

2015 City of Elyria Water Plant Consumer Confidence Report

Elyria OHIO'S COMMUNITY OF *Opportunity*



Greetings from Elyria Mayor Holly Brinda:

As you will see from this 2015 Water Quality Report, the City of Elyria is taking important steps to insure the availability of the highest quality drinking water possible for you and the other 125,000 people served in Elyria and surrounding communities.

Among the latest improvements include a new High Service Pump House that pumps water from Lake Erie in Lorain to Elyria; new Low Service Screens and Pumps that screen out debris; and renovations to the Water Plant Laboratory. And with this frigid weather we have been having, Elyria water customers have been spared water interruptions thanks to a carefully-thought-out Frazil Ice Emergency Plan that has proven successful in minimizing the impact of frazil ice blocking the water supply.

You can learn more about these Water Plant improvements and other ways that the City of Elyria is maintaining momentum for positive change by viewing the Mayor's State of the City Address on Cable Channel 12 or visiting the City's website at www.cityofelyria.org.

See first-hand how Elyria is open for business with a revised, business-friendly Design Review Process; new business development incentive programs; a new Economic Development Plan informed by a Market Analysis; and a new Elyria Community Improvement Corporation – all to help us better retain, attract and expand businesses and create new jobs.

Thanks largely to government grants, Elyria had over \$30 million of infrastructure improvements completed or started last year. Among them: the Midway area SR57-49th Street Bridge reconfiguration; roadway improvements on 21 streets; bidding for the replacement of Middle Avenue; and the repair of 3500 feet of sanitary sewers.

Elyria's strengthened Narcotics and Neighborhood Impact Unit is breaking the cycle of drugs and burglaries, with over 179 drug related arrests – including the largest single heroin seizure in Lorain County history. Elyria's neighborhoods are safer with the demolition of 43 additional nuisance properties for a total of 151 housing demolitions in the last 24 months.

Quality of life programming is back with free summer camps, fireworks, summer concerts, expanded holidays lights and a new agreement with the Lorain County MetroParks to benefit Cascade and Elywood parks. With your continued support, Elyria will continue to move forward.

Holly C. Brinda,
Mayor

City of Elyria

2015 Water Quality Report

The City of Elyria is proud to present our 2015 Water quality report that covers all testing from January 1, 2014 to December 31, 2014. The City of Elyria Water Pumping Plant has been making clean drinking water for customers since 1901, over 114 years. We work 24 hours a day, seven days a week to ensure that you, our customer, has a ready, unlimited source of drinking water that exceeds all of the EPA's standards. We operate and maintain a state of the art conventional surface water plant, located in Lorain, on the shore of Lake Erie. We have five water towers and two remote pump stations located in the City of Elyria. Over 4.7 billion gallons of water was pumped in 2014. We serve over 125,000 people in a number of communities. We are truly a Regional Water plant serving the needs of our customers.

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Where does your water come from?

The United States has one of the safest water supplies in the world. However, national statistics don't tell you specifically about the quality and safety of the water coming out of your tap. That's because drinking water quality varies from place to place, depending on the condition of the source water from which it is drawn and the treatment it receives. Therefore we are providing to you, as per the Safe Drinking Water Act, this water quality report which includes information obtained from evaluating the results of our water tests performed last year.

The City of Elyria Water Plant gets its water from Lake Erie. We are fortunate to have Lake Erie as our source of water. The Elyria Water Works is a conventional surface water treatment plant having a capacity of producing 22 million gallons of drinking water per day. There are two separate intake lines from the lake into the plant. We have a pump station that pumps the untreated lake water into the plant from treatment. The raw water is then dosed with ACH (aluminum chlorohydrate), a coagulant to aid in the removal of turbidity (dirt particles). Powdered Activated Carbon (PAC) is added to remove tastes and odor from the water. Fluoride is also added for dental protection. The water is mixed and then flows to the flocs, and then the sedimentation basins, where the turbidity is removed. Next the water flows to the filters. Chlorine is added for disinfection. The water is then pumped from the storage wells to our customer's homes and businesses.

