

2013 Elyria Water Department

Dear Fellow Elyrian,

I am pleased to present this report on the quality of water delivered to your home or business from Lake Erie by the City of Elyria. While this report meets a regulatory requirement, it also offers us the opportunity to share information about steps we are taking to ensure the integrity of our water system, and improve the quality of other services in the City of Elyria.

The City's water intake plant was first built in 1903, with an additional intake completed in 1946. Elyria's Water Purification Plant supplies Elyria, and surrounding communities, with nearly 14 million gallons per day and 4,622,930,000 gallons of water per year. Our water personnel, with assistance from the Elyria Fire Department dive team, inspected these intakes thoroughly in 2013. This "in-house" inspection, with our own personnel and equipment, not only saves money for services that were previously contracted out, but also makes sure that our intake pipes are clean, preventing disruption of service because of frazzle ice and other debris. This is just one example of money saving initiatives – you can see many others by viewing my 2014 State of the City at www.cityofelyria.org.

Plant security has been upgraded continuously over that last few years through Homeland Security Grants. Most recently the City has obtained grant funds to install an automatic shut-off system and lead detectors for our chlorine tanks – and replace low service pumps that draw raw lake water from the raw wells into the plant. This protection of our precious resources is critical to many faucets of our local and regional economy. Elyria's ability to provide water and wastewater treatment is essential for our community's ability to retain, attract and grow businesses and serve residents.

I hope you will take the time to learn more about all the City of Elyria is doing to improve the quality of life for our residents and others who work in and visit our community. Elyria is a city that is creating opportunities for you, our residents. Again, to learn more about the many initiatives to do more with less, including ensuring our safety, promoting economic vitality, strengthening our neighborhoods, rebuilding our infrastructure, investing in our youth and families, and more – please go to www.cityofelyria.com or tune in to Cable Channel 12 to view: Creating More Opportunities... Together 12 – 2014 State of the City.

Whether you are interested in our new partnership with the Lorain County MetroParks and new opportunities for children and families through our parks system; the millions of dollars of street, road, bridge and sewer improvements taking place – including our new Ford Road Bridge and the reconfiguration of SR 57 and the 49th Street Bridge to improve the Midway Mall area; projects underway in Elyria's downtown like our new Lorain Arts Council Elyria Art Depot and our quest to return passenger rail to Elyria and more – the report has something for everyone! And, it offers you opportunities to work on special projects as a volunteer through the Mayor's Office on Volunteer Engagement (M.O.V.E.). For further information please call (440) 326-1402 or attend a Mayor's Night In the first Thursday of each month at 6:00pm in Council Chambers – Elyria City Hall – 131 Court Street.

The momentum is building towards a brighter future for Elyria. Working together, we can ensure the highest quality city services at the most affordable cost. Thank you in advance for your consideration.

Sincerely,



Holly C. Brinda
Mayor

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.

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

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 are grounds for turn off or denial of services to the service address.

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

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. 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>.

Water Quality Table 2013

Contaminant	Date	Unit	MCL	MCLG	Detected	Detected	Violation	Typical Source of contaminants
Inorganic Contaminantes								
Barium	2013	ppm	2	2	0.02	0.02	no	Discharge of drilling wastes. Discharge from metal refineries, erosion of natural deposits
Fluoride	2013	ppm	4	4	1.3	0.81-1.30	no	Erosion of natural resources, additive which promotes strong teeth
Nitrates	2013	ppm	10	10	1.31	<0.1-1.31	no	Runoff from fertilizer use, leachng from septic tanks, sewage, erosion of natural deposits
Microbiological								
Turbidity	2013	NTU	100% <0.3 NTU	NA	0.19	0.06-0.19	no	soil runoff
Total Organic Carbon (TOC)	2013	none	N/A	TT removal > 1.0	2	1.5-2.0	no	normally present in environment
Residual Disinfectant								
Total Chlorine	2013	ppm	4.0 (MRDL)	4.0 (MRDLG)	2.55	1.65-2.55	no	water additive used to control microbes
Volatile Organic Contaminants								
Total Trihalomethanes	2013	ppb	80	N/A	62.2	19.2-73.1	no	byproduct of drinking water chlorination
Haloacetic Acids	2013	ppb	60	N/A	36.08	<6.0-36	no	byproduct of drinking water chlorination
Other Water Quality Parameters of interest								
pH	2013		7.0-10.5	no goal set	7.98	7.36-7.95	no	Treatment Process
Hardness	2013	ppm	No level	No level set	137	105-137	no	Naturally occurring

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
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 milli-

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.

More About Your Drinking Water

The EPA requires regular sampling to ensure drinking water safety. We conducted sampling for bacteria, inorganic, radiological, synthetic organic, and volatile organic contaminants during 2012 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, are 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.



Important Health Information

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. 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 maybe 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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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!

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 cityofelyria.org

2013 ANNUAL WATER QUALITY REPORT

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 are 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 flocc, sedimentation basins when 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 customers' 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.

How can I learn more or what if I have any questions? You can contact Samuel F. Jacob , Water Plant Superintendent at 440-324-7669 or 440-244-4310 for additional information and/or questions.

"We have a current, unconditioned license to operate our water system."

Water Distribution

Water Service Contact Numbers

Water Billing 440-326-1570

Sewer Problems 440-366-2211 Option-0

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 2600 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.