2017 Consumer Confidence Report for Public Water System M E N WSC

This is your water quality report for January 1 to December 31, 2017

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

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:	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.
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 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 I 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 using the best available treatment technology.
Maximum Contaminant Level Goal or MCLG:	The level of a contaminant is 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 I 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 of 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)

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 materials, 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 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 ins 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 he 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 for 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 setting 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.

Annual Drinking Water Quality Report

TX1750015 M E N WSC

Annual Water Quality Report for the period of January 1 to December 31, 2017

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

For more information regarding this report contact:

Name: Dennis Donoho

Phone: (903) 872-1899

M E N WSC is Purchased Surface Water

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

Sources of Drinking Water

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Information about Source Water Assessments

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL:
http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: http://dww.tceq.texas.gov/DWW

Source Water Name		Type of Water	Report Status	Location
SW FROM CORSICANA	CC FROM TX1750002 CITY OF	SW	A	Navarro Mills Lake
SW FROM CORSICANA	CC FROM TX1750002 CITY OF	SW	A	Lake Halbert

2017 Regulated Contaminants Detected

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. ALGs allow for a margin of safety.
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Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2016	1.3	1.3	0.13	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing
Lead	2016	0	15	3.9	0	ppb	N	Corrosion of household plumbing Erosion of natural deposits.

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	0Positive monthly Sample	0	>1routine/repeat sample per month which is total coliform positive	0	N	Naturally present in the Environment

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2017	26.8	6.9-26.8	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2017	65.2	32.3 -65.2	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2017	1	0.0885 – 0.537	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Disinfectant Residual Table

Disinfectant	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Likely Source of Contamination
Chloramines	2017	1.63	0.19 – 4.00	4.0	4.0	ppm	N	Water additive used to control microbes.

Purchased Surface Water from Forest CORSICANA

Detected Regulated Contaminates for 2017				
EP 1 Navarro Mills				
SOC Pesticide	*Detected Quantity*	*MCL*	*Date Collected*	*Analytical Method*
Atrazine	*0.6 ug/l*	*N/A*	*6/14/2017*	*E525.2 GC/MS*
Metolachlor	*0.4 ug/l*	*N/A*	*6/14/2017*	
VOC's				
2-Butatone	*1.22 ug/l*	*N/A*	*7/27/2017*	*E524.2 GC/MS*
Chloroform	*23.3 ug/l*	*N/A*	*7/27/2017*	*E524.2 GC/MS*
Bromodichloromethane	*17.0 ug/l*	*N/A*	*7/27/2017*	*E524.2 GC/MS*
Dibromochloromethane	*8.15 ug/l*	*N/A*	*7/27/2017*	*E524.2 GC/MS*
Methyl Ethyl Ketone	*1.22 ug/l*	*N/A*	*7/27/2017*	*E524.2 GC/MS*
Inorganics				
Chloride	*13.6 mg/l*	*300.0 mg/l*	*7/27/2017*	*E300.0 Anions*
Fluoride	*0.607 mg/l*	*4.0mg/l*	*7/27/2017*	*E300.0 Anions*
Nitrate (as N)	*0.0263 mg/l*	*10.0mg/l*	*7/27/2017*	*E300.0 Anions*
Sulfate	*42.3 mg/l*	*300.0 mg/l*	*7/27/2017*	*E300.0 Anions*
Total Dissolved Solids	*249 mg/l*	*1000.0 mg/l*	*7/27/2017*	*SM2540C*
Inorganics				
Metals Trace Elements				
Calcium	*34.1 mg/l*	*20,000.0 mg/l*	*7/26/2017*	*E200.7 Metals, Trace*
Magnesium	*2.62 mg/l*	*20,000.0 mg/l*	*7/26/2017*	*E200.7 Metals, Trace*
Potassium	*3.86 mg/l*	*20,000.0 mg/l*	*7/26/2017*	*E200.7 Metals, Trace*
Sodium Total	*20.1 mg/l*	*20,000.0 mg/l*	*7/26/2017*	*E200.7 Metals, Trace*
E200.8 ICP-MS				
Aluminum Total	*0.048 mg/l*	*0.2 mg/l*	*7/27/2017*	*E200.8 IC-MS*
Arsenic Total	*0.0019 mg/l*	*0.01 mg/l AL*	*7/27/2017*	*E200.8 IC-MS*
Barium Total	*0.044 mg/l*	*2.0 mg/l*	*7/27/2017*	*E200.8 IC-MS*
Chromium Total	*0.00083mg/l*	*0.1 mg/l*	*7/27/2017*	*E200.8 IC-MS*
Copper Total	*.0015 mg/l*	*1.3 mg/l*	*7/27/2017*	*E200.8 IC-MS*
Manganese Total	*.00023 mg/l*	*0.05 mg/l*	*7/27/2017*	*E200.8 IC-MS*
Nickel Total	*0.0013 mg/l*	*0.05 mg/l*	*7/27/2017*	*E200.8 IC-MS*
Cyanide Total	*<0.0200 mg/l*	*0.2 mg/l*	*7/27/2017*	*E355.4 CN*

