.080 ppm | N/A | 0.0078 ppm | | 6/11/2024 | No | Byproduct of water disinfection |

(1) While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. 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.

(2) Sodium is not a regulated contaminant.

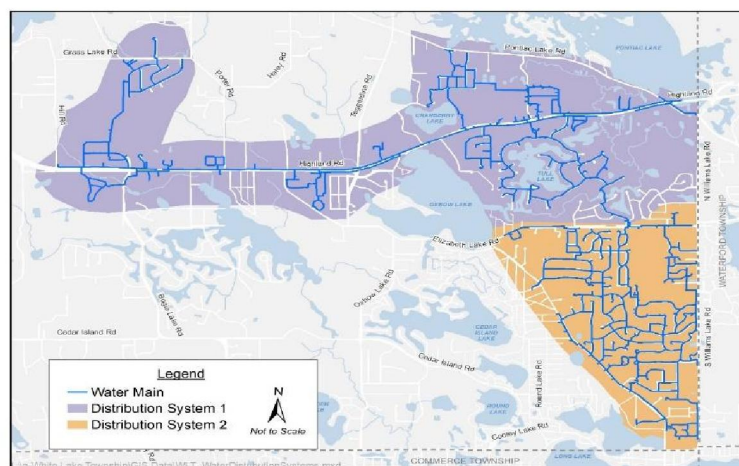
| Regulated Contaminants | MCL | MCLG | Running Annual Average | Range of Detections | Sample Date | Violations | Typical Sources of Contaminants |
|------------------------|-------|-------|------------------------|---------------------|-----------------------------|------------|---|
| Chlorine | 4 ppm | 4 ppm | 0.55 ppm | 0.2 ppm to 1.4 ppm | Jan. 2024 through Dec. 2024 | No | Water additive used to control microbes |

| Inorganic Contaminant Subject to Action Levels (AL) | Action Level | MCLG | Our Water* 90 th Percentile | Range of Results | Number of Samples Over Action Level | Sample Date | Typical Sources of Contaminant |
|---|--------------|---------|--|------------------|-------------------------------------|--------------------------|--|
| Distribution System #1 Spring- Lead | 15 ppb | 0 ppb | 2 ppb | 0-30 ppb | 1 of 10 | 3/12/2024 thru 5/24/2024 | Lead service lines, corrosion of household plumbing systems, erosion of natural deposits |
| Distribution System #1 Spring-Copper | 1.3 ppm | 1.3 ppm | 0.8 ppm | 0.2-1.1 ppm | 0 of 10 | 3/12/2024 thru 5/24/2024 | Corrosion of household plumbing systems, erosion of natural deposits |
| Distribution System #1 Fall-Lead | 15 ppb | 0 ppb | 2 ppb | 0-5 ppb | 0 of 10 | 7/9/2024 thru 8/30/2024 | Lead service lines, corrosion of household plumbing systems, erosion of natural deposits |
| Distribution System #1 Fall-Copper | 1.3 ppm | 1.3 ppm | 0.6 ppm | 0.1-0.7 ppm | 0 of 10 | 7/9/2024 thru 8/30/2024 | Corrosion of household plumbing systems, erosion of natural deposits |
| Distribution System #2 Lead | 15 ppb | 0 ppb | 2 ppb | 0-4 ppb | 0 of 20 | 6/13/2024 thru 7/29/2024 | Lead service lines, corrosion of household plumbing systems, erosion of natural deposits |
| Distribution System #2 Copper | 1.3 ppm | 1.3 ppm | 1 ppm | 0– 1.1 ppm | 0 of 20 | 6/13/2024 thru 7/29/2024 | Corrosion of household plumbing systems, erosion of natural deposits |

*90 percent of samples at or below this level

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson’s Disease should consult their personal doctor.

Information about lead: 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. White Lake 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 White Lake DPS at 248-698-7700 for available resources. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is



There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of persons who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

White Lake Township has zero known water service lines that are made of lead material. However, we have 13 public and 9 private service lines of unknown material out of the total number of 2,481 water service lines. If you believe that you have a lead service line or would like assistance in identifying your service line material, please contact DPS at 248-698-7700.

Total Coliforms: Coliforms are a type of bacteria that is naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. White Lake Township collects (6) samples per month for routine monitoring.

| Contaminant | Number of samples collected in 2024 | Number of Samples Detected Positive | Sample Period | Susceptible Vulnerable Population | Typical Sources of Contaminant |
|----------------|-------------------------------------|-------------------------------------|------------------------|--|--|
| Total Coliform | 72 | 0 | 1/2/2024 to 12/16/2024 | Infants, young children, the elderly and people with severely compromised immune systems | Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present Coliforms were found in more samples than allowed and this was a warning of potential problems |

Per- and polyfluoroalkyl substances (PFAS) are a potential groundwater contaminant found in some firefighting foams and other industrial chemical products. These compounds are highly soluble in groundwater and remain in the environment for long periods of time.

