

THE CITY OF
Painesville

**2019
WATER
QUALITY
REPORT**

Composed by the Painesville Water Division



www.painesville.com/water
440-392-9565



2019 WATER QUALITY REPORT

EVERYDAY OUR WATER TRAVELS



157 MILES
OF MAINS, DELIVERING



2.99 MILLION
GALLONS

OF WATER TO NEARLY



25,000
PEOPLE

IN THE PAINESVILLE AREA

IN 2019,



1.158 BILLION
GALLONS PUMPED

PH AVERAGE OF 7.2

HARDNESS AT 122 MG/L

ALKALINITY AT 83 MG/L

Once again, we proudly present our annual report. **This edition covers all testing completed from January through December 2019.** We are pleased that our compliance with all state and federal drinking water laws remains exemplary. As in the past, we are committed to delivering the best-quality drinking water to our customers.

Painesville City Public Water Supply in 2019 operates under **unconditional license OH 4301611**. Our back-up connection with Fairport Harbor, Lake County and Aqua-Ohio were not used during 2019 for a primary source of our water and therefore are not included in this report.

HAVE A CONCERN?

Public participation and comments are encouraged at regular meetings of Painesville City Council. Meetings are held on the first and third Mondays of each month at 7:30 p.m. at the Painesville Municipal Courthouse (7 Richmond St).

For more info about Painesville City Council or to find agenda items, please reach out to the Clerk of Council's office at 440-392-5803 or visit www.painesville.com/citycouncil. For more info about Painesville drinking water, contact Danine Schultz, Water Plant Supervisor at 440-392-9544.

The Painesville Water Division receives its drinking water from Lake Erie (specifically, the water off Titus Beach in Mentor, Ohio) and the Grand River. Our plant sits adjacent to Mentor Headlands State Park and the Mentor Marsh.

For more information, visit our website at www.painesville.com/water

For more information about the EPA, visit www.epa.gov/safewater

CORRECTIONS

In our 2018 Water Quality Report, the City of Painesville Water Department failed to report that we had no detections in our sampling of four UCMRs. We also failed to report that our license was unconditional in 2018. We apologize for any inconvenience.

**OUR RAW
WATER
SOURCE IS
BEAUTIFUL
LAKE ERIE**



SOURCE WATER INFORMATION

The Painesville Municipal Water Division has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

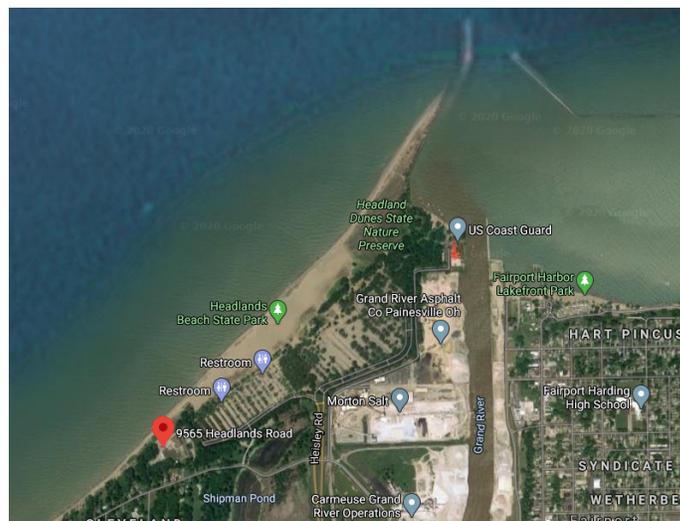
WHAT ARE THE SOURCES OF OUR WATER SYSTEM?

Our system receives its drinking water from Lake Erie (more specifically, the section of Lake Erie directly off Titus Beach in Mentor, Ohio) and the Grand River. The Painesville Water Plant is adjacent to Mentor Headlands State Park and near Mentor Marsh. Since our source water is exposed to atmospheric conditions, it is considered to be surface water.

