

## 2022 Consumer Confidence Report for Public Water System EAST GARRETT WSC

This is your water quality report for January 1 to December 31, 2022

EAST GARRETT WSC provides surface water from City of Ennis (Lake Bardwell) located in Ellis County.

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Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono 469-383-6362

### Definitions and Abbreviations

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The following tables contain scientific terms and measures, some of which may require explanation.

Action Level:

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

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.

Avg:

Regulatory compliance with some MCLs are based on running annual average of monthly samples.

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.

Level 1 Assessment:

A Level 1 assessment is 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 Level 2 assessment is 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 residual disinfectant level goal or 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.

na:

not applicable.

ppb:

micrograms per liter or parts per billion

MFL

million fibers per liter (a measure of asbestos)

mrem:

millirems per year (a measure of radiation absorbed by the body)

ppm:

milligrams per liter or parts per million

## Definitions and Abbreviations

NTU	nephelometric turbidity units (a measure of turbidity)
pCi/L	picrouries per liter (a measure of radioactivity)
ppq	parts per quadrillion, or picograms per liter (pg/L)
ppt	parts per trillion, or nanograms per liter (ng/L)
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

## Information about your Drinking Water

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.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

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.

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.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

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>.

### Information about Source Water

EAST GARRETT WSC purchases water from CITY OF ENNIS. CITY OF ENNIS provides purchase surface water from [insert source name of aquifer, reservoir, and/or river] located in [insert name of County or City]. [insert a table containing any contaminant that was detected in the provider's water for this calendar year, unless that contaminant has been separately monitored in your water system (i.e. TTHM, HAA5, Lead and Copper, Coliforms)].

TCEQ completed a Source Water Susceptibility for all drinking water systems that own their sources. This report describes the susceptibility and types of constituents that may come into contact with the drinking water source based on human activities and natural conditions. The system(s) from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system contact [insert water system contact][insert phone number].

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/11/2020	1.3	1.3	0.21	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems

## 2022 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination

Haloacetic Acids (HAA5)	2022	16	9.1 - 15.6	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2022	40	29 - 50.2	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2022	0.314	0.314 - 0.314	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

### Disinfectant Residual

A blank disinfectant residual table has been added to the CCR template, you will need to add data to the fields. Your data can be taken off the Disinfectant Level Quarterly Operating Reports (DLQOR).

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chloramines	2022	2.1	0.5-3.7	4	4	PPM	N	Water additive used to control microbes.

## City of Ennis

### Regulated Substances

These substances are regulated or are required to be monitored and were detected in Ennis tap water. None of the detected substances exceeded the regulated limits.

Year	Substance	Units	Average	Minimum	Maximum	MCL	MCLG	Possible Source
2022	Barium	ppm	0.064	0.064	0.064	2.0	2.0	Erosion of natural deposits, discharge from drilling and metal refineries
2022	Atrazine	ppb	0.10	0.10	0.10	3.0	3.0	Runoff from herbicide used on row crops
2022	Fluoride	ppm	0.368	0.368	0.368	4	4	Erosion of natural deposits, water additive which promotes strong teeth, discharge from fertilizer and aluminum factories
2022	Nitrate (measured as Nitrogen) *1	ppm	0.460	0.0586	1.09	10	10	Runoff from fertilizer, septic tanks, sewage, natural deposits
2022	Chloramines *3	ppm	3.18	2.86	3.39	MRDL=4	MRDLG=4	Disinfectant used to control microbes
2022	Total Haloacetic Acids (HAA5) *4	ppb	11.56	9.5	16.3	60	No goal for the total	Byproduct of drinking water disinfection
2022	Total Trihalomethanes (TTHM) *4	ppb	42.78	28.5	59.1	80	No goal for the total	Byproduct of drinking water disinfection

### Total Organic Carbon (TOC) \*5

2022	Source Water	ppm	5.17	4.44	6.0			Naturally present in the environment
2022	Drinking Water	ppm	3.05	2.69	3.54			Naturally present in the environment
2022	Removal Ratio	%	1.17	1.0	1.48	%Removal*		NA

### Turbidity \*6

Year	Substance	Units	Highest Single Measurement	Minimum	Lowest Monthly % of Samples	MCL	Turbidity Limits	Possible Source

Year	Substance	Units	Concentration Level	Number of Sites AL	MCL	90 <sup>th</sup> Percentile	Violation	Possible Source
2022	Turbidity	NTU	0.1	0.06	100	0.3	0.3	Soil runoff

**Lead and Cooper \*7**

Year	Substance	Units	Concentration Level	Number of Sites AL	MCL	90 <sup>th</sup> Percentile	Violation	Possible Source
2022	Texas Copper	ppm	0.0014	0	1.0	NA	N	Corrosion of household plumbing systems, corrosion of natural deposits, leaching from wood preservatives

