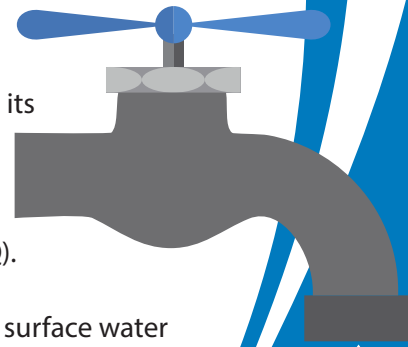




2022 WATER QUALITY REPORT



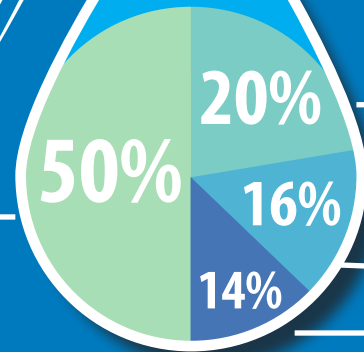
Where Lubbock's Water Comes From



The Water Utilities Department's primary mission is to deliver safe, clean water to its customers. Water Utilities operates the city's water system, which includes the treatment of water that is distributed throughout the City. The water treatment employees are dedicated to producing water that meets or exceeds strict water quality regulations set by the Texas Commission on Environmental Quality (TCEQ).

Lubbock's water supply comes from diverse and resilient sources, including both surface water and groundwater. Groundwater sources amount to 66% of Lubbock's water usage. The Ogallala Aquifer provides the groundwater that is supplied by Roberts County Well Field and Bailey County Well Field. Lake Alan Henry and Lake Meredith provide the surface water that accounts for 34% of Lubbock's water usage. City owned sources supplied 36% of the Lubbock's 2022 water usage. The City purchased 64% of the water used from Canadian River Municipal Water Authority (CRMWA).

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (806) 775-3836 or enviar un correo electrónico a watereducation@mylubbock.us.



Roberts County Well Field (RCWF)

Canadian River Municipal Water Authority (CRMWA) manages and operates RCWF in Roberts County, Texas. RCWF is approximately 150 miles northeast of Lubbock. The City has received water from RCWF since the early 2000s.

Lake Alan Henry (LAH)

The City owns and operates LAH in Garza County, Texas. LAH is approximately 65 miles southeast of Lubbock. LAH is a reservoir formed by Montford Dam on the Double Mountain Fork of the Brazos River. The City began using water from LAH in August 2012.

Bailey County Well Field (BCWF)

Since the 1950s, the City has owned and operated BCWF in Bailey and Lamb Counties. BCWF is approximately 75 miles northwest of Lubbock. The City owns more than 80,000 acres of water rights in BCWF. There are currently 175 active wells with an average well production capacity of 200 gallons per minute.

Lake Meredith (LM)

CRMWA manages and operates LM in Sanford, Texas. LM is approximately 160 miles north of Lubbock. LM is a reservoir formed by Sanford Dam on the Canadian River. The City has received water from LM since the 1960s.



The Future of Lubbock's Water

Lubbock is currently planning the development of a new water source. Jim Bertram Lake 7 will hold 20,000 acre feet of water with an initial water yield of 11,975 acre feet per year (10 million gallons per day). It is estimated to be completed by 2035, or sooner.

