# 2018 Consumer Confidence Report for Public Water System M E N WSC

This is your water quality report for January 1 to December	er 31, 2018	For more information regarding this report contact:							
M E N WSC provides Purchased Surface Water from <b>Naval</b> located in <b>Corsicana</b> .	rro Mills and Lake Halbert	Name	Dennis Donoho						
		Phone	903) 872-1899						
			te incluye información importante sobre el agua para tomar. Para asistencia en español, favor elefono ()						
Definitions and Abbreviations									
Definitions and Abbreviations	The following tables contain scientific terms and measu	ires, some o	f which may require explanation.						
Action Level:	The concentration of a contaminant which, if exceeded,	, triggers tre	atment or other requirements which a water system must follow.						
Action Level Goal (ALG):	The level of a contaminant in drinking water below which	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 water system.	identify pot	ential problems and determine (if possible) why total coliform bacteria have been found in our						
Level 2 Assessment:	A Level 2 assessment is a very detailed study of the war occurred and/or why total coliform bacteria have been	-	o identify potential problems and determine (if possible) why an E. coli MCL violation has r water system on multiple occasions.						
Maximum Contaminant Level or MCL:	The highest level of a contaminant that is allowed in dri	inking 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	ch there is n	o 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 w contaminants.	ater. There	is convincing evidence that addition of a disinfectant is necessary for control of microbial						
Maximum residual disinfectant level goal or MRDLG:	The level of a drinking water disinfectant below which t to control microbial contaminants.	here is no k	nown or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants						
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)								

picocuries per liter (a measure of radioactivity)

pCi/L

#### **Definitions and Abbreviations**

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.

### 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 Lake and Lake Halbert located in Navarro County.

'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 **Dennis Donoho (903) 872-1899**.'

## **Regulated Contaminants**

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	07/28/2016	1.3	1.3	0.13	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing
Lead	07/28/2016	0	15	3.9	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

# **2018 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)	2018	17	0 - 19.7	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)	2018	45	26.1 - 48.6	No goal for the total	80	ppb	N	By-product of drinking water disinfection.			

<sup>\*</sup> 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]	2018	0.183	0.12 - 0.183	10	10	ppm		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	2018	1.58	0.21-4.00	4	4	mg/l	ppm	Water additive used to control microbes.

**DEFINITIONS** 

ug/l parts per billion or micrograms per liter mg/l parts per billion or micrograms per liter

	Detected Regula	ted Conta	minates for 20	018
P2 Lake Halbert				
SOC Pesticide	Detected Quantity	MCL	Date Collected	Analytical Method
Atrazine	0.4 ug/l	N/A	1/31/2018	E525.2 GC/MS
VOC's	Detected Quantity	MC/L	Date Collected	Analytical Method
Acetone	5.8 ug/l	N/A	7/17/2018	E524.2 GC/MS
Chloroform	12.0 ug/l	N/A	7/17/2018	E524.2 GC/MS
Bromodichloromethane	11.0 ug/l	N/A	7/17/2018	E524.2 GC/MS
Dibromochloromethane	5.27 ug/l	N/A	7/17/2018	E524.2 GC/MS
Methyl Ethyl Ketone	2.28 ug/l	N/A	7/17/2018	
Inorganics				
Chloride	16.4 mg/l	300.0 mg/l	1/31/2018	E300.0 Anions
Fluoride	0.49 mg/l	4.0 mg/l	1/31/2018	E300.0 Anions
Nitrate (as N)	0.352 mg/l	10.0mg/l	1/31/2018	E300.0 Anions
Sulfate	52.7 mg/l	300.0 mg/l	1/31/2018	E300.0 Anions
		1000.0		
Total Dissolved Solids	210 mg/l	mg/l	1/31/2018	SM2540C
Inorganics				
<b>Metals Trace Elements</b>				
Calcium Total	37.6 mg/l	N/A	1/31/2018	E200.7 Metals, Trace
Potassium Total	4.02 mg/l	N/A	1/31/2018	E200.7 Metals, Trace
Magnesium	3.08 mg//	N/A	1/31/2018	E200.7 Metals, Trace
Sodium Total	18.6 mg/l	N/A	1/31/2018	E200.7 Metals, Trace
E200.8 ICP-MS				
Aluminum Total	0.020 mg/l	0.2 mg/l	1/31/2018	E200.8 IC-MS
Barium Total	0.057mg/l	2.0 mg/l	1/31/2018	E200.8 IC-MS
Chromium Total	0.001 mg/l	0.1 mg/l	1/31/2018	E200.8 IC-MS
Copper Total	0.0011 mg/l	1.3 mg/l AL	1/31/2018	E200.8 IC-MS
Manganese Total	.0041 mg/l	0.05 mg/l	1/31/2018	E200.8 IC-MS
Cyanide Total	0.0530 mg/l	0.2 mg/l	1/31/2018	E355.4 CN

