



Austin Water strives to deliver drinking water of the highest quality, with exceptional value and reliability. This annual Drinking Water Quality Report provides information on the City of Austin's drinking water.

Austin Water faced unprecedented challenges in October 2018 with treating water from the historic Llano River flood event. During this time, Austin Water did not meet the turbidity standards. However, the turbidity standards were met in all other months in 2018.

Austin's drinking water met all other national and state water quality standards in 2018. The U.S. Environmental Protection Agency (EPA) requires that all drinking water suppliers provide a water quality report to their customers on an annual basis.

There are many opportunities for public participation. The Austin City Council meets on Thursdays. Information on these meetings can be found by visiting [austintexas.gov/department/city-council/council-meetings](http://austintexas.gov/department/city-council/council-meetings).

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al 512-972-0155.

## WATER SOURCES

Customers of the City of Austin receive their drinking water from three water treatment plants that pump surface water from the Lower Colorado River as it flows through Lake Travis and Lake Austin. The City of Austin treats and filters the water according to federal and state standards to remove any possible harmful contaminants.

The sources of drinking water nationwide (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 can be polluted by animals or human activity.

The Lower Colorado River watershed reaches many miles upstream, passing through agricultural and urban areas. Contaminants that may be present in the source water include:

**Microbial contaminants**, such as viruses and bacteria;

**Inorganic contaminants**, such as salts and metals;

**Pesticides and herbicides**, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses;

**Organic chemicals**, from industrial or petroleum use,

**Radioactive materials**, which can be naturally-occurring.

EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems to ensure that tap water is safe to drink. The Food and Drug Administration 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 a cause for health concerns. For concerns with taste, odor, or color of drinking water, contact Austin Water at 512-972-0021.

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 the 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**.

## SOURCE WATER ASSESSMENT

The Texas Commission on Environmental Quality (TCEQ) completed an assessment of our source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for the water system are based on this susceptibility and previous sample data. Any detection of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts of our system contact Austin Water's Regulatory Manager at 512-972-0021.

## SPECIAL NOTICE

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 800-426-4791.

All surface water sources are known to be susceptible to contamination by *Cryptosporidium*. Because of this, Austin Water monitors for *Cryptosporidium* in the lake water. Of the 12 total samples collected in 2018, results from 11 samples reported no detection and one sample reported a detection of one oocyst.

## DRINKING WATER REGULATIONS

The extreme conditions in October 2018 brought on by the Llano River flood event caused some abnormally high turbidity readings as indicated in the "Regulated at the Treatment Plant" section of this Consumer Confidence Report. As such, Austin Water did not meet the turbidity standards in October. However, the turbidity standard was met during the other 11 months. Austin Water was in full compliance with all other State of Texas and EPA national primary drinking water regulations during the 12-month period covered by this report.

## FLUORIDE AND INFANTS

Water fluoridated at a level optimal for oral health (as is used in Austin) poses no known health risks for infants. However, some children may develop enamel fluorosis, a cosmetic condition where faint white markings or streaks may appear on the teeth. Fluorosis can affect both baby teeth and permanent teeth while they're forming under the gums.

If you're concerned about fluorosis, you can minimize your baby's exposure to fluoride in several ways. Breast feeding is the best source of nutrition for infants. If breast feeding is not possible, you can minimize fluoride exposure by using ready-to-feed formula. You can also alternate tap water and non-fluoridated water for formula preparation, or mix powdered or liquid infant formula concentrate with low-fluoride water most or all of the time. If you use only non-fluoridated water, such as purified, deionized or distilled water to prepare your baby's formula, your doctor may recommend fluoride supplements beginning at six months.

## WATER LOSS

The Infrastructure Leak Index (ILI) measures the efficiency of water loss control efforts. It is calculated by taking the real losses (water lost due to leaks) and dividing them by the unavoidable real losses, the theoretical level of minimum leakage calculated by American Water Works Association Standards. For Austin Water's 2018 ILI, please visit [austinwater.org/waterquality](http://austinwater.org/waterquality).