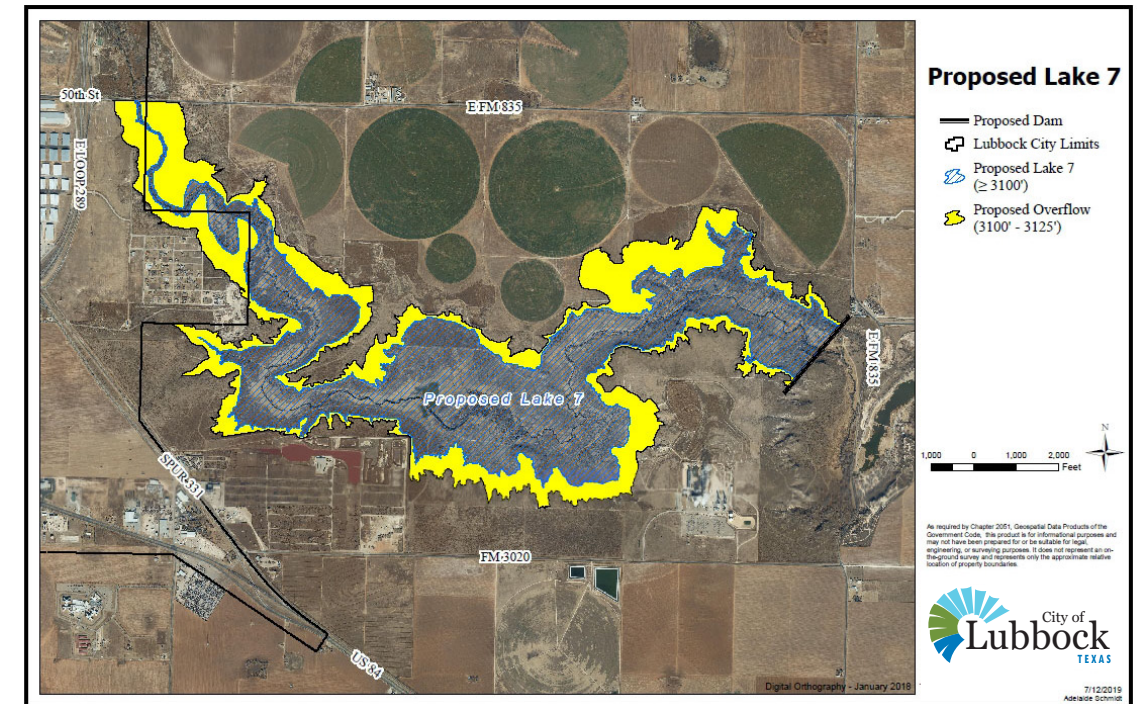
Lake 7 will be filled by developed water, storm water, and reuse water. Developed water from playa lakes will not reach the Brazos River Basin without the City's efforts.

Reuse water will be provided by the City's water reclamation plants. This is a project that will help Lubbock to continue supplying safe and reliable water as the city continues to grow. It is part of Lubbock's 100 year plan to ensure water for the future.

