CITY OF IONIA

Annual Drinking Water Quality Report for 2024

WSSN: 03370

A Message From Your City Manager

Dear Ionia community member,

The City of Ionia is pleased to provide you with this year's Annual Water Quality Report. Inside it you will find information about the excellent water and related services delivered to you over the past year. Our goal is and always has been, to provide you with a dependable supply of drinking water.

** We are pleased to report that our drinking water meets all Federal and State requirements. **

If you have any questions about this report or your water service, please contact the City of Ionia Department of Public Utilities at 720 Wells St. Ionia, MI 48846, telephone 616-523-0165, or e-mail jlafler@ci.ionia.mi.us. It is important to us that you, as our valued customers, are well informed about your water production service, and delivery in the City of Ionia. If you want to learn more, please feel free to check out the city's website at www.cityofionia.org/public-utilities.php or contact Joe Lafler, Utilities Director or me, at any of the numbers or email addresses provided. Thank you for the opportunity to serve and meet your public water utility needs.

Sincerely,

Precia Garland
City Manager
pgarland@ci.ionia.mi.us
616-527-4170

About Your Water

Where Your Drinking Water Comes From

Most drinking water in the United States comes from a river, lake, or groundwater well. Our water source is groundwater**.** The City of Ionia has nine wells. Each are over one hundred feet in depth, drawing from a glacial drift aquifer of the Pleistocene age. The City of Ionia Department of Public Utilities routinely monitors constituents in your drinking water according to Federal and State laws. The tables below show the results of our monitoring for the period of January 1st through December 31st, 2024. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents is often naturally occurring and does not necessarily pose a health risk.

Protecting the Source

Your water comes from nine groundwater wells located on the north side of the City. The State of Michigan performed an assessment of our source water in 2003 to determine the susceptibility or the relative potential of contamination. The susceptibility rating is based on a seven-tiered scale from "very low" to "high" and considers various factors including geologic sensitivity, water chemistry and contaminant sources. The susceptibility of our source is high. We are currently updating our Wellhead Protection Program in order to take proactive steps to protect our water source.

What Is in Your Drinking Water

The sources of drinking water (both tap water and bottled water) can come from a myriad of origins, including 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, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban stormwater 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 stormwater 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 stormwater 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, the Environmental Protection Agency (EPA) prescribes regulations that limit the number of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Maximum Contaminant Levels are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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 at 800-426-4791.

* “Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.” This testing was conducted in 2024, with no detections in the data. The results are available upon request.

“If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water comes primarily from materials and components associated with service lines and home plumbing. The City of Ionia 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 1-800-426-4791 or at http://water.epa.gov/drink/info/lead.

“Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or emotional 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.”

“The State allows 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 representative, are more than one year old.”

“Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson’s Disease should consult their doctor.”

Your Role in Water Quality

Check Your Home or Business' Plumbing for Lead and Copper

The City works hard to provide high quality water to your property. However, after this water passes through the meter on your property, it is exposed to a whole new environment in your home that the city does not control, but you do. 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 City of Ionia is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When water has been sitting in your plumbing for several hours, you can minimize the potential for lead exposure by flushing for 30 seconds to 2 minutes before using water for drinking or cooking. If you have a lead service line, it is recommended that you run your water for at least 5 minutes to flush water from both your home plumbing and lead service line. 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

"Infants and children who drink water containing lead could experience delays in their physical or emotional 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." There have been no identified lead service lines in the City of Ionia distribution system. The City of Ionia currently has approximately 2,800 total service lines in the system.

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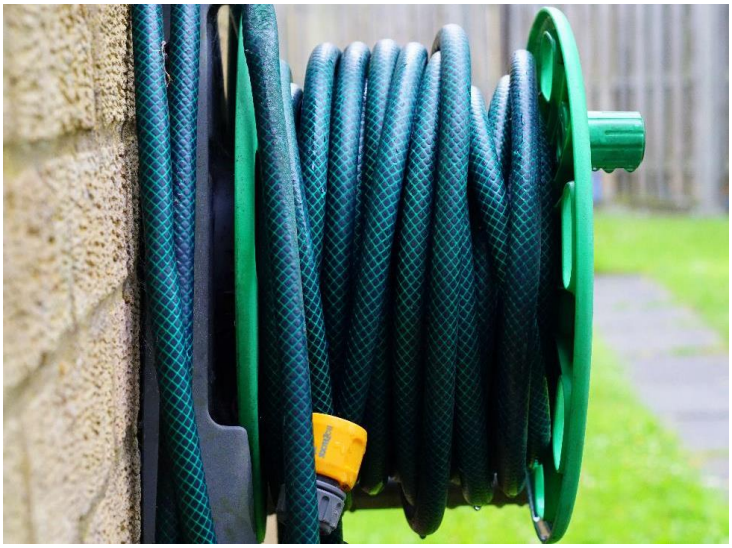
Run Water After Vacation

Another factor that affects water quality in your home is how “stale” the water is. When you leave your home or business for a long time, such as when you take a vacation, the water in the pipes and plumbing doesn’t move. When water sits for days, bacteria can grow, and if you have lead or copper plumbing, those metals can start seeping into the water. The best thing to do when you get back from vacation is to run the water on full blast for 30 seconds to two minutes before using it for drinking or cooking. Always use cold water for cooking to draw in fresh water from the outside, not water that has sat in your water heater.