DEFINITIONS

ug/l parts per billion or micrograms per liter

mg/l parts per million or milligrams per liter

Detected Regulated Contaminates for 2017

EP2 Lake Halbert				
VOC's	*Detected Quantity*	*MC/L*	*Date Collected*	*Analytical Method*

Acetone	*10.7 ug/l*	*N/A*	*7/26/2017*	*E524.2 GC/MS*
Chloroform	*32.7 ug/l*	*N/A*	*7/26/2017*	*E524.2 GC/MS*
Bromodichloromethane	*10.3 ug/l*	*N/A*	*7/26/2017*	*E524.2 GC/MS*
dibromochloromethane	*1.8 ug/l*	*N/A*	*7/26/2017*	*E524.2 GC/MS*
Methyl Ethyl Ketone	*1.43 ug/l*	*N/A*	*7/26/2017*	
Inorganics				
Chloride	*12.5 mg/l*	*300.0 mg/l*	*1/17/2017*	*E300.0 Anions*
Fluoride	*0.571 mg/l*	*4.0 mg/l*	*1/17/2017*	*E300.0 Anions*
Nitrate (as N)	*0.0431 mg/l*	*10.0mg/l*	*1/17/2017*	*E300.0 Anions*
Sulfate	*58.0 mg/l*	*300.0 mg/l*	*1/17/2017*	*E300.0 Anions*
Total Dissolved Solids	*167 mg/l*	*1000.0 mg/l*	*1/17/2017*	*SM2540C*
Inorganics ***Metals Trace Elements***				
Calcium Total	*36.1 mg/l*	*N/A*	*1/17/2017*	*E200.7 Metals, Trace*
Potassium Total	*4.17 mg/l*	*N/A*	*1/17/2017*	*E200.7 Metals, Trace*
Magnesium	*4.56 mg//*	*N/A*	*1/17/2017*	*E200.7 Metals, Trace*
Sodium Total	*16.7 mg/l*	*mg/l*	*1/17/2017*	*E200.7 Metals, Trace*
E200.8 ICP-MS				
Aluminum Total	*0.023 mg/l*	*0.2 mg/l*	*1/17/2017*	*E200.8 IC-MS*
Barium Total	*0.044mg/l*	*2.0 mg/l*	*1/17/2017*	*E200.8 IC-MS*
Chromium Total	*0.001 mg/l*	*0.1 mg/l*	*1/17/2017*	*E200.8 IC-MS*
Copper Total	*0.0011 mg/l*	*1.3 mg/l AL*	*1/17/2017*	*E200.8 IC-MS*
Manganese Total	*.0041 mg/l*	*0.05 mg/l*	*1/17/2017*	*E200.8 IC-MS*
Cyanide Total	*0.0882 mg/l*	*0.2 mg/l*	*1/17/2017*	*E355.4 CN*

DEFINITIONS

Ug/l parts per billion or micrograms per liter

Ug/l parts per million or milligrams per liter

Turbidity and TOC 2017																
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	0.08	0.18	100	3.79	2.98	21.4	85	Jan	0.13	0.28	100	5.14	3.37	34.4	100
Feb	0.07	0.09	100	4.06	2.94	27.6	110	Feb	0.10	0.21	100	5.26	3.46	34.2	112
Mar	0.07	0.10	100	4.23	2.9	31.4	126	Mar	0.09	0.21	100	5.31	3.66	31.1	102
Apr	0.08	0.12	100	4.00	3.04	24.0	160	Apr	0.09	0.24	100	5.39	3.39	37.1	106
May	0.07	0.12	100	4.21	3.19	24.2	100	May	0.08	0.19	100	5.02	3.37	32.9	107
Jun	0.07	0.11	100	3.85	2.81	27.0	108	Jun	0.09	0.25	100	5.09	3.30	35.2	100
Jul	0.06	0.15	100	4.42	3.07	30.5	154	Jul	0.11	0.28	100	5.42	3.56	34.3	151
Aug	0.07	0.11	100	4.21	3.13	25.7	130	Aug	0.07	0.18	100	4.43	3.07	30.7	128
Sep	0.07	0.18	100	4.18	3.15	24.6	100	Sep	0.05	0.14	100	4.3	2.67	37.9	142
Oct	0.07	0.11	100	4.41	3.38	23.4	100	Oct	0.07	0.23	100	4.62	2.94	36.4	104
Nov	0.07	0.10	100	4.29	3.36	21.7	100	Nov	0.06	0.17	100	4.59	3.08	32.9	100
Dec	0.07	0.11	100	4.10	3.19	22.2	112	Dec	0.07	0.17	100	4.23	2.93	30.7	100
Average	0.07			4.15	3.10	25.3	115.4		0.08			4.90	3.23	34.0	112.7
	NTU	Raw TOC	**Tap TOC**	**% Removal**											
Average Both Plants	0.08	452	3.16	29.6											