

**More on source water**

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of these substances. It's important to remember that the presence of these substances does not necessarily pose 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 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, urban storm water runoff, and residential uses.
- **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.
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.
- **Per- and Polyfluoroalkyl Substances (PFAS)**, are a group of chemicals that have been classified by the U.S. EPA as an emerging contaminant and have been used in many industrial applications and consumer products such as carpeting, waterproof clothing, upholstery, food paper wrappings, fire-fighting foams, and metal plating. PFAS have been found at low levels both in the environment and in blood samples from the general U.S. population. For more PFAS information go to: <http://michigan.gov/pfasresponse>

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**Health Effects of 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. OCRC DPU 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>.

**Cryptosporidium and Giardia.** Testing is also performed to detect the presence of Cryptosporidium and Giardia, which are protozoan parasites that occur in natural surface waters such as lakes, rivers and streams. Wyoming's water treatment process provides multiple barriers, including clarification, filtration, and disinfection, to lower the risk of these contaminants in finished tap water. Monitoring of treated water samples yielded a 100% removal rate, highlighting the effectiveness of the treatment system in microscopic particle removal. For information on microbiological testing, contact the Wyoming laboratory at 616-261-3572.

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. FDA regulations establish limits for contaminants in bottled water, which provide the same protection for public health.



In a world where an estimated 3 million people die every year from preventable waterborne disease, our water systems allow us to drink from virtually any public tap with a high assurance of safety. Each community water supply meets rigorous federal and state health-protective standards.

We are members of these organizations!



# Olive & Blendon Townships



**We're pleased to report that your drinking water meets federal and state requirements for safe drinking water.**

**LAKE MICHIGAN IS CONSIDERED TO BE ONE OF THE HIGHEST QUALITY WATER SOURCES IN THE WORLD!**

This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of your drinking water.

Rain, groundwater, rivers, and streams feed into Lake Michigan, dissolving naturally occurring minerals and sometimes picking up substances resulting from the presence of animals or from human activity. Some of the substances that can make their way into Lake Michigan are: viruses and bacteria from animal, agricultural, and human activities, salts, metals, pesticides and herbicides, as well as by-products of industrial processes. In order to ensure that tap water is safe to drink, EPA prescribes regulations, called Maximum Contaminant Levels (MCLs) that limit the amount of certain contaminants in your drinking water. Our water source has a moderately high susceptibility to contaminants.



The East Crisp (Groenewoude School District 4) was built in 1860 on property donated by Groenewoude.

The treatment plant routinely monitors for a variety of dissolved mineral and organic substances in your drinking water according to federal and state laws. The tables in this brochure show the results of our monitoring for the period of January 1 through December 31, 2021.

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 cryptosporidium and other microbial contaminants are also available from the Safe Drinking Water Hotline at 800-426-4791.

The Ottawa County Road Commission, Public Utilities Department, operates your Water System, on behalf of Olive and Blendon Townships. The Road Commission purchases your water from the City of Wyoming. Your water is drawn from Lake Michigan into the City's treatment plant. The treatment plant provides multiple barriers of treatment, including clarification, filtration and disinfection to remove contaminants from source water.

For a copy of the most current Source Water Assessment of the water system, please call the filtration plant at 616-399-6511. The filtration plant is operated 24 hours a day, 365 days a year to produce a reliable supply of safe drinking water. In order to ensure the safety of your drinking water, continuous testing is performed before, during and after treatment to verify proper chemical levels are maintained and the water remains free of unwanted contaminants. Additionally, we monitor the water quality throughout the distribution system and at the customers' tap.

You are invited to attend Olive Twp. meetings held on the 3rd Thursday of each month at 7:00pm, or Blendon Twp. meetings held on the 3rd Monday of each month at 7:00pm. A schedule of Ottawa County Road Commission Board meetings can be found on the OCRC web site at [www.ottawacorc.com](http://www.ottawacorc.com). You may also contact the distribution system supervisor Joe Hebert at 616-842-5400.

**Parts per million (ppm)** - A measurement of concentration. One part per million corresponds to one minute in two years.

**Parts per billion (ppb)** - A measurement of concentration. One part per billion corresponds to one minute in 2000 years.

**Maximum Contaminant Level (MCL)** - The "Maximum allowed" (MCL) is the highest level of contaminant that is allowed in drinking water. MCL's are set close to the MCLG's as feasible using the best available treatment technology.

**Action Level (AL)** - The concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow.

**Maximum Contaminant Level Goal (MCLG)** - The "Goal" (MCLG) is the level of a contaminant in drinking water below, which there is no known or expected risk to health. MCLG's allow for a margin of safety.

**Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

**LRAA** - Locational Running Annual Average is a regulatory calculation based on averaging sample results from the previous 12 months for a specific sampling location.

**NTU** - Nephelometric Turbidity Unit. Turbidity level shall not exceed 0.3 NTU in 95% of the samples every month. This is the measurement of suspended material that is found in water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

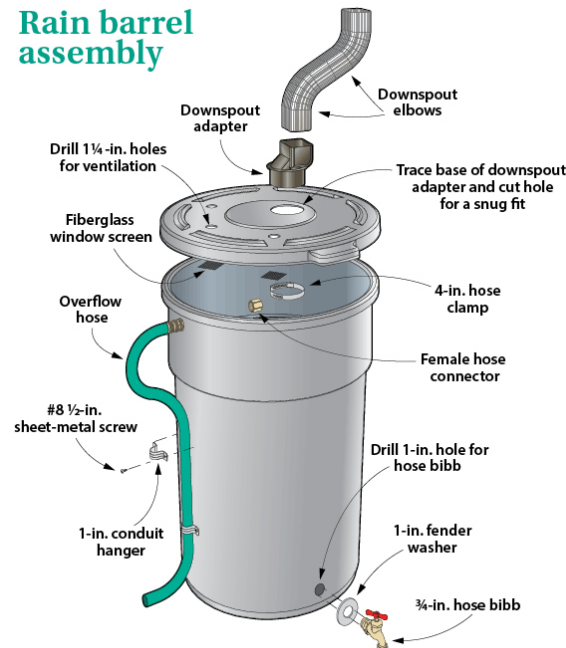
**Unregulated Monitoring** - Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where these contaminants occur and whether it needs to regulate those contaminants.