Safely Connect Outdoor Hoses

A third factor that can influence water quality in your home are connections to water outside your home. The outdoor spigot connection to a hose provides a potential way for pollutants to enter your plumbing. If you use the hose to spray chemicals on your yard by connecting the nozzle to a spray bottle, or if you have a connected sprinkler system, there is the potential for chemicals from the bottle or the lawn to accidentally flow back into your internal plumbing. To prevent this from happening, we recommend (and in some states it is the law) that you have a device installed to prevent that from happening.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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. Furthermore, EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

-Parts per million (PPM) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.
-Parts per billion (PPB) or Micrograms per liter (*ug/l)* - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
-Parts per trillion (PPT) or Nanograms per liter (ng/l) – one part per trillion corresponds to one minute in 2,000,000 years or a single penny in $1,000,000,000
- *Action Level* - the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
-Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs using the best available technology.
-Maximum Contaminant Level Goal - The "Goal" (MCLG) is 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.
-Picocuries per liter - pCi/l – the measure of the radioactivity in water.
-Maximum Residual Disinfectant Level (MDRL): 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.
-Maximum Residual Disinfection 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.

Stay Informed About Your Water

Monthly City Council Meetings

We need your understanding and support to be successful, so we hope you will get involved with us in all the ways you can regarding projects, programs, and policies. All City Council meetings are open to the public. Regular meetings are on the first Wednesday of each month at City Hall in the council chambers at 6:30 p.m. A meeting agenda is posted on the city website before each meeting (www.cityofionia.org). We always make time to hear from residents, so please join us to learn more about what we're working on. Your input is important to us!

Projects and Rates

Infrastructure projects and utility rates go hand in hand. We can't keep the system in top shape without regular investment, so we want you to be as informed as possible about what we need and why. Check out the city website at www.cityofionia.org to learn more about projects and current rates.

Lead and Copper

Contaminant	Level Detected (90th Percentile)	Range of Test results	Unit Measurement	MCLG (MRDLG)	MCL (MRDL)	Violation	Source
Lead (2023)	3	0-22	ppb	15	AL-15	No	Corrosion of household plumbing; Erosion of natural deposits
Copper (2023)	0.3	0.0-0.6	ppm	1.3	AL-1.3	No	Corrosion of household plumbing; Erosion of natural deposits

Inorganic Contaminants

Contaminant	Highest Level Detected	Range of Test Results	Unit Measurement	MCLG (MRDLG)	MCL (MRDL)	Violation	Source
Arsenic (2019)	Not Detected	Not Detected	ppm	0	10	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium (2019)	0.05	0.05-0.05	ppm	2	2	No	Discharge from drilling waste; discharge from metal refineries; erosion of natural deposits.
Fluoride	0.77	0.45-0.77	ppm	4	4	No	Erosion of natural deposits; water additive, which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (As Nitrogen)	0.5	0-0.5	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium*	39	18-39	ppm	N/A	N/A	No	Erosion of Natural Deposits.

***Sodium is not a regulated contaminant.**

Chlorine Residual

Contaminant	Highest running annual average	Range	Unit Measurement	MCL (MRDL)	Violation	Source
Chlorine Residual*	0.7	0.5-0.7	ppm	4	No	Water additive used to control microbes.

*The chlorine residual was calculated using a running annual average.

Radiological Contaminants

Contaminant	Highest Level Detected	Unit Measurement	(MRDLG)	MCL (MRDL)	Violation	Source
Alpha Emitters (2016)	1.62	pCi/L	0	15	No	Erosion of natural deposits
Uranium (2024)	0.80	ppb	0	30	No	Erosion of natural deposits.

Microbial Contaminants

Blank	Highest Level Detected	Unit Measurement	MCL/ MCLG	Violation	Source
Total Coliform	0	Presence/ Absence	0/ Not more than one positive.	No	Naturally present in the environment.

Disinfection Byproducts

Blank	Highest Running Annual Average	Range	Unit Measurement	MCL (MRDL)	Violation	Source
Trihalomethanes	19.9	15.6-24.2	ppb	80	No	Byproducts of drinking water chlorination
Haloacetic Acids	6.5	5-8	ppb	60	No	Byproducts of drinking water chlorination

Per- and polyfluoroalkyl Substances (PFAS)

Chemical	Highest Level Detected	Unit Measurement	MCL (MRDL)	Violation	Source
PFOS	Not Detected	ppt	16	No	Firefighting foam, discharge from electroplating facilities, discharge and waste from Industrial facilities.
PFOA	Not Detected	ppt	8	No	Discharge and waste from Industrial facilities, stain resistant treatments.
PFNA	Not Detected	ppt	6	No	Discharge and waste from Industrial facilities, breakdown of precursor compounds.
PFHxA	Not Detected	ppt	400,000	No	Firefighting foam, discharge and waste from Industrial facilities.
PFHxS	Not Detected	ppt	51	No	Firefighting foam, discharge and waste from Industrial facilities.
PFBS	Not Detected	ppt	420	No	Discharge and waste from Industrial facilities, stain resistant treatments.
HFPO-DA	Not Detected	ppt	370	No	Discharge and waste from Industrial facilities utilizing Gen X chemical process

We at the City of Ionia Department of Public Utilities work around the clock to provide top quality water to every tap. Through the City's Ordinances, continuous training, extensive monitoring, fire hydrant flushing, cross connection inspections and a Wellhead Protection Program, we are dedicated to protecting our ground water supply now and in the future. We ask that all our customers help us protect our water sources, which are essential to the heart of our community, our way of life and our children's future.