



Roosevelt Park

Annual Water Quality Report

2020



System Overview

Roosevelt Park purchases its water from the City of Muskegon. The Muskegon Water Filtration Plant is a conventional water treatment plant with a capacity of 40 million gallons per day. Its customers include not only Roosevelt Park, but also North Muskegon, Muskegon Township, County Northside, Fruitport and Norton Shores.

Your water comes from Lake Michigan. The state performed an assessment of our source water in 2003 to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a six-tiered scale from very low to high, based primarily on geologic sensitivity, water chemistry and contaminant sources. The susceptibility of our source water is moderately high.

DID YOU KNOW?

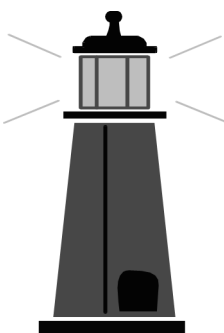
The Muskegon Water Filtration Plant treated over 4 Billion gallons of water in 2020.

Water Quality Exceeds Mark!

(A Note From the Muskegon Filtration Plant)

Dear Customers,

This report contains a summary of the quality of the water provided to you during 2020 and details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. Muskegon Water Filtration Plant Personnel are committed to providing you the safest and most reliable water supply. Informed customers are our best allies in maintaining safe drinking water.



This includes collecting water samples at various stages of the treatment process as well as throughout the distribution system. These samples are analyzed for many different chemical and microbiological parameters. Our sophisticated lab equipment can detect substances at very minute levels. 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 our water poses a health risk.

Our State certified lab runs over 8,000 tests each year.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at:
(800) 426-4791

GET INVOLVED

Customer Views Welcome!

Meetings that deal with decisions about our source water are conducted through the Muskegon Conservation District. You may contact the Muskegon Conservation District at (231) 773-0008

Consult our web site at www.rooseveltpark.org
Or contact Ben VanHoeven, Roosevelt Park Public Works at (231) 755-3721

For further information, see U.S. Environmental Protection Agency (EPA) water information at www.epa.gov/safewater

Vulnerability of sub-populations

Some People may be more vulnerable to contaminants in the 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 persons and infants can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. Environmental Protection Agency and Centers for Disease Control Guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the EPA's Safe Drinking Water Hot-



DID YOU KNOW?

A leaky faucet that drips at the rate of one drip per second can waste more than 3,000 Gallons per year. A leaking faucet can raise your utility bill 10% monthly.

Roosevelt Park Treated Water Quality Chart

Listed below are the water quality parameters for the City of Roosevelt Park drinking water during the reporting period of 2020. All parameters shown are BELOW allowed levels. Not listed are hundreds of other contaminants for which we tested that were NOT detected.

Regulated at the Treatment Plant

Substance	MCL	MCLG	Highest Level Detected	Range	Sample Year	Violation	Typical Source
Barium (ppm)	2	2	0.02	n/a	2017	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	4.0	4.0	0.72	0.65-0.79	2020	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	0.9	0-0.9	2020	No	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits
PFOS (ppt)	16	n/a	3	0-3	2019	No	Firefighting foam; discharge from electroplating facilities; discharge and waste from industrial waste
Sodium (ppm) ²	n/a	n/a	13	10-13	2020	No	Erosion of natural deposits
Total Organic Carbon (TOC) ¹	TT	n/a	22% removal (20% required)	17-33% removal	2020	No	Naturally present in the environment
Turbidity (ntu) ³	1 (TT)	n/a	0.08	n/a	2020	No	Soil runoff

¹The level detected for this substance is reported as a running annual average (RAA).

²Sodium is not a regulated contaminant.

³Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the water quality.

