

EVERYDAY OUR WATER TRAVELS



**157 MILES**  
OF MAINS, DELIVERING



**3.07 MILLION**  
**GALLONS**

OF WATER TO NEARLY



**25,000**  
**PEOPLE**

IN THE PAINESVILLE AREA

IN 2018,



**1.188 BILLION**  
GALLONS PUMPED

**PH AVERAGE OF 7.2**  
**HARDNESS AT 120 MG/L**  
**ALKALINITY AT 81 MG/L**

## EPA COMPLIANCE

In compliance with the Safe Drinking Water Act, the Painesville Water Division has prepared this report on the quality of our drinking water. The EPA requires regular sampling to ensure drinking water safety. Every year the Painesville Water Division conducts sampling for bacteria, inorganic, synthetic organic and volatile organic contaminants, sampling 100+ different contaminants.

Most contaminants are not detected in the Painesville water supply. Because the concentrations of these contaminants do not change frequently, the Ohio EPA requires us to monitor these contaminants less than once per year. Thus, although accurate, some data may be more than one year old.

# OUR RAW WATER SOURCE IS BEAUTIFUL LAKE ERIE

### WHERE DOES PAINESVILLE WATER COME FROM?

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.

### CONTINUING OUR COMMITMENT

Once again, we proudly present our annual report. This edition covers all testing completed from **January through December 2018**. 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 operates under license **OH 4301611**. Our back-up connection with Fairport Harbor, Lake County and Aqua-Ohio were not used during 2018 for a primary source of our water and therefore are not included in this report.

### WHAT IF I HAVE A CONCERN ABOUT THE MANAGEMENT OF MY DRINKING WATER?

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). Please be aware of a different 'summer schedule' and check online for meetings.

For more information 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](http://www.painesville.com/citycouncil).



For more information, visit our website at [www.painesville.com/water](http://www.painesville.com/water)  
For more information about the EPA, visit [www.epa.gov/safewater](http://www.epa.gov/safewater)

## CONTACT US

### WATER BILL QUESTION?

Utilities Offices  
7 Richmond Street, Painesville, Ohio 44077  
Business Hours: 440-392-9301

### 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

### PAINESVILLE WATER DIVISION TEAM

**Randy Bruback**, Director of Infrastructure  
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**Danine Schultz**, Water Superintendent  
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**Mark Connor**, Water Distribution Supervisor  
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# 2018 WATER QUALITY REPORT

CITY OF PAINESVILLE  
WATER DIVISION

THE CITY OF  
*Painesville*

# 2018 RESULTS - PAINESVILLE WATER DIVISION

Contaminants	MCLG	MCL	Level Found	Range of Detection	Violation	Sample Year	Typical Source of Contaminants
<b>Microbiological</b>							
Turbidity (nt's)*	N/A	TT	0.2	0.01 – 0.20	No	2018	Soil runoff
Turbidity (% samples meeting standard)	N/A	TT	97%	97%	No	2018	Soil runoff
Total Organic Carbon (TOC)**	N/A	TT	0.87	0.55 – 1.41	No	2018	Naturally present in the environment
<b>Inorganic Contaminants</b>							
Fluoride (mg/l)	4.0	4.0	1.05	0.68 – 1.18	No	2018	Water additive that promotes strong teeth
Nitrate (mg/l)	10	10	0.76	0.14 – 0.76	No	2018	Runoff from fertilizer use, leaching from septic tanks, sewage, and erosion of natural deposits
Barium (mg/l)	2	2	0.019	N/A	No	2018	Natural deposits, pigments, epoxy sealants, spent coal
<b>Organic Contaminants (Regulated in Distribution System)</b>							
Total Trihalomethanes (TTHM) (ppb)	N/A	80	49.4	23.6 – 57.5	No	2018	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	N/A	60	29.2	12.8 – 42.6	No	2018	By-product of drinking water disinfection
<b>Disinfectant</b>							
Chlorine (ppm)	MRDLG 4	MRDL 4	1.36	1.18 – 1.38	No	2018	Water additive used to control microbes
Contaminants	MCLG	AL	Level Found	# Samples Exceeding AL	Exceeds AL	Sample Year	Typical Source of Contaminants
<b>Inorganic Contaminants</b>							
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 5 NTU at any time. As reported above, the Painesville Municipal Water Division's highest recorded turbidity result for 2018 was 0.2 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

All surface waters in Ohio have a high susceptibility to contamination. A paper copy 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 & bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock & wildlife
- **inorganic contaminants**, such as salts & metals, which can be from naturally-occurring or urban storm water runoff, industrial or domestic wastewater discharges, oil & gas production, mining or farming
- **pesticides & herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff & residential uses
- **organic chemical contaminants**, including synthetic & volatile organic chemicals, which are by-products of industrial processes & petroleum production, or from gas stations, urban storm water runoff, septic systems
- **radioactive contaminants**, which may be naturally occurring or from oil & gas production & mining activities

In order to ensure that tap water is safe to drink, USEPA 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 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 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 at 1-800-426-4791.

This assessment is based on available data and therefore may not reflect current conditions in all cases. Water quality, land uses and other activities may change with time. Although Painesville source water is susceptible to contamination, historically, the water treatment plant has effectively treated our source water to meet drinking water quality standards. Contaminants that may be present in source water include:

- municipal wastewater treatment discharges
- industrial waste water discharges
- air contamination deposition
- runoff from residential, agricultural & urban areas
- oil & gas production & transportation
- accidental releases & spills from rail/vehicular traffic
- commercial shipping operations & recreational boating

## SPECIAL PRECAUTIONS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as chemotherapy patients, organ transplant patients, those 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 on how to lessen the risk of infection by microbial contaminants are available from the EPA Safe Drinking Water Hotline at 1-800-426-4791.

## CRYPTOSPORIDIUM

Cryptosporidium is a microbial pathogen found in surface water throughout the US. *Symptoms of infection include nausea, diarrhea and abdominal cramps.* Most healthy individuals can overcome the infection within a few weeks. However, immuno-compromised people are at greater risk of developing a life threatening illness. Cryptosporidium must be ingested to cause harm and may be spread through means other than drinking water. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal.

In 2018, a Cryptosporidium oocyst was detected in 1 of 12 raw water sampling events and Giardia was detected in 3 of 12 different sampling events. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. The presence of contaminants does not necessarily indicate that water poses a health risk.

## LEAD & COPPER

In 2018, 30 lead and copper samples were collected for analysis. The results are listed in the table.

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>