2022 Consumer Confidence Report for Public Water System M E N WSC

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

M E N WSC provides surface water from **Navarro Mills Reservoir and Lake Halbert** located in **Navarro County, Corsicana**.

For more information regarding this report contact:

Name Dennis Donoho

Phone (903) 872-1899

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (903) 872-1899.

Definitions and Abbreviations

Definitions and Abbreviations	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.
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)

Definitions and Abbreviations

ppb:	micrograms per liter or parts per billion
ppm:	milligrams per liter or parts per million
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

M E N WSC purchases water from CITY OF CORSICANA. CITY OF CORSICANA provides purchase surface water from **Navarro Mills Reservoir and Lake Halbert** located in **Navarro County , City of Corsicana**.
[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 **MEN WSC , Dennis Donoho, 903-872-1899**

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	1		0	N	Naturally present in the environment.

Lead and Copper	**Date Sampled**	**MCLG**	**Action Level (AL)**	**90th Percentile**	**# Sites Over AL**	**Units**	**Violation**	**Likely Source of Contamination**
Copper	08/23/2019	1.3	1.3	0.23	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	08/23/2019	0	15	3.6	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Variances or Exemptions

Variance or Exemptions	**Explanation of Variance**	**Date Variance was issued**	**Date Variance Expires**	**Brief status on the steps the System is taking to comply with the terms and Schedule of the Variance**	**Any opportunity for public input on the review or removal of the Variance**
Variance Alternative Capacity Requirement (ARC)	ARC is a reduction on the TCEQ's 0.6gpm/connection Rule	8/23/2022	N/A	MEN is monitoring water pumpage so not to exceed variance requirements.	Not at this time.

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	20	3.7 - 21.2	No goal for the total	60	ppb	N	By-product of drinking water disinfection.

*The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year

Total Trihalomethanes (TTHM)	2022	46	34.8 - 50.6	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

*The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2022	1	0.207 - 0.598	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	1.75	0.5-3.7	4	4	ppm	N	Water additive used to control microbes.

Violations

Lead and Copper Rule

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	Violation Begin	Violation End	Violation Explanation
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2022	2022	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Detected Regulated Contaminates for 2022				
EP1 Navarro Mills				
SOC Pesticide	Detected Quantity	MCL	Date Collected	Analytical Method
Atrazine	1.2 ug/L	3 ug/L	6/21/2022	E525.2 GC/MS
Metolachlor	0.3 ug/L	N/A	6/21/2022	E525.2 GC/MS
VOC'S	Detected Quantity	MC/L	Date Collected	Analytical Method
Acetone	10.4 ug/L	N/A	8/23/2022	E524.2 GC/MS
Cholroform	16.0 ug/L	N/A	8/23/2022	E524.2 GC/MS
Bromodichloromethane	18.7 ug/L	N/A	8/23/2022	E524.2 GC/MS
Dibromochloromethane	12.7 ug/L	N/A	8/23/2022	E524.2 GC/MS
Inorganics				
Chloride	14.1 mg/L	300.0 mg/L	4/14/2022	E300.0 Anions
Fluoride	0.554 mg/L	4.0 mg/L	4/14/2022	E300.0 Anions
Nitrate (as N)	0.0882 mg/L	10.0 mg/L	4/14/2022	E300.0 Anions
Sulfate	49.3 mg/L	300.0 mg/L	4/14/2022	E300.0 Anions
Total Dissolved Solids	222 mg/L	1000.0 mg/L	4/14/2022	SM2540C
Inorganics Metals Trace Elements				
Calcium Total	44.9 mg/L	N/A	4/14/2022	E200.7 Metals, Trace
Potassium Total	3.12 mg/L	N/A	4/14/2022	E200.7 Metals, Trace
Magnesium Total	3.93 mg/L	N/A	4/14/2022	E200.7 Metals, Trace
Sodium Total	20.4 mg/L	N/A	4/14/2022	E200.7 Metals, Trace
E200.8 EICP-MS				
Aluminum Total	0.048 mg/L	0.2 mg/L	4/14/2022	E200.8 IC-MS
Barium Total	0.047 mg/L	2.0 mg/L	4/14/2022	E200.8 IC-MS
Chromium Total	<0.00100 mg/L	0.10 mg/L	4/14/2022	E200.8 IC-MS
Copper Total	0.0022 mg/L	1.0 mg/L	4/14/2022	E200.8 IC-MS
Manganese Total	0.0019 mg/L	0.05 mg/L	4/14/2022	E200.8 IC-MS
Nickel Total	0.0012 mg/L	.1 mg/L	4/14/2022	E200.8 IC-MS