The Water Works operates 24 hours per day, 365 days a year following the rules and regulations of the Ohio Environmental Protection Agency and the Ohio Administrative Code. Over 80,000 tests are performed each year by certified personnel at various stages in the treatment process.

More About Your Drinking Water

The EPA requires regular sampling to ensure drinking water safety. In 2014, we conducted sampling for bacteria, inorganic, synthetic organic, and volatile organic contaminants. Samples were collected for a total of 83 different contaminants, most of which were not in our water supply. The OEPA requires us to monitor for some contaminants less than once per year because their concentrations do not change frequently. Some of our data, though accurate, is more than one year old.

Our water system uses surface water drawn from two intakes in Lake Erie. For the purpose of source water assessments, in Ohio 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 time from source to intake.

Although the City of Elyria's surface water intakes are located offshore in Lake Erie, the proximity of Beaver Creek and Martin's Run increases the susceptibility of the source water to contamination. The City of Elyria's drinking water source protection area is susceptible to contamination from municipal wastewater treatment discharges, air contamination deposition, runoff from residential, agricultural and urban areas, oil and gas production and transportation, leaking underground storage tanks and accidental releases and spills from rail and vehicular traffic as well as from commercial shipping and recreational boating.

The City of Elyria's public water system treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect Lake Erie, Beaver Creek, and Martin's Run. More detailed information is provided in the City of Elyria's Drinking Water Source Assessment report, which can be obtained by calling Elyria Water Works, 440-324-7669.

How can I learn more or what if I have any questions? You can contact Samuel F. Jacob, Water Plant Superintendent who has prepared this report. Mr. Jacob has over 38 years of experience in Water Treatment, and Class IV Water Plants. He currently holds an Ohio EPA Class IV Water Certificate. If you have any questions, concerns or would like additional information, please contact him at 440-324-7669 or 440-244-4310 extension 201.

License to Operate Status Information

The City of Elyria Water Plant has a current unconditional license to operate our water system

Important Health Information

The City of Elyria's Drinking water meets or exceeds all federal and state laws. The following is mandatory language provided by the EPA:

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 from their health care providers, regarding their drinking water. 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 (800-426-4791).

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 (800-426-4791).

The sources of drinking water (both tap water and bottled 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 in the water source:

- **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 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, storm water runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic, 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration, (FDA) establishes limits for contaminants in bottled water which must provide the same protection for public health.

How to Participate in Decisions Concerning Your Drinking Water

Elyria City Council meets the first and third Mondays, January through December, except for June, July and August, when they meet only on the first Monday. The meetings take place at 7:00 PM at Elyria City Hall. Please visit <http://www.cityofelyria.org/> for access to city Council meeting information.

Lead Educational Information

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 Elyria Water Works is responsible for providing high quality drinking water; it is not responsible for your home plumbing materials or faucet fixtures.

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. A list of laboratories in the State of Ohio to test for lead may be found at: www.epa.ohio.gov/ddagw or by calling 614-644-2752. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at the Safe Drinking Water Hotline at <http://www.epa.gov/safewater/lead>.

Compliance with Applicable Laws

As a condition for receiving utility services, water and sanitary sewer, from the City of Elyria, the owner and occupants of the *property* agree to comply with any applicable City, State and Federal laws, rules and regulations.

Installation and service of taps, service laterals or lines, curb stops, meters, meter pits and any plumbing fixtures or devices shall comply with City, State and Federal laws, rules and regulations. The work is to be completed by a licensed contractor in the City of Elyria. The owner/occupant shall provide access for City employees or representatives to inspect the completed work. Failure to comply with these regulations is grounds for turn off or denial of services to the service address.