## **DEFINITIONS**

[	<b>Detected Regula</b>	ted Contam	inates for 201	8
EP1 Navarro Mills				
SOC Pesticide	Detected Quantity	MCL	Date Collected	Analytical Method
Atrazine	0.3 ug/l	N/A	1/31/2018	E525.2 GC/MS
VOC's	Detected Quantity	MC/L	Date Collected	Analytical Method
Acetone	5.98 ug/l	N/A	7/19/2018	E524.2 GC/MS
2-Butatone	2.49 ug/l	N/A	7/19/2018	E524.2 GC/MS
Chloroform	17.2 ug/l	N/A	7/18/2018	E524.2 GC/MS
Bromodichloromethane	16.9 ug/l	N/A	7/19/2018	E524.2 GC/MS
Dibromochloromethane	10.0 ug/l	N/A	7/19/2018	E524.2 GC/MS
Bromoform	1.52 ug/l	N/A	7/19/2018	E524.2 GC/MS
Inorganics				
Chloride	13.7 mg/l	300.0 mg/l	1/31/2018	E300.0 Anions
Fluoride	0.662 mg/l	4.0 mg/l	1/31/2018	E300.0 Anions
Nitrate (as N)	0.0722 mg/l	10.0mg/l	1/31/2018	E300.0 Anions
Sulfate	46.5 mg/l	300.0 mg/l	1/31/2018	E300.0 Anions
Total Dissolved Solids	200 mg/l	1000.0 mg/l	1/31/2018	SM2540C
Inorganics				
Metals Trace Elements				
Calcium	39.9 mg/l	20,000.0 mg/l	1/31/2018	E200.7 Metals, Trace
Potassium	3.75 mg/l	20,000.0 mg/l	1/31/2018	E200.7 Metals, Trace
Magnesium	2.78 mg//	20,000.0 mg/l	1/31/2018	E200.7 Metals, Trace
Sodium Total	18.6 mg/l	20,000.0 mg/l	1/31/2018	E200.7 Metals, Trace
E200.8 ICP-MS				
Aluminum Total	0.030 mg/l	0.2 mg/l	1/31/2018	E200.8 IC-MS
Barium Total	0.050mg/l	2.0 mg/l	1/31/2018	E200.8 IC-MS
Copper Total	0.0049mg/l	1.3 mg/l AL	1/31/2018	E200.8 IC-MS
Manganese Total	.0012 mg/l	0.05 mg/l	1/31/2018	E200.8 IC-MS
Nickel Total	.0010 mg/l	.1 mg/l	1/31/2018	E200.8 IC-MS
E245.1 Mercury water				
Mercury Total	0.030 mg/l	0.2 mg/l	1/31/2018	E245.1 Mercury water
Cyanide Total	0.0103 mg/l	0.2 mg/l	1/31/2018	E355.4 CN
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	Turbidity and TOC 2018														
<u>Navarro Mills</u>							-	Lake Halb	ert						
	NTU TOC				NTU NTU										
<u>Month</u>	Average	<u>Highest</u>	<u>%</u>	Raw	Tap	<u>%</u>	<u>%</u>	Month	Average	Highest	%Compliance	Raw TOC	Tap TOC	% Removal	% Compliance
			Compliance	TOC	TOC	Removal	Compliance								
