



3812 Eck Lane
Austin, Texas 78734

Source Water Assessment

The Texas Commission on Environmental Quality (TCEQ), the state water regulatory agency, completed a source water assessment (SWA) for Lake Travis in 2014. The SWA is a report on the susceptibility of public drinking water systems to 227 drinking water contaminants. The results include a high, medium, or low rating for each contaminant, as well as a list of potential sources of contamination. Our report lists low susceptibility for asbestos and disinfection by-products, medium for Radio-chemicals, minerals, microbes and cyanide, and high for metals and volatile and synthetic organic chemicals. The sampling requirements for our water system are based on this susceptibility and previous sample data. If there were any detection of these contaminants they will be noted in this Consumer Confidence Report. A copy of this report is available at the District Office at 3812 Eck Lane. You can access more information on the internet at www.tceq.texas.gov/drinkingwater/SWAP and www.epa.gov/dwstandardsregulations.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk. 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 can acquire naturally occurring minerals, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;
- Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 stormwater runoff, and residential uses;
- Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and which may also come from gas stations, urban stormwater runoff, and septic systems;
- Radioactive Contaminants**, which can be naturally occurring or may be the result of oil and gas production and mining activities; and
- Secondary 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 our business office. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Community Participation & Questions?

We want our customers to be informed about their water utility. You are invited to attend regular board of directors meetings on the third Thursday of each month, beginning at 6 p.m. at the District Office at 3812 Eck Lane. This report is posted at <http://goo.gl/7G9w2F> or available in paper by request. For information about this report, or for any questions relating to your drinking water, please call Thurman Carlisle, Water Operations Supervisor, at (512) 801-3445, email: tcarlisle@wcid17.org.

3812 Eck Lane
Austin, Texas 78734
(512) 266-1111
Website: www.wcid17.org

Annual WATER QUALITY REPORT

Reporting Year 2016

Presented by:
Travis County Water Control and
Improvement District No. 17

PWS ID#:TX2270027

Our Drinking Water Meets or Exceeds All Standards

Travis County Water Control and Improvement District No. 17 is a nonprofit public utility. The Board of Directors and Staff are committed to supplying the best possible drinking water to our customers. We live and work here, we are your neighbors, we drink the water and our families do also.

We encourage you to share your thoughts with us on the information contained in this report. Should you ever have any questions or concerns about your water, we are always available to assist you. Our drinking water is obtained from Lake Travis and as the charts on these pages demonstrate, the District was in full compliance with the State of Texas and the EPA national primary drinking water regulations during the 12-month period covered by this report, and we continue to meet all standards.

Where Does Our Water Come From?

Water District 17 customers are fortunate because we enjoy an exceptionally clean surface water supply from Lake Travis. The Colorado River watershed that feeds Lake Travis reaches many miles upstream, passing through agricultural fields as well as urban areas. The raw water is processed at the Eck Lane Water Treatment Plant or the Mansfield Water Treatment Plant, where it is filtered through state-of-the-art microfiltration membranes. Microfiltration rejects particles larger than 0.075 microns and can filter out Giardia cysts, Cryptosporidium, bacteria, and about 68% of viruses.

The water is then treated with chlorine and ammonia to disinfect and remove any residual harmful contaminants, and a small amount of fluoride is added to prevent tooth decay. Water quality is monitored continuously to ensure it is within standards for low turbidity and proper disinfection levels.

Important Health Information

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; those 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 provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (800) 426-4791.

ESTA REPORTE INCLUYE INFORMACION IMPORTANTE SOBRE SU AGUA PARA TOMAR. PARA ASISTENCIA EN ESPANOL, FAVOR DE LLAMAR AL TELEFONO (512)266-1111

Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows ONLY THOSE CONTAMINANTS THAT WERE DETECTED in the water samples. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium Total (ppm)	2016	2.0	NA	0.0501	0.0498-0.0504	No	Runoff/leaching from natural deposits
Copper (ppm)	2016	1.3	1.3	0.00665	0.0020-0.131	No	Erosion of natural deposits
Fluoride (ppm)	2016	4	4	0.59	0.1-0.9	No	Erosion of natural deposits; Additive which promotes strong teeth; Discharge from aluminum and fertilizer factories
Nickel (ppm)	2016	0.1	NA	0.00155	0.0014-0.0017	No	Runoff/leaching from natural deposits
Nitrate (ppm)	2016	10	10	0.11	0.05-0.29	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppm)	2016	1	1	<0.01	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Zinc (ppm)	2016	5.0	NA	0.00895	0.0089-0.0090	No	Runoff/leaching from natural deposits
RADIOACTIVITY Gross Beta Particle Activity (Pci/L)	2016	50	NA	4.1	NA	No	Naturally present in the environment

