

### In compliance with the Safe Drinking Water Act,

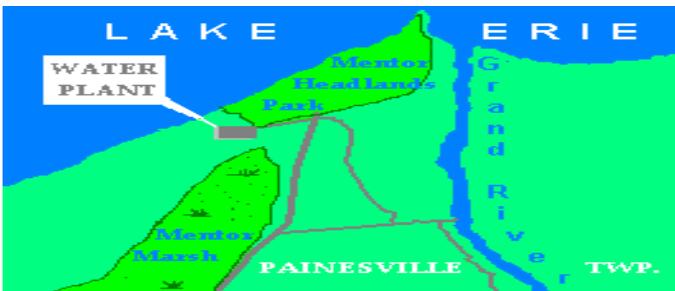
The Painesville Municipal Water Division has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking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

### What are 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, Mentor, Ohio) and Grand River, (see map below). We are adjacent to Mentor Headlands State Park and near Mentor Marsh. Since our source waters are exposed to atmospheric conditions, it is considered to be 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 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 2017 for a Primary source of our water. Our water travels through approximately 140 miles of mains, delivering on the average, 2.93 MGD (million gallons daily) of water to nearly 25,000 people. For 2017: water pumpage totaled 1.07 billion gallons, pH averaged 7.2, the hardness was 121 mg/l, and the alkalinity was 82 mg/l.

**Este informe contiene informacion muy importante sobre su agua para beber. Traduzcalo o hable con alguien que lo entienda bien.**

### What are the sources of contamination in the water?

The sources of drinking water both tap water and bottled water includes 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.

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### 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.

Painesville Water Treatment monitored for Cryptosporidium in the source water during 2017. A Cryptosporidium oocyst was detected in 1 of 12 raw water sampling events. Giardia was detected in 3 of 12 different 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 percent removal. Our monitoring of source water and/or finished water indicate 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, immunocompromised people are at greater risk of developing a life threatening illness. We encourage immunocompromised 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.

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 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 *Environmental Protection Agency's Safe Drinking Water Hotline* (1-800-426-4791).

### Who needs to take 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 on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the *Safe Drinking Water Hotline* (1-800-426-4791).

### Lead information

In 2015 we collected lead and copper samples for analysis. All sample results were below the action level. 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 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 at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

### About your drinking water.

The EPA requires regular sampling to ensure drinking water safety. The Painesville Municipal Water Division conducted sampling for bacteria, inorganic, synthetic organic, and volatile organic contaminants during 2017. Samples were collected for a total of over 100 different contaminants. Most contaminants were not detected in the Painesville Municipal 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, though accurate, are more than one year old. Listed on the next page, is information on those contaminants that were found in the Painesville Municipal Water Division's drinking water.

### Who to contact for more info?

Frank McKeon is the Painesville Water Division Superintendent and is available to answer questions regarding this report during the hours of 8 AM. to 4 PM. at: (440) 392-2975 or (440) 392-9565. Additional information is available on our web site at [www.painesville.com](http://www.painesville.com). Another source of information is through the EPA web site at <http://www.epa.gov/safewater>.

### How do I participate in decisions concerning my drinking water?

Public participation and comments are encouraged at regular meetings at The City of Painesville Council meetings. Council meetings are normally held on the first and third Mondays of each month at 7:30 PM. Council meets at City Hall, 7 Richmond Street, Painesville, Ohio, in courtroom number 1. During the months of July and August, council meets only once per month. Information can be obtained at the City Managers office at 440-392-5800 to find out when council meets.

## Continuing Our Commitment

Once again we proudly present our annual water quality report. This edition covers all testing completed from January through December 2017. We are pleased to tell you 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 that end, we remain vigilant in meeting the needs of all our water users while providing community education. "We have a current, unconditioned license to operate our water system." Painesville City Public Water Supply operates under license OH 4301611

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection	Violation	Sample Year	Typical Source of Contaminants
<b>Microbiological Contaminants</b>							
Turbidity (ntu/s) *	N/A	TT	0.18	0.04 – 0.18	NO	2017	Soil Runoff
Turbidity (% samples meeting standard)	N/A	TT	100%	100%	NO	2017	Soil Runoff
Total Coliform	N/A	Less than 1	0	0	NO	2017	Naturally present in the environment
<b>Inorganic Contaminants</b>							
Fluoride (mg/l)	4.0	4.0	1.04	0.65 – 1.14	NO	2017	Water additive that promotes strong teeth
Nitrate (mg/l)	10	10	1.17	<.10 - 1.17	NO	2017	Runoff from fertilizer use, leaching from septic tanks, sewage, and erosion of natural deposits
Barium (mg/l)	2	2	0.023	NA	NO	2017	Natural deposits, pigments, epoxy sealants, spent coal
<b>Lead and Copper</b>							
Copper (ppb) (Residential customer's tap only)	1300	AL = 1300	140.0	N/A	NO	2015	Corrosion of household plumbing systems and erosion of natural deposits.
Lead (ppb) (Residential customer's tap only)	0	AL = 15	4.2	N/A	NO	2015	Corrosion of household plumbing systems and erosion of natural deposits.
A TOTAL OF 34 LEAD AND COPPER SAMPLES WERE COLLECTED AND NO SAMPLES EXCEEDED THE ACTION LEVEL FOR LEAD OR COPPER							
<b>Organic Contaminants (regulated in Distribution System)</b>							
Total Trihalomethanes (TTHM) (ppb)	NA	80	42.2	19 - 50.9	NO	2017	By-product of drinking water chlorination.
Haloacetic Acids (HAA5) (ppb)	NA	60	29.3	14.2 - 35.6	NO	2017	By-product of drinking water disinfection
Total Organic Carbon (TOC)	NA	TT	0.71	0.33 - 1.27	NO	2017	Naturally present in the environment
<b>Unregulated Contaminants (ppb)</b>							
Chlorate	N/A	N/A	24.6	0-24.6	NO	2013	By-product of drinking water disinfection
Hexavalent Chromium	N/A	N/A	0.093	0.061-0.093	NO	2013	Produced by industrial processes and manufacturing activities
Chromium	N/A	0.1ppm	0	0-0.316	NO	2013	Naturally present in the environment
molybdenum	NA	NA	1.7	1.5-1.7	NO	2013	Naturally present in the environment
strontium	NA	NA	185	62-185	NO	2013	Naturally present in the environment
<b>Disinfectant</b>							
Chlorine (ppm)	MRDLG = 4	MRDL = 4	1.2	1.01 - 1.47	NO	2017	Water additive used to control microbes

\*Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our 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 2017 was 0.18 and the lowest monthly percentage of samples meeting the turbidity limits was 100%.

\*\* 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 one 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.**

- 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 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 an addition of a disinfectant is necessary for control of microbial contaminants.)
- Maximum Residual Disinfectant Level Goal (MRDLG): The level of a 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.)
- N/A: not applicable.
- Parts per Million (ppm) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.
- Parts per Billion (ppb) or Micrograms per Liter (µg/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
- The "<" symbol: 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, 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.

**THE CITY OF PAINESVILLE MUNICIPAL  
WATER  
DIVISION**

**2017**

**WATER QUALITY REPORT**

**CITY HALL:  
7 RICHMOND STREET  
PAINESVILLE, OH. 44077**

**DISTRIBUTION SERVICE  
& REPAIR:  
459 STORRS STREET  
PAINESVILLE, OH. 44077**

**WATER PLANT:  
9565 HEADLANDS RD,  
MENTOR, OH. 44060**