ABOUT SURFACE WATER

For the purposes of source water assessments, all surface waters are considered to be susceptible to contamination. By their nature, surface waters are accessible and can be readily contaminated by chemicals and pathogens, with relatively short travel times from source to intake. Based on information compiled by assessment, the Painesville drinking water protection area is susceptible to contamination from municipal wastewater treatment discharges, industrial waste water discharges, air contamination deposition, runoff from residential, agricultural and urban areas, oil and gas production and transportation, and accidental releases and spills from rail and vehicular traffic as well as from commercial shipping operations and recreational boating.

It is important to note that this assessment is based on available data and therefore may not reflect current conditions in all cases. Water quality, land



The Painesville Water Plant is located at 9565 Headlands Road, Mentor, Ohio. It sits off Titus Beach, adjacent to Headlands State Park and the Mentor Marsh. Image by Google Maps.

uses and other activities that are potential sources of contamination, may change with time. Although the source water (Lake Erie) for the Painesville Public Water System was determined to be susceptible to contamination, historically, the water treatment plant has effectively treated this source water to meet drinking water quality standards.

Our interconnections with Fairport, Lake County and Aqua-Ohio were not used during 2019 for a primary source of water.

All surface waters in Ohio, including Painesville's source water, have a high susceptibility to contamination. A paper copy of the City of Painesville's Drinking Water Source Assessment Report or Consumer Confidence Report can be obtained by calling 440-392-9565.

SOURCES OF CONTAMINATION

The sources of drinking water (both tap water and bottle water) include rivers, 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, 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, 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.

In order to ensure that tap water is safe to drink, USEPA prescribes regulation which limit the amount of certain contaminants in water provided by public

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

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants and potential health effects can be obtained by calling the Federal Environmental Protection Agency's Safe Water Drinking Water Hotline at 1-800-426-4791.



SPECIAL PRECAUTIONS

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 infection. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the EPA Safe Drinking Water Hotline at 1-800-426-4791.

CRYPTOSPORIDIUM

The City of Painesville monitored for cryptosporidium during 2018. A cryptosporidium oocyst was detected in 1 of 12 raw water sampling events. Giardia was detected in 3 of 12 raw water sampling events.

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Our monitoring of source water and/or finished water indicated the presence of these organisms. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea and abdominal cramps.

Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing a life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

2019 TESTING RESULTS

Table 1 - Detected Contaminants in 2019

Contaminants	MCLG	MCL	Level Found	Range of Detection	Violation	Sample Year	Typical Source of Contaminants
Microbiological							
Turbidity (nt's)*	N/A	TT	0.3	0.02 – 0.30	No	2019	Soil runoff
Turbidity (% samples meeting standard)	N/A	TT	100%	100%	No	2019	Soil runoff
Total Organic Carbon (TOC)**	N/A	TT	0.79	0.62 – 1.14	No	2019	Naturally present in the environment*
Inorganic Contaminants							
Fluoride (mg/l)	4.0	4.0	1.03	0.66 – 1.15	No	2019	Water additive that promotes strong teeth
Nitrate (mg/l)	10	10	0.82	<0.10 – 0.82	No	2019	Runoff from fertilizer use, leaching from septic tanks, sewage, and erosion of natural deposits
Barium (mg/l)	2	2	0.017	N/A	No	2019	Natural deposits, pigments, epoxy sealants, spent coal
Organic Contaminants (Regulated in Distribution System)							
Total Trihalomethanes (TTHM) (ppb)	N/A	80	50.55	21.2 – 79.1	No	2019	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	N/A	60	29.3	13.8 – 45.3	No	2019	By-product of drinking water disinfection
Disinfectant							
Chlorine (ppm)	MRDLG 4	MRDL 4	1.33	0.94 – 1.4	No	2019	Water additive used to control microbes
Contaminants	MCLG	AL	Level Found	# Samples Exceeding AL	Exceeds AL	Sample Year	Typical Source of Contaminants
Inorganic Contaminants							
Lead – AL at consumer taps (ppb)	0	15	4.2	1	No	2018	Corrosion of household plumbing systems; Erosion of natural deposits
Copper – AL at consumer taps (ppm)	1.3	1.3	0.17	0	No	2018	Corrosion of household plumbing systems; Erosion of natural deposits

*Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of the filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported above, the Painesville Municipal Water Division's highest recorded turbidity result for 2019 was 0.3 NTU and the lowest monthly percentage of samples meeting the turbidity limits was 97%.

