

TOWN OF ERIE

2020

DRINKING WATER QUALITY REPORT

FOR CALENDAR YEAR 2019

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Contact **BRUCE CHAMEROY at 303-926-2895** with any questions or for public participation opportunities that may affect water quality. Please see the water quality data from our wholesale system(s) (either attached or included in this report) for additional information about your drinking water.



ERIE WATER SOURCES

SOURCE	NORTHERN COLORADO PIPELINE CARTER LAKE	ERIE LAKE	THOMAS RESERVOIR	GROSS RESERVOIR S. BOULDER CANYON DITCH	PURCHASED FROM LAFAYETTE CO 0107473	PURCHASED FROM 107471 LEFTHAND SW
SOURCE TYPE	Intake	Intake	Intake	Intake	Consecutive Connection*	Consecutive Connection*
WATER TYPE	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
POTENTIAL SOURCE(S) OF CONTAMINATION	EPA Hazardous Waste Generators, EPA Chemical Inventory/Storage Sites, Permitted Wastewater Discharge Sites, Aboveground, Underground and Leaking Storage Tank Sites, Solid Waste Sites, Existing/Abandoned Mine Sites, Other Facilities, Commercial/Industrial/Transportation, High Intensity Residential, Low Intensity Residential, Urban Recreational Grasses, Row Crops, Fallow, Small Grains, Pasture / Hay, Deciduous Forest, Evergreen Forest, Septic Systems, Oil / Gas Wells, Road Miles					

The Town of Erie's primary water source is the Colorado-Big Thompson Project (C-BT), which originates on the western slope and is delivered via pipeline from Carter Lake in Berthoud to our Water Treatment Facility in Erie. C-BT water is also delivered via pipeline to our reservoirs for storage in Erie or Thomas Reservoir. We also fill our reservoirs via the South Boulder Canyon Ditch which originates from Gross Reservoir in Boulder. There are pipelines that carry water from our reservoirs directly to our Water Treatment Facility. *Lafayette and Lefthand are constant connections that are only used in emergency situations. View copies of both agencies reports at www.erieco.gov/water.

DETECTED CONTAMINANTS

Town of Erie routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2019 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

DISINFECTANTS SAMPLED IN THE DISTRIBUTION SYSTEM

TT Requirement: At least 95% of samples per period (month or quarter) must be at least 0.2 ppm OR if sample size is less than 40 no more than 1 sample is below 0.2 ppm
Typical Sources: Water additive used to control microbes

DISINFECTANT NAME	TIME PERIOD	RESULTS	NUMBER OF SAMPLES BELOW LEVEL	SAMPLE SIZE	TT VIOLATION	MRDL
CHLORINE	November, 2019	Lowest period % of samples meeting TT requirement: 100%	0	33	No	4.0 ppm

LEAD AND COPPER SAMPLED IN THE DISTRIBUTION SYSTEM

CONTAMINANT NAME	TIME PERIOD	90TH PERCENTILE	SAMPLE SIZE	UNIT OF MEASURE	SAMPLE SITES ABOVE AL	90TH PERCENTILE AL	90TH PERCENTILE AL EXCEEDANCE	TYPICAL SOURCES
COPPER	10/30/2019 to 11/05/2019	0.06	61	ppm	0	13	No	Corrosion of household plumbing systems; Erosion of natural deposits
LEAD	10/30/2019 to 11/05/2019	0.0036	61	ppm	0	0.015	No	Corrosion of household plumbing systems; Erosion of natural deposits

DISINFECTION BYPRODUCTS SAMPLED IN THE DISTRIBUTION SYSTEM

NAME	YEAR	AVERAGE	RANGE LOW-HIGH	SAMPLE SIZE	UNIT OF MEASURE	MCL	MCLG	MCL VIOLATION	TYPICAL SOURCES
TOTAL HALOACETIC ACIDS (HAA5)	2019	27.73	16.7 to 35.6	16	ppb	60	N/A	No	By-product of drinking water disinfection
TOTAL TRIHALOMETHANES (TTHM)	2019	45.01	28.2 to 66.7	16	ppb	80	N/A	No	By-product of drinking water disinfection