**Coliform Bacteria \*8**

Year	Total Bacteriological Samples Collected	Maximum Contaminant Level Goal	Total Coliform	Highest No. of Positive	Fecal Coliform or E.coli Maximum Contaminant Level	No. of positive E.coli or Fecal Coliform Samples	Violation	Possible Source
2022	240	0	0	0	*8	0	N	Naturally present in the environment

**Notes:** \*1 Nitrate Advisory - Nitrate in drinking water at levels above 10 ppm is a health risk for infants or less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider. \*2 EPA considers 50 µCi/L to be the level of concern for beta particles. \*3 Systems must complete and submit disinfection data on the Surface Water Monthly Operations Report (SWMOR). On the CCR report, the system must provide disinfection type, minimum, maximum, and average level. \*4 All sample results have been used for calculating the Highest Level Detected. \*5 Total Organic Carbon (TOC) no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include Trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report. Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed. \*6 Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a media for microbial growth. Turbidity may indicate the presence of disease-causing bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. \*7 Definitions: Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety. Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. 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. This water supply 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 (800) 426-4791 or at <http://www.epa.gov/safewater/lead>. \*8 Coliform Bacteria, Fecal Coliform or E.coli maximum containment level (MCL); A routine sample and a repeat sample are total coliform positive and one is also fecal coliform or E.coli positive. A violation occurs if both a routine sample and a repeat sample are total coliform positive. A violation occurs if fecal coliform or E.coli are ever positive.

**Unregulated and Secondary Drinking Water Standards**

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. Any unregulated contaminants detected are reported in the following table. For additional information and data visit <https://www.epa.gov/uwcmr/fourth-unregulated-contaminant-monitoring-rule>, or call the Safe Drinking Water Hotline at (800) 426-4791.

Year	Substance	Units	Average	Minimum	Maximum	MCL	MCLG	Possible Source
2022	Chloroform	ppb	12.99	6.33	22.10	Not Regulated	Not Regulated	By-product of drinking water disinfection. Not regulated individually, included in Total Trihalomethanes
2022	Bromoform	ppb	3.16	1.62	4.32	100	100	
2022	Bromochloromethane	ppb	14.43	9.15	19.90	Not Regulated	Not Regulated	
2022	Dibromochloromethane	ppb	12.86	7.79	16.8	Not Regulated	Not Regulated	
2022	Acetone	ppm	0.00672	0.00672	0.00672	20	0.0	Acetone is a manufactured chemical that is found naturally in the environment. It is also found in exhaust from vehicles, factories, and landfills.
2022	Aluminum	ppm	0.048	0.048	0.048	0.05 - 0.2	0.05	Abundant naturally occurring element
2022	Nickel	ppm	0.002	0.002	0.002	0.1	Not Regulated	Corrosion of household plumbing systems; erosion of natural deposits
2022	Chromium	ppm	0.0018	0.0018	0.0018	0.1	0.1	Naturally occurring in the environment
2022	Calcium	ppm	44.1	44.1	44.1	NA	NA	Abundant naturally occurring element
2022	Conductivity@25 C UMHO /CM	UMHO /CM	403.000	403.000	403.000	NA	Not Regulated	Conductivity of water is its ability to conduct electric current. Salts or other chemicals that dissolve break down into positive and negative ions
2022	Chloride	ppm	28.1	28.1	28.1	250	Not Regulated	Chlorides may get into surface water from several sources including: rocks containing chlorides, agricultural run-off, wastewater from industries, oil well wastes, and effluent wastewater from wastewater treatment plants
2022	Hardness as Ca/Mg	ppm	120	120	120	NA	NA	Naturally occurring calcium and magnesium
2022	pH	pH	7.59	7.36	7.76	6.5-8.5	6.5-8.5	Measure of corrosiveness of water
2022	Sodium	ppm	26.8	26.8	26.8	NA	NA	Erosion of natural deposits, by-product of oil field activity
2022	Magnesium	ppm	2.53	2.53	2.53	NA	NA	Abundant naturally occurring element
2022	Manganese	ppm	0.0022	0.0022	0.0022	0.05	NA	Abundant naturally occurring element

2022	Potassium	ppm	7.56	7.56	7.56	7.56	7.56	Not Regulated	Not Regulated	Abundant naturally occurring element
2022	Sulfate	ppm	46.5	46.5	46.5	46.5	250	250	250	Naturally occurring; common industrial by-product; by-product of oil field activity
2022	Total Alkalinity as CaCO3	ppm	105	105	105	105	NA	NA	NA	Naturally occurring soluble mineral salts
2022	Total Dissolved Solids	ppm	196	196	196	196	500	500	500	Total dissolved mineral constituents in water