Water Quality Table 2014

Contaminant	Date	Unit	MCL	MCLG	Amount Detected	Range Detected	Violation	Typical Source of contaminants
Inorganic Contaminants								
Barium	2014	ppm	2	2	0.019	0.019	no	Discharge of drilling wastes. Discharge from metal refineries, erosion of natural deposits
Fluoride	2014	ppm	4	4	1.27	0.80-1.27	no	Erosion of natural resources, additive which promotes strong teeth
Nitrates	2014	ppm	10	10	0.77	0.13-0.77	no	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits
Microbiological								
Turbidity	2014	NTU	100% <0.3 NTU	NA	99% <0.3 NTU 1.17	0.05-1.17	yes	soil runoff
Total Organic Carbon (TOC)	2014	none	N/A	TT removal > 1.0	2.2	1.03-2.2	no	normally present in environment
Residual Disinfectant								
Total Chlorine	2014	ppm	4.0 (MRDL)	4.0 (MRDLG)	2.79	1.35-2.79	no	water additive used to control microbes
Volatile Organic Contaminants								
Total Trihalomethanes	2014	ppb	80	N/A	68.55	19.5-76.3	no	byproduct of drinking water chlorination
Haloacetic Acids	2014	ppb	60	N/A	33.48	13.6-60.7	no	byproduct of drinking water chlorination
Other Water Quality Parameters of interest								
pH	2014		7.0-10.5	no goal set	8.29	7.28-8.29	no	Treatment Process
Hardness	2014	ppm	No level	No level set	134	109-134	no	Naturally occurring
Lead and Copper			Action level	MCLG	Concentration at 90th percentile	Range	# of sites above action level	
Lead	2012	ppb	15	0	2.3	<2.0-43	0	Corrosion of household plumbing fixtures , erosion of natural deposits
Copper	2012	ppm	1.3	1.3	0.056	<0.002-0.087	0	Corrosion of household plumbing fixtures , erosion of natural deposits

Definitions and Terms

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal or 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.

TOC: The monthly TOC removal ratio is calculated as the ratio between the actual TOC removal and the TOC rule removal requirements. The ratio shown is the average of the ratios for 12 months

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow

N/A: symbol meaning “not applicable”

90th Percentile: 90% of samples are equal to or less than the number in the chart.

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

NTU = Nephelometric Turbidity Units

ppm = parts per million, or milligrams per liter (mg/L)

ppb = parts per billion, or micrograms per liter (µg/L)

> = A symbol meaning GREATER THAN

< = A symbol meaning LESS THAN

MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants

Maximum residual disinfectant level" or "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.

Turbidity has not health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Ohio EPA Mandated language

The City of Elyria water system received a violation for failing to provide sufficient filtration of its drinking water when the turbidity levels of representative samples of its filtered water exceeded one turbidity unit (NTU) on November 10, 2014. The plant feeds a coagulant to help remove turbidity from the raw water. The fitting where the coagulant is fed to the raw water line broke sometime after midnight on November 10, 2014. Upon discovering the issue, the fitting was replaced immediately. The filter effluent turbidities exceeded 1.0 NTU due to not feeding the coagulant for a period of time and therefore, the City of Elyria received a violation. However, the water leaving the plant did not exceed 1.0 NTU and therefore, a boil alert was not required to be issued.

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Come on man, put it in the can!

The careless and casual handling of waste creates litter. Knowing more about the causes of litter and where it comes from is a good place to start in addressing litter prevention. One person, one business, one organization can positively affect the behavior of others in the community.

YOU can make a difference!

No matter where litter starts, it moves. From streets and highways to parks and waterways, wind and weather moves litter around a community.

What can YOU do?

Each person must accept responsibility for their actions and influence the actions of others around them in their home, school, and community. By modeling proper trash and waste disposal, you will cause others to consider their actions, too.

Help prevent litter:

Set an example for others by always using receptacles and NOT littering.

Carry a litter bag in your vehicle and use it!

Never throw anything from your vehicle windows!



Please don't litter!

Only Rain in the Drain

By practicing healthy household habits, residents can decrease the amount of common storm water pollutants from entering our storm sewers and eventually the Black River.

Pick up pet waste and dispose of properly.