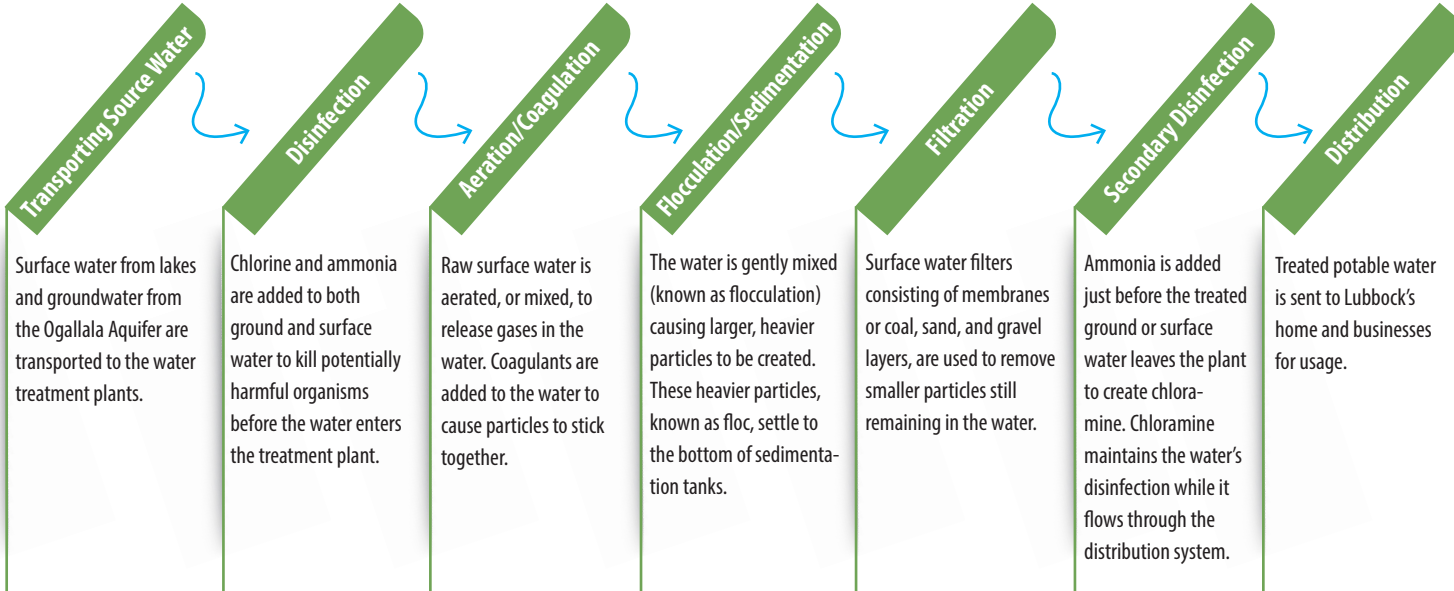
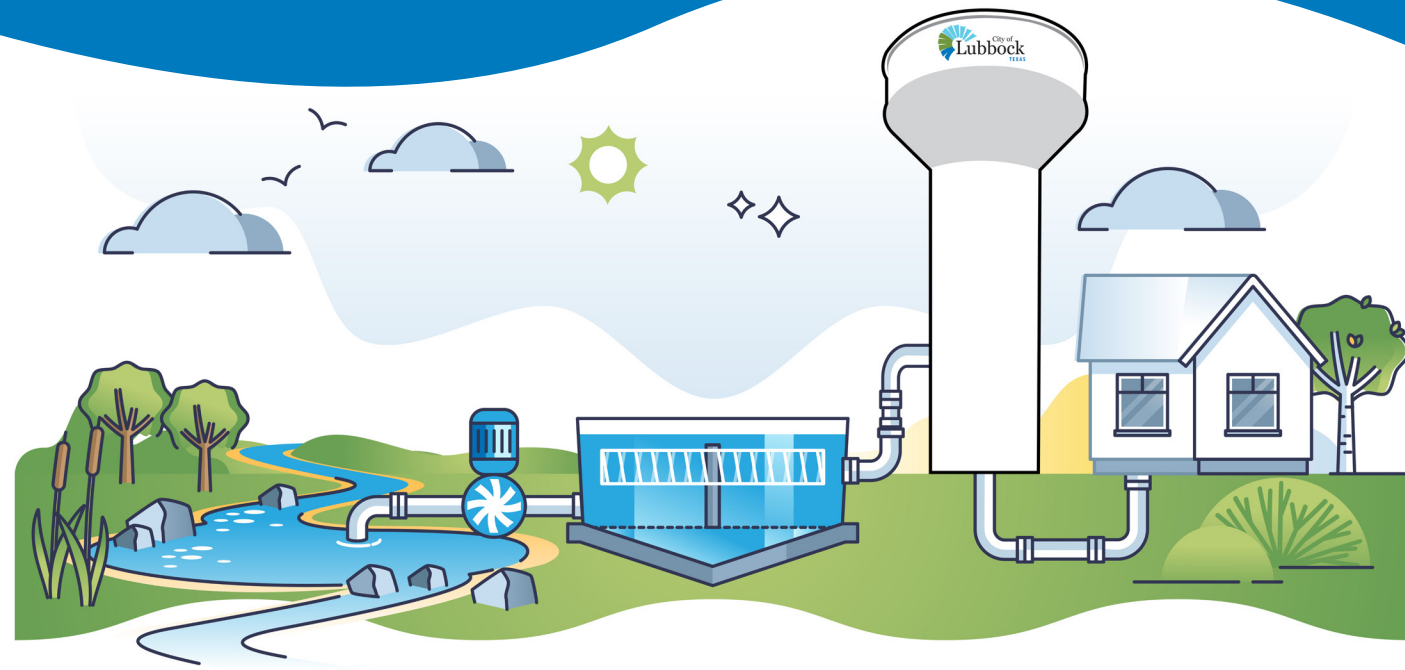
For more information about the proposed Lake 7 visit mylubbock.us/proposedlake7

Special Information for People with Immune System Deficiencies

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.



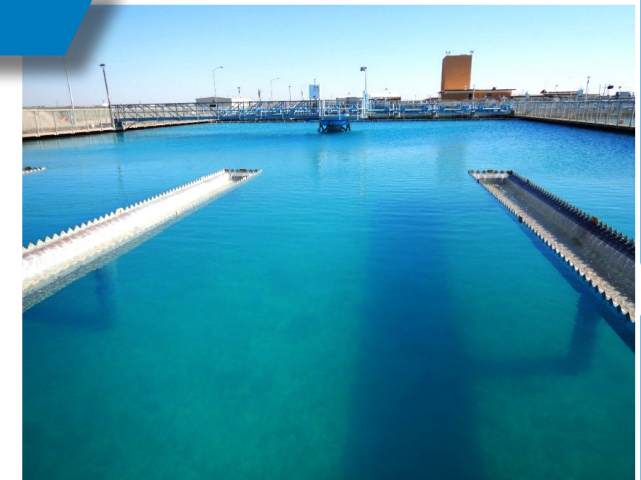
How Your Water is Treated?