RADIONUCLIDES SAMPLED AT THE ENTRY POINT TO THE DISTRIBUTION SYSTEM

NAME	YEAR	AVERAGE	RANGE LOW-HIGH	SAMPLE SIZE	UNIT OF MEASURE	MCL	MCLG	MCL VIOLATION	TYPICAL SOURCES
COMBINED RADIUM	2019	1.2	1.2 to 1.2	1	pCi/L	5	0	No	Erosion of natural deposits

DETECTED CONTAMINANTS *Continued*

SUMMARY OF TURBIDITY SAMPLED AT THE ENTRY POINT TO THE DISTRIBUTION SYSTEM

CONTAMINANT NAME	SAMPLE DATE	LEVEL FOUND	TT REQUIREMENT	TT VIOLATION	TYPICAL SOURCES
TURBIDITY	August	Highest single measurement: 0.096 NTU	Maximum 0.5 NTU for any single measurement	No	Soil Runoff
TURBIDITY	December	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	In any month, at least 95% of samples must be less than 0.1 NTU	No	Soil Runoff

INORGANIC CONTAMINANTS SAMPLED AT THE ENTRY POINT TO THE DISTRIBUTION SYSTEM

NAME	YEAR	AVERAGE	RANGE LOW-HIGH	SAMPLE SIZE	UNIT OF MEASURE	MCL	MCLG	MCL VIOLATION	TYPICAL SOURCES
BARIUM	2019	0.01	0.01 to 0.01	1	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
FLUORIDE	2019	0.74	0.74 to 0.74	1	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
NITRATE	2019	0.07	0.07 to 0.07	1	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

SECONDARY CONTAMINANTS**

**Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

NAME	YEAR	AVERAGE	RANGE LOW-HIGH	SAMPLE SIZE	UNIT OF MEASURE	SECONDARY STANDARD
SODIUM	2019	8.5	8.5 to 8.5	1	ppm	N/A
TOTAL DISSOLVED SOLIDS	2019	45	45 to 45	1	ppm	500

UNREGULATED CONTAMINANTS*

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Unregulated Contaminant Monitoring Rule (UCMR). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) (epa.gov/dwucmr/national-contaminant-occurrence-database-ncod). Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR sampling and the corresponding analytical results are provided below.

CONTAMINANT NAME	YEAR	AVERAGE OF INDIVIDUAL SAMPLES	RANGE OF SAMPLES LOW-HIGH	NUMBER OF SAMPLES	UNIT OF MEASURE
CHLORATE	2015	165.9	70.4 - 275.0	8	ppb
STRONTIUM	2015	89.4	43.0 - 185.0	8	ppb
CHROMIUM	2015	0.200	0.0 - 0.361	8	ppb
CHROMIUM, HEXAVALENT	2015	0.019	0.0 - 0.041	8	ppb
VANDIUM	2015	0.291	0.0 - 0.646	8	ppb

*More information about the contaminants that were included in UCMR monitoring can be found at: drinktapp.org/water-info/whats-in-my-water/unregulated-contaminant-monitoring-rule-UCMR. Learn more about the EPA UCMR at: epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule or contact the Safe Drinking Water Hotline at (800) 426-4791 or epa.gov/ground-water-and-drinking-water.

VIOLATIONS, SIGNIFICANT DEFICIENCIES, BACKFLOW/CROSS-CONNECTION AND FORMAL ENFORCEMENT ACTIONS

NON-HEALTH-BASED VIOLATIONS

These violations do not usually mean that there was a problem with the water quality. If there had been, we would have notified you immediately. We missed collecting a sample (water quality is unknown), we reported the sample result after the due date, or we did not complete a report/notice by the required date.

NAME	DESCRIPTION	TIME PERIOD
CROSS CONNECTION RULE	Failure to meet cross connection control and/or back-flow prevention requirements - M613	11/07/2019 - 11/07/2019
CROSS CONNECTION RULE	Failure to meet cross connection control and/or back-flow prevention requirements - M610	11/07/2019 - 11/07/2019

Failure to Complete an Annual Backflow Report: At the time of a CDPHE inspection the Town did have a Backflow Prevention and Cross-Connection Control (BPCCC) program, but it did not have the proper written annual BPCCC program report documentation for years 2016, 2017 and 2018. The proper documentation was submitted to CDPHE, the reports are compliant and the record keeping violation has been resolved.