| Per- and polyfluoroalkyl substances (PFAS) | | | | | | | |
|--|------------------|---------------|----------------|---------|--------------|------------------|---|
| Regulated Contaminant | MCL, TT, or MRDL | MCLG or MRDLG | Level Detected | Range | Year Sampled | Violation Yes/No | Typical Source of Contaminant |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) (ppt) | 370 | N/A | ND | ND | 2024 | No | Discharge and waste from industrial facilities utilizing the Gen X chemical process |
| Perfluorobutane sulfonic acid (PFBS) (ppt) | 420 | N/A | ND | ND | 2024 | No | Discharge and waste from industrial facilities; stain-resistant treatments |
| Perfluorohexane sulfonic acid (PFHxS) (ppt) | 51 | N/A | ND | ND | 2024 | No | Firefighting foam; discharge and waste from industrial facilities |
| Perfluorohexanoic acid (PFHxA) (ppt) | 400,000 | N/A | ND | ND | 2024 | No | Firefighting foam; discharge and waste from industrial facilities |
| Perfluorononanoic acid (PFNA) (ppt) | 6 | N/A | ND | ND | 2024 | No | Discharge and waste from industrial facilities; breakdown of precursor compounds |
| Perfluorooctane sulfonic acid (PFOS) (ppt) | 16 | N/A | ND | ND | 2024 | No | Firefighting foam; discharge from electroplating facilities; discharge and waste from industrial facilities |
| Perfluorooctanoic acid (PFOA) (ppt) | 8 | N/A | ND | ND | 2024 | No | Discharge and waste from industrial facilities; stain-resistant treatments |
| Perfluorobutanoic Acid (PFBA) | N/A | N/A | 3 ppt | 2-3 ppt | 2024 | No | Firefighting foam; discharge and waste from industrial facilities |
| Perfluoropentanoic Acid (PFPeA) | N/A | N/A | 2 ppt | 2-2 ppt | 2024 | No | Firefighting foams, discharge and waste from industrial facilities; stain-resistant treatments |

Violations: On November 13th, 2024, White Lake DPS collected samples at each water plant for Water Quality Parameters (WQP) and delivered them to the State of Michigan Drinking Water Laboratory for testing. We collect this panel of samples every two weeks as required. On December 2nd 2024 we were notified by the lab that they did not log in their samples correctly and the samples were not tested for alkalinity, conductivity, and orthophosphate for the two-week monitoring period of November 10th to November 23rd. Repeat samples were collected and the system returned to compliance on December 9th. A notice regarding this violation and the notice from the State of Michigan Drinking Water Laboratory are attached to this report. No changes to water system or treatment monitoring were made during this period.

100% of White Lake Township drinking water comes from wells. What Can You Do to Protect the Township's Drinking Water Supply?

- Always recycle household chemicals like gasoline, paint, and pesticides.
- Never dump chemicals onto the ground.
- Never flush chemicals down the toilet.

The Township hosts an annual Household Hazardous Waste Drop-Off event. The 2026 Annual Household Hazardous Waste Day will be held in early May 2026. Information on the schedule and what materials are accepted will be updated on the Township website at www.whitelaketwp.com as soon as they are available.

The State and EPA require us to test our water on a regular basis to ensure its safety. For more information about your water, additional copies of this report, the contents of this report or to participate on issues that affect your water quality, contact Aaron D. Potter, Director, Department of Public Services (certified operator D-1, S-1) at 248-698-7700 or visit our website at www.whitelaketwp.com/water.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for White Lake Township

Our water system recently violated several drinking water requirements. Even though this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. The samples we collected were not analyzed for all the required water quality parameters (WQPs¹) and, therefore, we cannot be sure of the quality of our drinking water during that time.

The table below lists the analytes we did receive results for, how often we are supposed to sample for these contaminants, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date we will collect follow-up samples.

| Contaminant | Required sampling frequency | Number of samples taken | When all samples should have been taken | Date additional samples were taken |
|---|--|-------------------------|--|------------------------------------|
| WQP ¹ Alkalinity, Conductivity and Orthophosphate | 1 sample/ every two weeks at 5 sites | 0 | November 10, 2024, to November 23, 2024 | December 9, 2024 |

¹ WQPs are a group of analytes that are indicators of corrosivity. They include pH, calcium, temperature, sulfate, chloride, alkalinity, conductivity, and orthophosphate. Three samples were not analyzed for alkalinity, conductivity, and orthophosphate.

What happened? What is being done?

White Lake Township collected the required samples, but the laboratory failed to analyze the samples for some of the parameters within the sampling period. Monitoring of WQPs is an essential part of corrosion control and is used to evaluate the potential aggressiveness of water on plumbing and fixtures. WQP sampling is required to safeguard public health. We will continue to work with the Michigan Department of Environment, Great Lakes, and Energy to meet requirements.

White Lake Township returned to compliance on December 9, 2024, when WQP samples were collected. We are making every effort to ensure this does not happen again. If you have any questions, please contact us at the number listed below.

For more information, please contact:

Aaron Potter, Director
Department of Public Services
White Lake Township
7525 Highland Road
White Lake, Michigan 48383

Email: apotter@whitelaketwp.com

Phone: 248-698-7700 x 226

This notice is being sent to you by White Lake Township, PWSID: MI0007065

December 2, 2024

To Whom it may Concern,

Please be advised that White Lake Township, sent to EGLE Laboratories samples that were collected for Compliance with the State of Michigan EGLE Drinking Water & Environmental Health Division directives for the month of November 2024 WSSN 07065. Due to laboratory error at sample login, the samples they submitted for Corrosion Test Code (Alkalinity, Ortho-Phosphate and Specific Conductance) were not analyzed. Since they were **not** notified about the problem in sufficient time, they were not able to complete another sampling within the specified month of November. This is not the fault of the supply, they attempted to provide sampling as necessary, it is the fault of the laboratory.

If you have any questions regarding this sampling event for White Lake Township, please feel free to contact me at 517-335-8076.

Sincerely Submitted,

Marlene Kane
Support Services Manager
Michigan Department of Environment, Great Lakes and Energy
517-335-8076 | kanem4@michigan.gov