Regulated in the Distribution System

Substance	MRDL or MCL	MRDL G or MCLG	Highest Level Detected	Range	Sample Year	Violation	Typical Source
Chlorine (ppm)	4.0	4.0	1.11	0.68-1.49	2020	No	Water additive used to control microbes
Total trihalomethanes (ppb) ⁴	80	n/a	44.6	32.6-48.5	2020	No	Byproduct of drinking water disinfection
Haloacetic acids (ppb) ⁴	60	n/a	31	16-38	2020	No	Byproduct of drinking water disinfection

Microbiological Contaminants

Substance	MCL	MCLG	Highest Level Detected	Range	Sample Year	Violation	Typical Source
Total Coliform	TT	n/a	0 positive samples	n/a	2020	No	Naturally present in the environment
<i>E. coli</i>	See Note ⁴	0	0 positive samples	n/a	2020	No	Human or animal fecal waste

⁴*E. coli* MCL violation occurs if: (1) routine and repeat samples are total coliform-positive and either is *E. coli*-positive, or (2) the supply fails to take all required repeat samples following *E. coli*-positive routine sample, or (3) the supply fails to analyze total coliform-positive repeat sample for *E. coli*.

Additional Monitoring

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

Substance	MCL	MCLG	Highest Level Detected	Range	Sample Year	Violation	Typical Source
Chlorate (ppb)	n/a	n/a	225	n/a	2015	No	Runoff from agricultural use; disinfection byproduct
Chromium (ppb)	n/a	n/a	0.35	n/a	2015	No	Discharge of steel and pulp mills; erosion of natural deposits
Total molybdenum (ppb)	n/a	n/a	1.1	n/a	2015	No	Erosion of natural deposits; industrial contaminant
Total strontium (ppb)	n/a	n/a	122	n/a	2015	No	Erosion of natural deposits; industrial contaminant
Total vanadium (ppb)	n/a	n/a	0.25	n/a	2015	No	Erosion of natural deposits; industrial contaminant

Roosevelt Park Treated Water Quality Chart

Regulated at Customer's Tap

<u>Substance</u>	<u>Action Level</u>	<u>MCLG</u>	<u>Range</u>	<u>90th Percentile</u>	<u>Typical source of contaminant</u>
Lead	15 PPB (AL)	0	0 - 4 PPB	0.0 PPB	Lead service lines, corrosion of household plumbing systems including fittings and fixtures. Erosion of natural deposits.
Copper	1.3 PPM (AL)	1.3PPM	<.01- .116 PPM	.09 PPM	Corrosion of Household plumbing systems: Erosion of natural deposits.

ZERO of the 22 sites tested exceeded the action level (AL) for lead. ZERO of the 22 sites tested exceeded the action level (AL) for copper. Tested July thru August 2018.

Our water supply has an estimated **254** Lead service lines out of a total of **1412** service lines.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Infants and Children who drink water containing lead could experience delays in their physical and mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. City of Roosevelt Park is responsible for providing high quality drinking water, but can not 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 5 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 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Definitions

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

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known health risk. MCLG's are set by the U.S. EPA and allow for a margin of safety.

Maximum Residual Disinfectant Level goal (MRDLG) - 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.

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.

PPM (mg/l) - parts per million or milligrams per liter

PPB -(ug/l) - parts per billion or micrograms per liter

PPT - parts per trillion or nanograms per liter

Action Level (AL) - The concentration of a contaminant that triggers treatment or other requirements that a water system must follow. Action Levels are reported at the 90th percentile for homes at greatest risk.

NTU - Nephelometric Turbidity Units

TT - Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

RAA - Running Annual Average

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.

Sources of drinking water:

The sources of drinking water (both tap and bottled) include rivers, lakes, ponds, reservoirs, springs and wells. Our water comes from Lake Michigan. As water travels over the surface of the land and through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances from animal or human activity. Contaminants that may be present in source water include:

1. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
2. Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water run-off, industrial or domestic wastewater discharges, oil and gas production, mining and farming.
3. Pesticides and herbicides, which may come from a variety of sources such as agriculture and residential uses.
4. Radioactive contaminants, which are naturally occurring or the result of oil and gas production and mining activities.
5. 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 run-off and septic systems. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.