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2023 WATER QUALITY REPORT
City of Ennis
P.O. Box 220
Ennis, TX 75120

CY 2023 Drinking Water Quality Report

(CONSUMER CONFIDENCE REPORT)

ENNIS
TEXAS
The bluebonnet spirit of Texas

107 N. Sherman Street
Ennis, Texas 75119
(972) 875-1234

https://www.ennistx.gov
0700001

Special Notice
Required language for ALL community public water supplies:
"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; those 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 provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (800) 426-4791."

Public Participation Opportunities

Date: August 9, 2024
Time: 10:00 a.m.
Location: Public Works Conference Room
Phone No: 972-875-1906

To learn about future public meetings concerning your drinking water, or to request to schedule one, please the Public Works Office.

Our Drinking Water is Regulated
This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what is in your drinking water. For more information about this report, please contact Ed Green with the City of Ennis at 972-875-1906 or at https://www.ennistx.gov.

Source of 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.

Contaminates that may be present in our 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 stormwater 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 stormwater 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 stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

En Español
Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, por favor de llamar al telefono 972-875-1906.

Where do we get our Drinking Water?
The source of the drinking water used by the City of Ennis is surface water from Lake Bardwell. The TCEQ completed an assessment of our source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Ed Green. For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: https://www.tceq.texas.gov/gis/swaview.

Further details about sources and source water assessments are available in Drinking Water Watch at the following URL: https://www.tceq.texas.gov/drinkingwater.

All Drinking Water May Contain Contaminants
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. 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.

Constituents (such as calcium, sodium, or iron) may be found in drinking water and may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns.

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

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.

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

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 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.

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.

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.

MFL: million fibers per liter (a measure of asbestos)

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

NA: not applicable.

NTU: nephelometric turbidity units (a measure of turbidity) pCi/L: picocuries per liter (a measure of radioactivity)

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

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.

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
2023	Barium	ppm	0.069	0.069	0.069	2.0	2.0	Erosion of natural deposits, discharge from drilling and metal refineries
2023	Gross Beta Particle Activity	PCI/L	8.2	8.2	8.2	4 mrem/yr	0	Decay of natural and man – made deposits
2023	Fluoride	ppm	0.374	0.374	0.374	4	4	Erosion of natural deposits, water additive which promotes strong teeth, discharge from fertilizer and aluminum factories
2023	Nitrate (measured as Nitrogen) *1	ppm	0.726	0.726	1.09	10	10	Runoff from fertilizer, septic tanks, sewage, natural deposits
2023	Chloramines *3	ppm	3.14	2.93	3.35	MRDL=4	MRDLG=4	Disinfectant used to control microbes
2023	Total Haloacetic Acids (HAA5) *4	ppb	12.65	10.2	16.45	60	No goal for the total	Byproduct of drinking water disinfection
2023	Total Trihalomethanes (TTHM) *4	ppb	36.87	32.8	50.5	80	No goal for the total	Byproduct of drinking water disinfection

Total Organic Carbon (TOC) *5

2023	Source Water	ppm	4.95	4.44	5.79			Naturally present in the environment
2023	Drinking Water	ppm	3.12	2.83	3.62			Naturally present in the environment
2023	Removal Ratio	%	1.15	1.0	1.50	%Removal*		NA

Turbidity *6

Year	Substance	Units	Highest Single Measurement	Minimum	Lowest Monthly % of Samples Meeting Limit	MCL	Turbidity Limits	Possible Source
2023	Turbidity	NTU	0.15	0.06	100	0.3	0.3	Soil runoff

Lead and Cooper *7

Year	Substance	Units	Concentration Level	Number of Sites AL	MCL	90th Percentile	Violation	Possible Source
2023	Texas Copper	ppm	0.0013	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
2023	243	0	1	1	*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 of 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 pCi/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 organisms. These organisms include 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/dwucmr/fifth-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
2023	Chloroform	ppb	9.88	7.29	12.10	Not Regulated	Not Regulated	By-product of drinking water disinfection. Not regulated individually, included in Total Trihalomethanes
2023	Bromoform	ppb	3.53	2.22	4.83	100.00	100.00	
2023	Bromodichloromethane	ppb	15.06	12.00	18.40	Not Regulated	Not Regulated	
2023	Dibromochloromethane	ppb	12.50	9.89	15.50	Not Regulated	Not Regulated	
2023	Dibromoacetic Acid	ppb	2.88	2.20	3.50	Not Regulated	Not Regulated	
2023	Bromochloroacetic Acid	ppb	4.81	3.90	5.20	Not Regulated	Not Regulated	
2023	Trichloroacetic Acid	ppb	2.62	1.60	3.80	Not Regulated	Not Regulated	
2023	Aluminum	ppm	0.014	0.014	0.014	0.050 – 0.200	0.050	Abundant naturally occurring element
2023	Nickel	ppm	0.0017	0.0017	0.0017	0.1000	Not Regulated	Corrosion of household plumbing systems; erosion of natural deposits
2023	Chromium	ppm	0.003	0.003	0.003	0.100	0.100	Naturally occurring in the environment
2023	Calcium	ppm	49	49	49	NA	NA	Abundant naturally occurring element
2023	Conductivity@25 C UMHOS/CM	UMHO /CM	484.000	484.000	484.000	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
2023	Chloride	ppm	36.1	36.1	36.1	250.0	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
2023	Hardness as CACO3	ppm	134	134	134	NA	NA	Naturally occurring calcium and magnesium
2023	pH	pH	7.68	7.46	7.87	6.50-8.50	6.50-8.50	Measure of corrosiveness of water
2023	Sodium	ppm	35.2	35.2	35.2	NA	NA	Erosion of natural deposits, by-product of oil field activity
2023	Magnesium	ppm	2.71	2.71	2.71	NA	NA	Abundant naturally occurring element
2023	Potassium	ppm	8.35	8.35	8.35	Not Regulated	Not Regulated	Abundant naturally occurring element
2023	Sulfate	ppm	63.8	63.8	63.8	250.0	250.0	Naturally occurring; common industrial by-product; by-product of oil field activity
2023	Total Alkalinity as CaCO3	ppm	116	116	116	NA	NA	Naturally occurring soluble mineral salts
2023	Total Dissolved Solids	ppm	263	263	263	500	500	Total dissolved mineral constituents in water
2023	Perfluorobutanoic Acid (PFBA)	ppb	0.0070	0.0061	0.0077	This data is part of UCMR5 results in relation to minimum reporting levels and available non-regulatory health-based reference concentrations.		PFAS are widely used, long lasting chemicals which break down very slowly over time. There are thousands of PFAS, and they are found in many different consumer, commercial, industrial products, and the environment.
2023	Perfluorobutanesulonic Acid (PFBS)	ppb	0.0054	0.0034	0.0065			
2023	Perfluorohexanoic Acid (PFHxA)	ppb	0.0119	0.1040	0.1320			
2023	Perfluoropentanoic Acid (PFPeA)	ppb	0.0133	0.0104	0.0173			