Failure to Develop or Implement a Written BPCCC Program: At the time of the CDPHE inspection the Town did not have a written BPCCC program that contained all the requirements as specified. The Town has provided a copy of the updated ordinance and the written BPCCC program that contained all of the requirements. The record keeping violation has been resolved and no further action is required at this time

SIGNIFICANT DEFICIENCIES

These violations do not usually mean that there was a problem with the water quality. If there had been, we would have notified you immediately. We missed collecting a sample (water quality is unknown), we reported the sample result after the due date, or we did not complete a report/notice by the required date.

DATE IDENTIFIED	DESCRIPTION	EXPLANATION AND STEPS TAKEN OR WILL TAKE TO CORRECT	ESTIMATED COMPLETION DATE
5/8/2019	R514 - MONITORING, RECORDKEEPING and DATA VERIFICATION; Sample Sites not representative.	The Entry Point to the distribution system sample location that was approved by CDPHE when the water plant was first built in 1998 has now been determined by a CDPHE inspector to not be a representative sample location. The Town is currently working with an engineering firm and CDPHE to find a new location for the sample point.	9/4/2020
5/8/2019	D901 - CROSS CONNECTION; Uncontrolled cross connection that may allow contamination to enter drinking water.	The Town was in the process of upgrading all of its temporary hydrant meters to meet the new backflow prevention requirements, but at the time of a CDPHE inspection all of the hydrant meters had not been exchanged out for the upgraded meters. The Town is still in the process of exchanging out all the meters to meet this requirement.	7/31/2020



TERMS & ABBREVIATIONS Understanding the Detected Contaminants Report

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.

Average (x-bar): The mathematical average of all sample results.

Compliance Value (No Abbreviation): Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).

Formal Enforcement Action (No Abbreviation): Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.

Gross Alpha (No Abbreviation): Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.

Health-Based: A violation of either a MCL or TT.

Level 1 Assessment: A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum Contaminant Level (MCL): The highest level of a contaminant allowed in drinking water.

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 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.

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.

Nephelometric Turbidity Unit (NTU): Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.

Not Applicable (N/A): Does not apply or not available.

Parts per million = Milligrams per liter (ppm = mg/L): One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion = Micrograms per liter (ppb = ug/L): One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L): Measure of the radioactivity in water.

Range (R): Lowest value to the highest value.

Sample Size (n): Number or count of values (i.e. number of water samples collected).

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

Violation (No Abbreviation): Failure to meet a Colorado Primary Drinking Water Regulation.

Variance and Exemptions (V/E): Department permission not to meet a MCL or treatment technique under certain conditions.

TREATMENT FACTS

9.9 MGD | Water Treatment Capacity

3.3 MGD | Average Daily Production

7.8 MGD | Peak Day Production in July

1.196 billion gallons | Water Treated

9,829 | Water Taps

121,774 gallons | Water Treated Per Tap

FOR MORE INFORMATION

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

TOWN OF ERIE WATER TREATMENT | 303-926-2860

GENERAL INFORMATION

All 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 the 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** or by visiting epa.gov/ground-water-and-drinking-water.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and microbiological contaminants call the EPA Safe Drinking Water Hotline at **1(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 present in source water include:

- ▶ **Microbial contaminants:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- ▶ **Inorganic contaminants:** 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:** may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- ▶ **Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- ▶ **Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

LEAD IN DRINKING WATER

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. 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. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline **1(800)426-4791** or at epa.gov/safewater/lead.

SOURCE WATER ASSESSMENT AND PROTECTION (SWAP)

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit wqcdcompliance.com/ccr. The report is located under "Guidance: Source Water Assessment Reports". Search the table using **162255, ERIE TOWN OF, BRUCE CHAMEROY** at **303-926-2895**. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that *could* occur. It *does not* mean that the contamination *has or will* occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.



TOWN OF ERIE | LYNN R. MORGAN WATER TREATMENT FACILITY

p: 303-926-2860 | **f:** 303-665-6544 | www.erieco.gov

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