LEAD AND COPPER

Water District 17 tested water in 30 locations throughout the District, mostly homes built prior to 1990 when lead in plumbing was banned. As shown in this report, District 17 water does not have lead in excess of established EPA maximum allowable levels, however, 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. Water District 17 is responsible for providing high quality drinking water, but 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>.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Lead (ppb)	2016*	15	0	3.97	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	2016*	1.3	1.3	0.347	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

*District 17 is only required to test for lead and copper every 3 years.

TURBIDITY

Turbidity is a measure of the cloudiness of the water; it has no health effects, per se, however, turbidity can interfere with disinfection and provide a medium for microbial growth. Low turbidity is a good indicator of an effective filtration system.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL	MCLG	AVERAGE AMOUNT DETECTED	RANGE LOW - HIGH	VIOLATION	TYPICAL SOURCE
Turbidity (NTU)	2016	TT req'd if >1 NTU	NA	0.02	0.02-0.08z	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2016	TT req'd if <95% meet limit of 0.3 NTU	NA	100% Met Limit	NA	No	Soil runoff

TOTAL COLIFORM

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is rapid and easy. While not disease-causing organisms themselves, coliforms are often found in association with other microbes that are capable of causing disease. Absence of coliforms in water is a good indication that the water is microbiologically safe for human consumption.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL	MCLG	AMOUNT DETECTED	VIOLATION	TYPICAL SOURCE
Total Coliform Bacteria (% of positive samples)	2016	More than 2 positive samples per month	NA	1*	No	Naturally present in the environment

*All repeat samples were negative.

DISINFECTANT

Disinfectant residuals are required to keep the water free from harmful microbial contaminants, levels below the Maximum Disinfectant Level have no known or expected health risks.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MRDL	MRDLG	AVERAGE AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloramines (ppm)	2016	4	4	2.84	0.73 - 3.8	No	Water additive used to control microbes

DISINFECTANT BY-PRODUCTS

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL	MCLG	HIGHEST LEVEL DETECTED	RANGE OF LEVELS	HIGHEST LRAA	VIOLATION	SOURCE
TTHMs [Total Trihalo-methanes] (ppb)	2016	80	NA	50.6	22.4-50.6	40.8	No	By-product of drinking water disinfection
Haloacetic Acids [HHA] (ppb)	2016	60	NA	22	1.7-22.0	16.8	No	By-product of drinking water disinfection

SECONDARY AND OTHER CONTAMINANTS - NOT REGULATED

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	AMOUNT DETECTED	RANGE LOW - HIGH	TYPICAL SOURCE
Alkalinity (ppm)	2016	NA	156	105-204	Naturally occurring soluble mineral salts
Bicarbonate (ppm)	2016	NA	188	178-198	Corrosion of limestone
Calcium (ppm)	2016	NA	40.6	40-46.1	Naturally occurring element
Chloride (ppm)	2016	250	32.5	31-34	Runoff leaching of natural deposits
Hardness* (ppm)	2016	NA	204.3	188-222	Measure of calcium and magnesium
Magnesium (ppm)	2016	NA	18.25	17.1-19.4	Naturally occurring element
pH (units)	2016	6.5-8.5	7.97	7.7-8.5	0-14 scale measure of acidity or alkalinity of water. 1 = very acidic; 14 = very alkaline; 7 = neutral
Potassium (ppm)	2016	NA	3.98	3.64-4.32	
Sodium (ppm)	2016	300	18.5	16.8-19.5	Erosion of natural deposits
Total Dissolved Solids (ppm)	2016	1000	244.5	238-251	Total dissolved mineral constituents in water

* District 17 water is considered moderately hard to hard. The range of 188-222 ppm converts to 10.9-12.98 grains per gallon with an average of 11.94 grains per gallon

WATER LOSS

As reported in the water loss audit to the Texas Water Development Board during the period January 1 - December 31, 2016, District 17 system lost an estimated 204,489,948 gallons of water or an average of 9.85 percent.

DEFINITIONS

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

LRAA (Locational Running Annual Average): The highest running average detected at any specific location.

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goals): The level of a contaminant in drinking water below which there is not known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that additions of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter.)

ppm (parts per million): One part substance per million parts water (or milligrams per liter.)

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.