Use pesticides and fertilizers sparingly. Avoid application if the forecast calls for rain. Sweep up grass clippings and other yard debris and compost or dispose of properly. Vegetate bare spots in your yard to prevent soil erosion.

Elyria Public Utilities

The office of Public Utilities is responsible for the billing and collection of Water, Sewer, and Sanitation Services. The office records meter reads and processes all transactions relative to each individual account.

The Public Utilities department and the Water Distribution department provide emergency response to main breaks and other water problems 24 hours a day, 7 days a week.

The Elyria Public Utilities office has an active "BACKFLOW" program. The focus of this program is to ensure that the proper safeguards are in place to protect our drinking water system from possible contamination through cross connections. Our Commercial Backflow program has completed over 5,000 surveys to commercial and industrial sites; resulting in the installation of over 3,105 new devices and annual testing of nearly 5,000 devices.

As an Elyria Public Utilities customer you may appreciate the convenience of our Automatic Bill Payment System. Visit our website for details or call our office for additional information. We would be glad to answer any questions you may have.

The Elyria Public Utilities Office is located at 131 Court Street - Suite 102, Elyria, OH 44035

Phone (440) 326-1570 Fax (440) 326-1588

Website: www.cityofelyria.org

Water Distribution

Water Service Contact Numbers

Water billing: 440-326-1570

Sewer Problems: 440-366-2211 Option 0

Water Main breaks (daytime) 440-326-1570

After Hour Water Emergencies: Elyria Police 440-323-3302

Starting at the City of Elyria Waterworks on the shore of Lake Erie, the City of Elyria Water Distribution Dept. maintains over 230 miles of water mains ranging from 4" to 48" diameters. Features include 2600 fire hydrants and 5043 valves.

For more information on the functions of Water Distribution and related topics see us on the web at www.cityofelyria.org under the Department tab.

Did You Know?

Many sewer backups in homes each year can be prevented by not disposing of cooking grease down the drain. For information about easy ways to dispose of cooking grease call:

Wastewater Pollution Control at: (440) 366-2211 Ext. 130

Pollution Prevention Tip

Grass clippings, leaves, plastic bags, pop cans, food wrappers and other forms of litter in the roadway cause plugging of the storm drains along the sides of the road resulting in the flooding of streets when it rains. A lot of these materials wash into the storm sewers with the rain and end up in the Black River and increase the amount of solid materials in the river and detract from the natural beauty of the river. As these solids break down, they use up oxygen in the river leaving less oxygen for the fish and other aquatic life. You can do your part to preserve this fresh water habitat for the fish by keeping grass clippings and leaves out of the street and by using trash cans for paper and plastic items. Please don't litter.

City of Elyria Wastewater Pollution Control

(440)366-2211



**INSIDE THE NEW PUMP HOUSE: HIGH SERVICE PUMPS
THESE ARE THE PUMPS THAT PUMP WATER TO THE MAINS**



NEW HIGH SERVICE PUMP HOUSE



Lorain County Emergency Alert Registration

Sign up here for **Lorain County Alerts!** By signing up here, you will receive Lorain County emergency alerts and public service announcements. In the event of an emergency, an alert may be sent to the phone number(s) you provide and/or your email address.

This is a free service provided by Lorain County and your local jurisdiction, however normal messaging fees may apply. To receive text messages to your cell phone, your cell phone must have text messaging capabilities. Notifications are dependent upon external providers (phone carrier, cell phone, email). Lorain County cannot guarantee notifications will be received by the intended recipient. By registering below, you will not receive unsolicited calls, and neither Lorain County, your local jurisdiction, nor the system vendor sells the contact number database.

By signing up here, you will also receive Lorain County Emergency Alerts.

Alerts sent from Lorain County will originate from 69310 for text messages and (440) 000-0000 for voice notifications. Please be sure to save these in your phone book.

If attempting to register a mobile number for both Text and Voice alerts please register the number first for Text and then "Add" another line and register the same number again for Voice.

Click [here](#) to register for Lorain County Emergency Alerts!