**Maximum Residual Disinfectant Level** - Means the highest level of a disinfectant allowed in drinking water, (MRDL). There is convincing evidence that an addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal** - Means the level of drinking water disinfectant below which there is no known or expected risk to health (MRDLG). MRDLGs do not reflect the benefits of the use of disinfectant to control microbial contaminants.

**N/A** - Not Applicable

**Rain barrel assembly**



**What are the benefits of using a rain barrel?**

In addition to saving water in the yard and garden, rain barrels can save money, energy, protect the environment and provide plants with untreated "soft water" free of dissolved salts or sediment. Using a rain barrel will reduce the amount of storm water runoff into local community water systems which may reduce flooding and stress on the water system.

[https://www.canr.msu.edu/news/rain\\_barrels\\_are\\_economical\\_and\\_ecolog](https://www.canr.msu.edu/news/rain_barrels_are_economical_and_ecolog)

**Additional Monitoring**

Unregulated contaminants are those for which the USEPA has not established drinking water standards. Monitoring helps the USEPA determine where certain contaminants occur and whether regulation of those contaminants are needed.

**Service line materials and Inventory**

The water distribution system supplies 180 homes and businesses with individual service line materials of only plastic or copper.

**FACT: 405 Million Gallons of Drinking Water was used during 2021 in Olive and Blendon Townships**

**REGULATED MONITORING AT THE CUSTOMER TAP**

Compliance is determined using 90th percentile (i.e., 9 out of 10)	Violation Yes/No	Action Level (AL)	MCLG	90th Percentile	Range	Year Sampled	Number of Samples	Likely Source of Contamination
Lead (ppb)	No	15	0	2	0 - 2	2019	0	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits. <b>Testing is every three years.</b>
Copper (ppm)	No	1.3	1.3	0.1	0.0 - 0.3	2019	0	

**REGULATED AND UNREGULATED MONITORING AT THE TREATMENT PLANT AND DISTRIBUTION SYSTEM**

Substance	Violation Yes/No	Highest Level Detected	Unit Measurement	Range of Detection	MCL	MCLG	Likely Source of Contamination
Total Coliform/E. coli Bacteria	No	0%	Presence or	Not Detected	TT	N/A	Naturally present in the environment
E. coli in the distribution system (positive samples)	No	Not Detected	Presence or Absence	N/A		0	Human and animal fecal waste
Fecal indicator - E. coli at the source (positive samples)	No	Not Detected	Presence or Absence	N/A	TT	N/A	Human and animal fecal waste
Turbidity shall not exceed 0.3 NTU in 95% of the samples monthly	No	0.08	NTU	0.02 to 0.08 Yearly Avg. = 0.04	1.0 (TT)		Soil runoff (Turbidity is a measure of the cloudiness of the water.)
Chlorine Residuals	No	LRAA = 1.02	ppm	0.81 to 1.29	MRDL= 4.0	MRDLG = 4.0	Water additive used to control microbes
Nitrate	No	0.56	ppm	0.26 to 0.56	10	10	Runoff from fertilizer and septic tanks
Fluoride	No	0.80	ppm	0.28 to 0.80	4	4	Water additive that promotes strong teeth
Chloride	No	20.6	ppm	17.1 to 20.6	N/A	N/A	Runoff from fertilizer and septic tanks
Sodium	No	12	ppm	10 to 12	N/A	N/A	Mineral and nutrient erosion
Sulfate	No	41.3	ppm	32.6 to 41.3	N/A	N/A	Mineral and nutrient erosion
Magnesium	No	14	ppm	8 to 14	N/A	N/A	Mineral and nutrient erosion
Hardness	No	113.8	ppm	86.8 to 113.8	N/A	N/A	Mineral and nutrient erosion
Calcium	No	42.9	ppm	35.4 to 42.9	N/A	N/A	Mineral and nutrient erosion
Alkalinity	No	112.4	ppm	100.6 to 112.4	N/A	N/A	Mineral and nutrient erosion

**REGULATED MONITORING IN THE DISTRIBUTION SYSTEM**

Total Trihalomethanes (TTHM)	No	LRAA= 20.0	ppb	19.5 to 20.4	80	0	By-product of water chlorination <u>Compliance</u> is based on a LRAA
Haloacetic Acids (HAA5)	No	LRAA= 14.2	ppb	13.9 to 14.5	60	0	

**REGULATED MONITORING AT THE TREATMENT PLANT**

Compound sampled on 1/26/2021	Violation Yes/No	Highest Level Detected	Unit Measurement	Range of Detection	Michigan MCL Limit (ppt)	Likely Source of Contamination
PFNA	No	< 2	ppt	---	6	Used in many industrial applications and consumer products
PFOA	No	< 2	ppt	---	8	
PFHxA	No	< 2	ppt	---	400,000	
PFOS	No	2.2	ppt	0 - 2.2	16	
PFHxS	No	< 2	ppt	---	51	Current lifetime health advisory = 70ppt for PFOS and PFOA combined
PFBS	No	< 2	ppt	---	420	
Gen X	No	< 2	ppt	---	370	

Results were gathered from tests performed by the City of Wyoming's certified lab, as well as the State of Michigan's Department of Environmental Quality laboratory and other certified private laboratories. As authorized by the EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.