Definitions

ug/L parts per billion or micrograms per liter

mg/L parts per million or milligrams per liter

Only contaminants at detectable level reported

Detected Regullated Contaminates for 2022				
EP2 Lake Halbert				
SOC Pesticide	Detected Quantity	MCL	Date Collected	Analytical Method
Atrazine	0.2 ug/L	3 ug/L	6/21/2022	E525.2 GC/MS
VOC'S	Detected Quantity	MC/L	Date Collected	Analytical Method
Acetone	11.6 ug/L	N/A	8/23/2022	E524.2 GC/MS
Cholroform	22.8 ug/L	N/A	8/23/2022	E524.2 GC/MS
Bromodichloromethane	21.5 ug/L	N/A	8/23/2022	E524.2 GC/MS
Dibromochloromethane	9.69 ug/L	N/A	8/23/2022	E524.2 GC/MS
Inorganics				
Chloride	17.7 mg/L	300.0 mg/L	4/14/2022	E300.0 Anions
Fluoride	0.498 mg/L	4.0 mg/L	4/14/2022	E300.0 Anions
Nitrate (as N)	0.181 mg/L	10.0 mg/L	4/14/2022	E300.0 Anions
Sulfate	63.9 mg/L	300.0 mg/L	4/14/2022	E300.0 Anions
Total Dissolved Solids	221 mg/L	1000.0 mg/L	4/14/2022	SM2540C
Inorganics Metals Trace Elements				
Calcium Total	43.4 mg/L	N/A	4/14/2022	E200.7 Metals, Trace
Potassium Total	4.76 mg/L	N/A	4/14/2022	E200.7 Metals, Trace
Magnesium Total	3.47 mg/L	N/A	4/14/2022	E200.7 Metals, Trace
Sodium Total	24.4 mg/L	N/A	4/14/2022	E200.7 Metals, Trace
EICP-MS				
Aluminum Total	0.022mg/L	0.2 mg/L	4/14/2022	E200.8 IC-MS
Barium Total	0.059 mg/L	2.0 mg/L	4/14/2022	E200.8 IC-MS
Chromium Total	<0.00100	0.10 mg/L	4/14/2022	E200.8 IC-MS
Copper Total	0.0015 mg/L	1.0 mg/L	4/14/2022	E200.8 IC-MS

Definitions

ug/L parts per billion or micrograms per liter

mg/L parts per million or milligrams per liter

Only contaminants at detectable level reported

Turbidity and TOC 2022

Navarro Mills								Lake Halbert							
NTU				TOC				NTU				TOC			
Month	Average	Highest	%Compliance	Raw TOC	Tap TOC	% Removal	%Compliance	Month	Average	Highest	%Compliance	Raw TOC	Tap TOC	%Removal	%Compliance
Jan	0.03	0.14	100	3.78	2.89	23.5	207	Jan	0.04	0.14	100	5.17	3.75	27.5	100
Feb	0.04	0.16	100	3.95	2.95	25.3	101	Feb	0.03	0.11	100	5.70	4.03	29.3	100
Mar	0.05	0.15	100	4.39	3.36	23.5	207	Mar	0.03	0.17	100	3.78	2.82	25.4	102
Apr	0.05	0.13	100	4.12	3.30	19.9	100	Apr	0.02	0.14	100	3.92	2.69	31.4	209
May	0.04	0.11	100	3.99	3.43	14.0	100	May	0.03	0.12	100	3.53	2.58	26.9	179
Jun	0.03	0.1	100	4.14	3.17	23.4	100	Jun	0.03	0.12	100	3.78	2.37	37.3	149
Jul	0.04	0.12	100	4.23	3.34	21.0	100	Jul	0.03	0.14	100	4.17	2.76	33.8	100
Aug	0.03	0.1	100	5.05	3.90	22.3	100	Aug	0.03	0.08	100	5.26	3.38	35.7	102
Sep	0.04	0.11	100	4.71	3.63	22.9	100	Sep	0.03	0.08	100	4.74	3.12	34.2	100
Oct	0.07	0.14	100	4.77	3.66	23.3	100	Oct	0.06	0.09	100	4.50	3.16	29.8	100
Nov	0.08	0.14	100	5.3	4.36	17.7	100	Nov	0.05	0.12	100	4.97	3.26	34.4	196
Dec	0.08	0.14	100	5.29	3.55	32.9	100	Dec	0.05	0.13	100	4.26	3.06	28.2	160
Average	0.05			4.47	3.46	22.5	117.9		0.04			4.48	3.08	31.2	133.1

	NTU	Raw TOC	Tap TOC	% Removal	
Average Both Plants	0.04	4.48	3.27	26.8	

TOC % Compliance is based on compliance with the TCEQ rules on TOC removal. Plants must meet or exceed 100% compliance base on a running quarterly average.