

A close-up photograph of water being poured from a glass pitcher into a clear glass. The water is captured in mid-pour, creating a dynamic splash and bubbles. The background is softly blurred, showing another glass and a wooden surface.

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2018

Presented By



Este reporte incluye información importante sobre el agua para tomar.
Para asistencia en español, favor de llamar al telefono (940) 458-2571.

PWS ID#: 0610006

Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2018. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available should you ever have any questions or concerns about your water.

Source Water Assessment

The Texas Commission on Environmental Quality (TCEQ) completed an assessment of your source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any contaminants detected will be listed in this Consumer Confidence Report. For more information on source water assessments and protection efforts for our system, contact Jim Bolz, (940) 458-2571. It is important to understand that a susceptibility rating of Higher does not imply poor water quality, only the system's potential to become contaminated within the assessment area. The assessment findings are summarized in the table below.

If you would like a copy of our assessment, please feel free to contact our office during regular business hours at the number provided in this report.

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.



Where Does My Water Come From?

The City of Sanger purchases water from the Upper Trinity Regional Water District (UTRWD), which provides surface water from Lewisville Lake in Denton County. For more information about your sources of water, please refer to the Source Water Assessment Viewer available at <http://www.tceq.texas.gov/gis/swaview>. Further details about sources and source water assessments are available at Drinking Water Watch at <http://dww2.tceq.texas.gov/DWW/>.

SOURCE WATER NAME	TYPE OF WATER	REPORT STATUS	LOCATION
Cherry/2nd	GW	Active	Trinity
South of FM 455	GW	Active	Trinity
McRyenolds Rd	GW	Active	Trinity
Lois Rd	GW	Active	Trinity
Cherry St	GW	Active	Trinity
Keith Dr	GW	Active	Trinity
SW from Upper Trinity RWD through City CC from TX0610213 UTRWD	SW	Active	Trinity

Lead in Home Plumbing

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 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.

How Long Can I Store Drinking Water?

The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria prior to filling up with the tap water the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

Benefits of Chlorination

Disinfection, a chemical process used to control disease-causing microorganisms by killing or inactivating them, is unquestionably the most important step in drinking water treatment. By far the most common method of disinfection in North America is chlorination.

Before communities began routinely treating drinking water with chlorine (starting with Chicago and Jersey City in 1908), cholera, typhoid fever, dysentery, and hepatitis A killed thousands of U.S. residents annually. Drinking water chlorination and filtration have helped to virtually eliminate these diseases in the U.S. Significant strides in public health are directly linked to the adoption of drinking water chlorination. In fact, the filtration of drinking water plus the use of chlorine is probably the most significant public health advancement in human history.

How chlorination works:

Potent Germicide Reduction in the level of many disease-causing microorganisms in drinking water to almost immeasurable levels.

Taste and Odor Reduction of many disagreeable tastes and odors like foul-smelling algae secretions, sulfides, and decaying vegetation.

Biological Growth Elimination of slime bacteria, molds, and algae that commonly grow in water supply reservoirs, on the walls of water mains, and in storage tanks.

Chemical Removal of hydrogen sulfide (which has a rotten egg odor), ammonia, and other nitrogenous compounds that have unpleasant tastes and hinder disinfection. It also helps to remove iron and manganese from raw water.



Water Conservation Tips

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:



- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

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.

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.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Jim Bolz, Water Department Superintendent, at (940) 458-2571.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water. Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring 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.

The percentage of total organic carbon (TOC) removal was measured each month, and the system met all TOC removal requirements set.

LEAD AND COPPER	DATE SAMPLED	MCLG	ACTION LEVEL (AL)	90TH PERCENTILE	# SITES OVER AL	UNITS	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Copper	2018	1.3	1.3	0.096	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2018	0	15	2.6	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.
DISINFECTION BY-PRODUCTS	COLLECTION DATE	HIGHEST LEVEL DETECTED	RANGE OF INDIVIDUAL SAMPLES	MCLG	MCL	UNITS	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Haloacetic Acids (HAA5)	2018	10	0 - 20.7	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	16	0 - 39	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 DETECTED	RANGE OF INDIVIDUAL SAMPLES	MCLG	MCL	UNITS	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Arsenic	09/07/2017	1.5	0 - 1.5	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	09/07/2017	0.014	0.011 - 0.014	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	09/07/2017	1.3	1.3 - 1.3	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	12/13/2017	0.116	0.116 - 0.116	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]	2018	0.408	0 - 0.408	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

RADIOACTIVE CONTAMINANTS	COLLECTION DATE	HIGHEST LEVEL DETECTED	RANGE OF INDIVIDUAL SAMPLES	MCLG	MCL	UNITS	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Combined Radium 226/228	09/07/2017	1.34	0 - 1.34	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	09/07/2017	4.5	4.1 - 4.5	0	15	pCi/L	N	Erosion of natural deposits.

DISINFECTANT RESIDUAL	YEAR	AVERAGE LEVEL	RANGE OF LEVELS DETECTED	MRDL	MRDLG	UNIT OF MEASURE	VIOLATION (Y/N)	SOURCE IN DRINKING WATER
Chlorine	2018	1.29	.41-2.5	4	4	ppm	No	Water additive used to control microbes.

Definitions

90th Percentile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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 average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.

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 Goal): 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.

MFL: Million fibers per liter (a measure of asbestos)

MRDL (Maximum Residual Disinfectant Level): 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.

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.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU: Nephelometric turbidity units (a measure of turbidity)

pCi/L (picocuries per liter): A measure of radioactivity.

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).

ppq: Parts per quadrillion, or pictograms 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.

