

2017 Consumer Confidence Report for Public Water System TRAVIS COUNTY WCID 19

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

TRAVIS COUNTY WCID 19 provides surface water and ground water from Travis County MUD 4 intake Lake Austin located in Travis County.

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (512) 402-1990.

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 MFL	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. 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.

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 number 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>.

2017 Water Quality Test Results for PWS #2270207

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	0.34	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2017	0	15	9.4	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

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	20	6.1 - 17.6	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2017	52	14.1 - 55.1	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Inorganic Contaminants	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2017	0.35	0.35 - 0.35	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Disinfectant Residual

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chloramines	2017	1.31	0.50 – 3.40	4	4	ppm	N	Water additive used to control microbes.

Coliform Bacteria

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

Information about Source Water

TRAVIS COUNTY WCID 19 purchases water from TRAVIS COUNTY MUD 4. TRAVIS COUNTY MUD 4 provides purchase surface water from Lake Austin located in Travis County.

'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.'

Travis County MUD 4 Provider Data:

Inorganic Contaminants

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Source of Contaminant
2017	Arsenic (ppm)	<0.002	<0.002	<0.002	0.01	0.01	Naturally occurring element in minerals and metals. Poisonous to multicellular life.
2013	Asbestos (MFL)	<0.1987	<0.1987	<0.1987	7	7	Decay of asbestos cement in water mains; erosion of natural deposits.
2017	Barium (ppm)	0.0579	0.056	0.0599	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2017	Cyanide (ppm)	0.07	0.03	0.11	0.2	0.2	Discharge from industrial chemical factories.
2017	Fluoride (ppm)	0.21	0.21	0.21	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2017	Mercury (ppm)	<0.0004	<0.0004	<0.0004	0.002	0.002	Naturally occurring element. Poisonous to multicellular life.
2017	Nickel (ppm)	0.00125	0.0012	0.0013	n/a	n/a	Leaching from metals in pipes.
2017	Nitrate* (ppm)	0.235	0.23	0.24	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2016	Nitrite* (ppm)	<0.01	<0.01	<0.01	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2017	Selenium (ppm)	<0.003	<0.003	<0.003	0.05	0.05	Naturally occurring trace mineral. Promotes good health in small amounts, but can be toxic.

*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. If you are caring for an infant you should ask advice from your health care provider

Organic Contaminants

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Source of Contaminant
2017	Atrazine (ppb)	0.15	0.15	0.15	3	3	Herbicide runoff.
2017	Simazine (ppb)	<0.07	<0.07	<0.07	4.0	4.0	Herbicide runoff
2017	Toxaphene (ppb)	<1.0	<1.0	<1.0	3.0	3.0	Insecticide.
2017	Total Xylenes (ppb)	0.5	<0.5	0.6	3.0	3.0	Discharge from petroleum and chemical factories.

Volatile Organic Contaminants

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Source of Contaminant
2017	Benzene (ppb)	<0.5	<0.5	<0.5	5.0	5.0	Petrochemical runoff.
2017	Vinyl Chloride (ppb)	<0.5	<0.5	<0.5	2	2	Leaching from PVC piping; Discharge of plastic factories

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Source of Disinfectant
2017	Chloramines (ppm)	2.34	0.8	3.5	4.0	<4.0	Disinfectant used to control microbes

Disinfection Byproducts

Year	Contaminant	LR Annual Average	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
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2017	Total Haloacetic Acids	6	2.3	13.1	60	ppb	Byproduct of drinking water disinfection.
2017	Total Trihalomethanes	9	3.8	18	80	ppb	Byproduct of drinking water disinfection.

Unregulated Contaminants

Bromoform, chloroform, bromodichloromethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.							
Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant	
2017	Chloroform	4.28	2.1	10.4	ppb	Byproduct of drinking water disinfection.	
2017	Bromoform	<1	<1	<1	ppb	Byproduct of drinking water disinfection.	
2017	Bromodichloromethane	2.8	1.6	5.6	ppb	Byproduct of drinking water disinfection.	
2017	Dibromochloromethane	1.16	<1	2	ppb	Byproduct of drinking water disinfection.	

Lead and Copper

Year	Contaminant	The 90 th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2015	Lead	0.9	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2015	Copper	0.2	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Required Additional Health Information for Lead

"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 material used 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>."

Turbidity

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium 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.						
Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Source of Contaminant	
2017	Turbidity (NTU)	0.29	100	0.3	Soil runoff.	

Total Organic Carbon

Total organic carbon (TOC) has 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.						
Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2017	Source Water	5.876	3.91	10.7	ppm	Naturally present in the environment
2017	Drinking Water	4.446	2.69	6.59	ppm	Naturally present in the environment

Total Coliform REPORTED MONTHLY TESTS FOUND NO TOTAL COLIFORM BACTERIA
Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

Secondary and Other Constituents Not Regulated (No associated adverse health effects)

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Limit	Source of Contaminant
2017	Aluminum (ppm)	0.1965	0.133	0.26	0.2	Abundant naturally occurring element.
2017	Bicarbonate (ppm)	181.5	176	187	NA	Corrosion of carbonate rocks such as limestone.
2017	Calcium (ppm)	42.55	42.5	42.6	NA	Abundant naturally occurring element.
2017	Chloride (ppm)	32	31	33	300	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2017	Iron (ppm)	<0.01	<0.01	<0.01	0.3	Abundant naturally occurring element.
2017	Magnesium (ppm)	17.75	17.7	17.8	NA	Abundant naturally occurring element.
2017	Manganese (ppm)	0.0038	0.0014	0.0062	0.05	Abundant naturally occurring element.
2012	pH (units)	7.7	7.7	7.7	>7.0	Measure of corrosivity of water.
2017	Sodium (ppm)	17.65	17.6	17.7	NA	Erosion of natural deposits; byproduct of oil field activity.
2017	Sulfate (ppm)	34.5	32	37	300	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2017	Total Alkalinity as CaCO ₃ (ppm)	148.5	144	153	NA	Naturally occurring soluble mineral salts.
2017	Total Dissolved Solids (ppm)	275	274	276	1000	Total dissolved mineral constituents in water.
2017	Total Hardness as CaCO ₃ (ppm)	179	179	179	NA	Naturally occurring calcium.
2017	Zinc (ppm)	0.0094	<0.005	0.0147	5	Moderately abundant naturally occurring element; used in the metal industry.

P.W.S. #2270325