



# Annual Drinking Water Quality Report

**EARLVILLE**

**IL0990150**

**Annual Water Quality Report for the period of January 1 to December 31, 2022**

**This report is intended to provide you with important information about your drinking water and the efforts made by the EARLVILLE water system to provide safe drinking water. The source of drinking water used by EARLVILLE is Ground Water. This report will not be mailed to individuals, but is available upon request at city hall, 210 Railroad street. You can also view the CCR on our website at earlvilleil.org. This year, as in years past, your tap water met all USEPA and state water health standards. Our system vigilantly safeguards its groundwater, and we are able to report that the department had no violation of a contaminant level or any other water quality standard in the previous year. This report summarizes the quality of water we provided last year, including details about where your water came from, what it contains, and how it compares to standards set by regulatory agencies. Samples in report reflect finished water data, raw water data is available upon request.**

**For more information regarding this report contact:**

**Roger Torman**

**815.246.9421**

## Source Water Information

**Well 3 (11457) is an active well that uses ground water and is located at 101 W. Park street. Well 4 (00973) is an active well which also uses ground water and is located at the old Marathon site.**

**Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.**

### Source of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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, 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 water 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 storm water 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 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.

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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

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.

Some people may be more vulnerable to contaminants in 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 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).

Source Water Assessment

**A Source Water Assessment summary is included below for your convenience.**

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by city hall or call Roger Torman at 815.246.9421. To view a summary version of the completed source water assessments including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

Based on information obtained in a Well Site Survey published in 1992 by the Illinois EPA, several potential secondary sources are located within 1,000 feet of the wells. Based on information provided by Earlville officials, the Earlville Farmers COOP is map codes 02110 & 02111; 209 W. Railroad street is map code 02112; 102 N. Main street is map code 02113; Whittaker Construction is map codes 02114 & 02115; the old Humm garage is map code 02116; the sheds on Water street (owned by Gene Coppes) is map code 02117. The Illinois EPA has determined that the Earlville Community Water Supply's source water is not susceptible to contamination. This determination is based on a number criteria including; monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and available hydro-geologic data on the wells. Furthermore, in anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that the Earlville Community Water Supply is not vulnerable to viral contamination. This determination is based upon the evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper siting conditions; a hydraulic barrier exists which should prevent pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. Because the community's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the susceptibility determination. Hence, well hydraulics were not evaluated for this system ground water supply.

## 2022 Regulated Contaminants Detected

**Water Quality Test Results**

Definitions: The following tables contain scientific terms and measures, some of which may require explanation. Maximum Contaminant Level (MCL): the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology. Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety. mg/l: milligrams per liter or parts per million (ppm) - or one ounce in 7,350 gallons of water .ug/l or ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water. na: not applicable. Avg: Regulatory compliance with some MCL's are based on running annual average of monthly samples. Maximum Residual Disinfectant Level (MRDL): The highest level of 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 disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

\*Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future. Level 1 Assessment: 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: 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. mrem: millirems per year (a measure of radiation absorbed by the body). Treatment Technique or TT: a required process to reduce the level of a contaminant in drinking water.

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
<b>Chlorine</b>	2022	4.0	0.91-4.0	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes
<b>Haloacetic Acids *(HAA5)*</b>	2022	20	19.5 - 19.5	No goal for the total	60	ppb	No	By-product of drinking water chlorination
<b>Total Trihalomethanes *(TTHm)*</b>	2022	38	38 - 38	No goal for the total	80	ppb	No	By-product of drinking water chlorination
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
<b>Arsenic</b>	2021	4.1	4.1 - 4.1	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.

<b>Barium</b>	2022	0.062	0.062-0.062	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
<b>Fluoride</b>	2022	.666	.604 - .666	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer and aluminum factory discharge.
<b>Nitrate (As N)</b>	2021	0.04	0.00-0.04	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Zinc</b>	2022	0.0038	0.0038-0.0038	5	5	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
<b>Combined Radium 226/228</b>	2022	1.37	1.37 - 1.37	0	5	pCi/L	No	Erosion of natural deposits

State Regulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
<b>Iron</b>	2022	0.29	0.29-0.29			1 ppm	No	Not currently regulated by USEPA. The State does regulate. Erosion from naturally occurring deposits
<b>Manganese</b>	2022	6.7	6.7 -6.7	150	150	ppb	No	Not currently regulated by USEPA. The State does regulate. Erosion of naturally occurring deposits
<b>Sodium</b>	2022	23	23 - 23			ppm	No	Erosion of naturally occurring deposits; used in water softener regeneration

**Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.**

#### Lead and Copper

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin safety.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	8.11.21	1.3	1.3	0.48	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	8.11.21	0	15	4.3	1	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

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. We are responsible for providing high quality drinking water, but we 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 or at <http://www.epa.gov/safewater/lead>.