** The value reported under 'Level Found' for Total Organic Carbon (TOC) is the lowest ratio between percentages of TOC actually removed to the percentage of TOC required to be removed. A value of greater than 1 indicates that the water system is in compliance with TOC removal requirements.

***Routine bacteria sample presented positive due to compromised reagents used to analyze bacteria. Repeat sampling of location and sampling of taps adjacent to the original location returned negative coliform results.

Definitions of some terms contained within this report:

Abbreviation	Term	Definition
AL	Action Level	The concentration of a contaminant which if exceeded triggers treatment or other requirements which a water system must follow.
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 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 Disinfectant Level	The highest level of a disinfectant allowed in drinking water (there is convincing evidence that an addition of a disinfectant is necessary for control of microbial contaminants).
MRDLG	Maximum Residual Disinfectant Level Goal	The level of drinking water disinfectant below which there is no known or expected risk to health (MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination).
PPM	Parts Per Million	ppm or mg/L (milligrams per liter) are units of measure for concentration of a contaminant. A part per million corresponds to once second in a little over 11.5 days.
PPB	Parts Per Billion	ppb or µg/L (micrograms per liter) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
TT	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
<	Less Than	A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

Table 2 - Unregulated Contaminants Detected in 2019

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. In 2019, the City of Painesville Water Department participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4). For a copy of the results, please call the Painesville Water Plant at 440-392-9565.

Contaminant (ug/L)	Sample Year	Average Level Found	Range of Detections
Plant Tap			
Manganese	2019	3.98	0.82-10.3 ug/L
Distribution			
MonoBromoAcetic Acid	2019	0.42	0.3-0.8 ug/L
DiChloroAcetic Acid	2019	9.73	2.1-16.6 ug/L
TriChloroAcetic Acid	2019	14.77	8.0-29.9 ug/L
BromoChloroAcetic Acid	2019	2.19	1.0-4.5 ug/L
BromoDiChloroAcetic Acid	2019	5.30	<0.5-7.7 ug/L
DiBromoAcetic Acid	2019	3.05	<0.3-7.0 ug/L
ChloroDiBromoAcetic Acid	2019	1.04	1.0-1.2 ug/L
HAA5 Group	2019	26.36	10.6-38.6 ug/L
HAA6BR Group	2019	10.70	6.7-14.1 ug/L
HAA9 Group	2019	34.29	16.8-51.8 ug/L

This data covers all **testing completed from January through December 2019** by the Painesville Water Division, unless otherwise noted.

ABOUT YOUR DRINKING WATER SAMPLING

The EPA requires regular sampling to ensure drinking water safety. The Painesville Water Division conducted sampling for bacteria, inorganic, synthetic organic and volatile organic contaminants during 2019. Samples were collected for a total of over 100 different contaminants. Most contaminants were not detected in the Painesville Water Division's water supply.

The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, although accurate, are more than one year old.



LEAD & COPPER

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 Painesville Water Division 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 you 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 EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>

IF LEAD ACTION LEVEL IS EXCEEDED IN YOUR HOME

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at 1-800-426-4791.

CONTACT US

WATER BILL QUESTION?

Utilities Offices

7 Richmond Street, Painesville, Ohio 44077
Business Hours: 440-392-5797

SERVICE & REPAIR QUESTION?

Water Distribution

459 Storrs Street, Painesville, Ohio 44077
Business Hours: 440-392-2975
After Hours: 440-392-9565

WATER QUALITY QUESTION?

Painesville Water Plant

9565 Headlands Road, Mentor, Ohio 44060
All Hours: 440-392-9565

POLICY OR DECISION MAKING QUESTION?

Painesville City Council

7 Richmond Street, Painesville, Ohio 44077
Business Hours: 440-392-5803

PAINESVILLE WATER DIVISION TEAM

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