<u>Jan</u>	<u>0.06</u>	<u>0.09</u>	<u>100</u>	<u>3.98</u>	<u>3.18</u>	20.1	100	<u>Jan</u>	<u>0.07</u>	<u>0.14</u>	<u>100</u>	4.07	2.87	<u>29.5</u>	<u>100</u>
<u>Feb</u>	<u>0.08</u>	<u>0.12</u>	<u>100</u>	<u>4.27</u>	<u>3.32</u>	22.2	<u>100</u>	<u>Feb</u>	<u>0.08</u>	0.22	<u>100</u>	<u>4.19</u>	<u>2.84</u>	<u>32.2</u>	<u>92</u>
<u>Mar</u>	<u>0.08</u>	0.12	<u>100</u>	4.17	<u>3.33</u>	<u>20.1</u>	<u>100</u>	Mar	<u>0.06</u>	0.14	<u>100</u>	<u>3.92</u>	<u>2.76</u>	<u>29.6</u>	<u>118</u>
Apr	0.06	0.12	<u>100</u>	4.14	<u>3.25</u>	21.5	100	<u>Apr</u>	0.06	0.14	<u>100</u>	4.04	2.94	<u>27.2</u>	<u>100</u>
May	0.08	0.14	<u>100</u>	1.06	3.22	20.7	<u>83</u>	May	0.06	0.18	<u>100</u>	4.00	2.89	<u>27.8</u>	<u>111</u>
Jun	0.08	0.15	100	4.33	3.18	26.6	<u>165</u>	<u>Jun</u>	0.04	0.1	100	4.17	2.68	<u>35.7</u>	<u>102</u>
<u>Jul</u>	0.07	0.10	<u>100</u>	4.41	<u>3.45</u>	21.8	<u>135</u>	<u>Jul</u>	0.05	0.13	<u>100</u>	<u>4.34</u>	3.06	<u>29.5</u>	<u>100</u>
Aug	0.08	0.13	<u>100</u>	<u>5.88</u>	<u>3.4</u>	42.2	<u>121</u>	Aug	<u>0.06</u>	0.25	<u>100</u>	<u>4.20</u>	<u>2.91</u>	<u>30.7</u>	<u>100</u>
<u>Sep</u>	0.08	0.15	<u>100</u>	4.70	<u>3.36</u>	<u>28.5</u>	<u>100</u>	Sep	0.04	0.10	<u>100</u>	4.39	<u>2.90</u>	<u>33.9</u>	<u>100</u>
<u>Oct</u>	0.07	<u>0.16</u>	<u>100</u>	4.65	<u>3.66</u>	<u>21.3</u>	<u>100</u>	Oct	0.05	0.18	<u>100</u>	4.29	<u>3.42</u>	<u>20.3</u>	<u>100</u>
<u>Nov</u>	<u>0.06</u>	<u>0.12</u>	<u>100</u>	4.41	<u>2.67</u>	<u>39.5</u>	<u>113</u>	Nov	0.05	0.2	<u>100</u>	<u>3.95</u>	<u>2.46</u>	<u>37.7</u>	<u>151</u>
<u>Dec</u>	<u>0.08</u>	0.20	<u>100</u>	<u>4.76</u>	<u>3.31</u>	<u>30.5</u>	<u>95</u>	<u>Dec</u>	0.06	<u>0.16</u>	<u>100</u>	<u>4.88</u>	<u>2.90</u>	<u>40.6</u>	<u>116</u>
<u>Average</u>	<u>0.07</u>			4.48	3.28	<u>26.2</u>	109.3		<u>0.06</u>			4.20	2.89	31.2	<u>107.5</u>
			<u>NTU</u>	Raw	<u>Tap</u>	<u>%</u>									
Avorogo			0.07	TOC 4.34	<u>TOC</u>	Removal 28.7									
Average Both			<u>0.07</u>	4.34	3.08	<u> 20.1</u>									
Plants															