## January - December 2018



Substance (Sampled for in 2018 unless noted differently)	Highest Level Allowed (EPA's MCL)	City of Austin Drinking Water			Ideal Goals (EPA's MCLG)	Possible Sources
Regulated at the Treatment Plant						
		Low	High	Average		
Barium (ppm)	2	0.01	0.01	0.01	2	Natural geology
Copper (ppm)	AL=1.3	<0.002	.009	0.004	1.3	Household plumbing
Fluoride (ppm)	4	0.69	0.84	0.78	4	Natural geology, supplement
Nitrate (ppm)	10	0.04	0.14	0.10	10	Runoff from fertilizer use
Cyanide (ppb)	200	<70	130	90	200	Discharge from manufacturing
Beta/photon emitters (pci/L)	50	4.8	4.8	4.8	0	Decay of natural and man-made deposits
Turbidity (ntu)-(clarity)	TT (95% of the samples must be at or below 0.3 ntu)	0.01	3.50	0.05	Austin Water measures turbidity (cloudiness of the water) as an indicator of the effectiveness of our filtration system.	
In October, Austin Water did not continuously meet the turbidity standards due to extreme flooding and historically high raw water turbidity levels, with 85% of the readings below 0.3 NTU but 3 readings above 1.0 NTU.**						
TOC Removal Ratio*	Annual avg ≥1	1.26	2.14	1.70		
*The TOC removal ratio is the percent of TOC removed through the treatment process divided by the percent of TOC required by TCEQ to be removed.						
Total organic carbon (TOC) has no adverse health effects. Total organic carbon provides a medium for the formation of disinfection byproducts when water is disinfected. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAAs) which are reported below.						
Regulated in the Distribution System						
Chloramines (mg/l)	4.0 (MRDL)	0.36	3.50	2.30	≤4 (MRDLG)	Disinfectant used to control microbes
Haloacetic Acids (5) (ppb)	Yearly Average 60	8.8	16.7	12.5	not applicable	Byproduct of drinking water disinfection
Total Trihalomethanes* (ppb)	Yearly average 80	23.5	47.6	32.9	not applicable	Byproduct of drinking water disinfection
*Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.						
Lead and Copper Testing is done at the customer's taps. Testing is done every 3 years.						
Copper (ppm)	AL=1.3	90% of all samples tested were <0.02 ppm. None exceeded 1.3			1.3	Household plumbing
Lead (ppb)	AL=15	90% of all samples tested were <1.0 ppb. None exceeded 15			0	Household plumbing
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead occurs in drinking water primarily from materials and components associated with service lines and home plumbing. Austin Water 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 (800-426-4791) or <a href="http://www.epa.gov/safewater/lead">www.epa.gov/safewater/lead</a> .						
Unregulated Contaminants						
Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. Any unregulated contaminants detected are reported in the following table. For additional information and data visit <a href="http://epa.gov">epa.gov</a> , or call the Safe Drinking Water Hotline (800-426-4791).						
Substance	Highest Level Allowed (EPA's MCL)	Low	High	Average	Ideal Goals	Possible Sources
Bromodichloromethane (ppb)	Not Regulated	7.0	15.4	11.0	0	Byproduct of drinking water disinfection
Chlorodibromomethane (ppb)	Not Regulated	2.6	14.3	8.0	60	Byproduct of drinking water disinfection
Chloroform (ppb)	Not Regulated	6.1	21.3	11.7	70	Byproduct of drinking water disinfection
Bromoform (ppb)	Not Regulated	<1	4.3	1.5	0	Byproduct of drinking water disinfection
Dichloroacetic Acid (ppb)	Not Regulated	6.3	11.1	8.1	0	Byproduct of drinking water disinfection
Trichloroacetic Acid (ppb)	Not Regulated	<1.0	3.8	2.4	20	Byproduct of drinking water disinfection
Dibromoacetic Acid (ppb)	Not Regulated	<1.0	4.1	2.2	No MCLG	Byproduct of drinking water disinfection
Bromochloroacetic Acid (ppb)	Not Regulated	2.6	5.9	4.4	No MCLG	Byproduct of drinking water disinfection
Table Key						
<b>AL = Action Level</b> The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow  <b>MCL = Maximum Contamination Level</b> The highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best treatment technology  <b>MCLG = Maximum Contamination Level Goal</b> 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.		<b>MRDL = Maximum Residual Disinfectant Level</b> The highest level of a disinfectant allowed in drinking water. There is evidence that addition of a disinfectant helps control microbial contaminants.  <b>MRDLG = Maximum Residual Disinfectant Level Goal</b> 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			<b>ntu = nephelometric turbidity units</b> (a measure of turbidity) <b>pci/L = picocuries per liter</b> (a measure of radioactivity) <b>ppb = parts per billion</b> or micrograms per liter (µg/l) <b>ppm = parts per million</b> or milligrams per liter (mg/l) <b>TT = Treatment Technique</b> TT is a required process intended to reduce the level of a contaminant in drinking water	
**Austin Water issued a boil water notice covering this period. Staff worked diligently to bring turbidity levels back into compliance before lifting the notice. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Inadequately treated water may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms.						