

## 2017 Consumer Confidence Report for Public Water System NAVARRO MILLS WSC (PWS # 1750024)

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

NAVARRO MILLS WSC provides surface water and ground water from **Navarro Mills Lake and a well** in **Navarro County**.

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (254) 578-1618.

For any questions regarding this report, you may call the office at 254-578-1618

### 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.
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)

## Definitions and Abbreviations

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 EPA's 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

NAVARRO MILLS WSC purchases water from CITY OF CORSICANA. CITY OF CORSICANA provides purchase surface water from Navarro Mills Lake located in Navarro County.

**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
Choloroform	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	E524.2 GC/MS
<b>Inorganics</b>				
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	10.0 mg/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
<b>Inorganics</b>				
<b>Metals Trace Elements</b>				
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 Total	4.56 mg/l	N/A	1/17/2017	E200.7 Metals, Trace
Sodium Total	16.7 mg/l	N/A	1/17/2017	E200.7 Metals, Trace
<b>E200.8 ICP-MS</b>				
Aluminum Total	0.023 mg/l	0.2 mg/l	1/17/2017	E200.8 IC-MS
Barium Total	0.044 mg/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	.0011 mg/l	1.3 mg/l	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
mg/l	parts per million or milligrams per liter

## 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	E525.2 GC/MS
<b>VOC's</b>				
2-Butatone	1.22 ug/l	N/A	7/27/2017	E524.2 GC/MS
Cholroform	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
<b>Inorganics</b>				
Chloride	13.6 mg/l	300.0 mg/l	7/27/2017	E300.0 Anions
Fluoride	0.607 mg/l	4.0 mg/l	7/27/2017	E300.0 Anions
Nitrate (as N)	0.0263 mg/l	10.0 mg/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
<b>Inorganics Metals Trace Elements</b>				
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
<b>E200.8 ICP-MS</b>				
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	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	0.00083 mg/l	0.1 mg/l	7/27/2017	E200.8 IC-MS
Copper Total	.0015 mg/l	1.3 mg/l AL	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	.0013 mg/l	.1 mg/l	7/27/2017	E200.8 IC-MS
Cyanide Total	<0.0200 mg/l	0.2 mg/l	7/27/2007	E355.4 CN

### DEFINITIONS

ug/l	parts per billion or micrograms per liter
mg/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	4.52	3.16	29.6									

### TTHM's 2017

Date of Samples	1/17/2017	4/19/2017	7/26/2017	11/16/2017	
Address of Sample	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Average of Quarters
4501 E HWY 31	29.4	46.0	61.5	50.6	46.9
2103 W 15th Ave	31.4	46.2	54.5	44.6	44.2
3500 Northpark	30.7	47.0	55.9	43.2	44.2
700 E 16th Ave	29.0	42.0	58.4	41.7	42.8
<b>Average for each quarter</b>	30.1	45.3	57.6	45.0	44.5

### Haa5's 2017

Date of Samples	1/17/2017	4/19/2017	7/26/2017	11/16/2017	
Address of Sample	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Average of Quarters
4501 E HWY 31	20.6	25.0	36.8	20.9	25.8
2103 W 15th Ave	21.0	23.7	32.9	14.4	23.0
3500 Northpark	22.1	24.7	32.9	15.1	23.7
700 E 16th Ave	16.2	13.0	21.1	9.9	15.1
<b>Average for each quarter</b>	20.0	21.6	30.9	15.1	21.9

'No Source Water Assessment for your drinking water source(s) has been conducted by the TCEQ for your water system. The report describes the susceptibility and the types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information in this assessment allows us to focus our source water protection strategies.' For more information, go to <http://dww2.tceq.texas.gov/DWW/>

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2017	1.3	1.3	0.22	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	2017	0	15	1.5	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

### 2017 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2017	19	0 - 48.6	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)	2017	30	16.9 - 38.1	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
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\* 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 or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2017	1	1.2 - 1.2	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2017	0.059	0.059 - 0.059	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2017	0.7	0.66 - 0.66	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen]	2017	0.235	0.0382 - 0.235	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2017	0.4	0.3 - 0.4	3	3	ppb	N	Runoff from herbicide used on row crops.
Di (2-ethylhexyl) phthalate	2017	0.6	0 - 0.6	0	6	ppb	N	Discharge from rubber and chemical factories.

Volatile Organic Contaminants	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Xylenes	2017	0.00078	0 - 0.00078	10	10	ppm	N	Discharge from petroleum factories; Discharge from chemical factories.

### 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
Chloramine	2017	2.49	1.78- 3.23	4	4	ppm	N	Water additive used to control microbes

## Violations

<b>Lead and Copper Rule</b>			
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.			
<b>Violation Type</b>	<b>Violation Begin</b>	<b>Violation End</b>	<b>Violation Explanation</b>
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2014	07/13/2017	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.
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2015	07/13/2017	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. (We conducted Lead & Copper samples, however 1 sample was Rejected due to the time it was taken by customer).
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2016	07/13/2017	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. (We conducted Lead & Copper samples, however 1 sample was Rejected due to an address discrepancy).

<b>Revised Total Coliform Rule (RTCR)</b>			
The Revised Total Coliform Rule (RTCR) seeks to prevent waterborne diseases caused by E. coli. E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children,			
<b>Violation Type</b>	<b>Violation Begin</b>	<b>Violation End</b>	<b>Violation Explanation</b>
MONITORING, ROUTINE, MAJOR (RTCR)	09/01/2017	09/30/2017	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. (Subsequent samples have been taken with no problems found)