Where is it Treated?

North Water Treatment Plant

This facility was built in 1965. It treats water from Lake Meredith and Roberts County Well Field. The water is treated by using sand, gravel, and coal filter to remove small particles.



South Water Treatment Plant

This facility was built in 2012. It treats water from Lake Alan Henry. The water is treated by using membrane filters that remove small particles and impurities.



Bailey County Well Field

This facility treats the water that is pumped from the Ogallala Aquifer. The water is disinfected near the well field, flows to northwest Lubbock, and enters the City's distribution system.



Drinking Water Analysis

WATER QUALITY REPORT DATA - 2022

Contaminant	Year of Range	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Contaminant Sources	Violation
SUBSTANCES REGULATED AT THE TREATMENT PLANT									
BETA/PHOTON EMITTERS	2020	5.6	5.6	5.6	50 *	0	pCi/L	Decay of natural and man-made deposits	NO
ALPHA EMITTERS	2017	4.5	2	7	15	0	pCi/L	Erosion of natural deposits	NO
URANIUM	2020	2.0	2.0	2.0	30	0	ppb	Erosion of natural deposits	NO
ARSENIC	2022	2.23	1.40	3.6	10	0	ppb	Erosion of natural deposits; runoff from orchards	NO
BARIUM	2022	0.137	0.100	0.20	2	2	ppm	Erosion of natural deposits	NO
CHROMIUM	2022	3.17	0	5.5	100	100	ppb	Erosion of natural deposits	NO
CYANIDE	2022	123	N/A	N/A	200	200	ppb	Discharge from steel/metal, plastic, and fertilizer factories	NO
FLUORIDE	2022	0.772	0.655	0.889	4	4	ppm	Erosion of natural deposits	NO
NITRATE	2022	0.954	0.124	1.43	10	10	ppm	Fertilizer runoff, septic tank leachate, sewage, erosion	NO
TURBIDITY	2022	0.044	0.031	0.067	*** < 0.3 (TT)	0	NTU	Soil runoff	NO
TOTAL ORGANIC CARBON ^{^^}	2022	1.39	1.14	1.67	TT	TT	ppm	Naturally present in environment	NO
TOTAL CHLORINE	2022	2.70	0.20	3.80	MRDLG=4.0	MRDLG=4.0	ppm	Disinfectant used to control microbes	NO
CHLORITE	2022	0.384	0.102	0.664	1	0.8	ppm	By- product of drinking water disinfection	NO
REGULATED IN THE DISTRIBUTION SYSTEM									
***TOTAL TRIHALOMETHANES	2022	14.1	5.27	42.4 [^]	80	N/A	ppb	By- product of drinking water chlorination	NO
****HALOACETIC ACIDS (5)	2022	6.37	1.4	14 [^]	60	N/A	ppb	By- product of drinking water chlorination	NO
*****TOTAL COLIFORM	2022	0	0	0	5% of monthly samples are positive	0	**P/A	Naturally present in environment	NO
REGULATED AT THE CUSTOMER'S TAP									
		Number of Samples	Action Level (AL)	90th Percentile	Number of Sites over AL				
Lead	2022	51	15	1.1	1	0	ppb	Natural deposit erosion; plumbing system corrosion	NO
Out of 51 samples collected, 50 were below the AL of 15 ppb & 1 exceeded the AL at 16.8 ppb.									
COPPER	2022	51	1.3	0.092	0	1.3	ppm	Natural deposit erosion; plumbing system corrosion	NO
Out of 51 samples collected, all were below the AL of 1.3 ppm.									
ADDITIONAL MONITORING AT WATER TREATMENT TAP									
ALUMINUM	2022	0.058	0.009	0.130	0.05-0.2 ^{^^}	N/A	ppm	Water Treatment Chemical	N/A
CHLORIDE	2022	236	213	258	300 ^{^^}	N/A	ppm	Naturally occurring	N/A
SULFATE	2022	107	102	112	300 ^{^^}	N/A	ppm	Naturally occurring	N/A
TOTAL DISSOLVED SOLIDS	2022	698	654	742	1000 ^{^^}	N/A	ppm	Naturally occurring	N/A
AMMONIA	2022	0.179	0.110	0.260	Not Regulated	N/A	ppm	Water Treatment Chemical	N/A
CALCIUM	2022	49.4	30.3	62	Not Regulated	N/A	ppm	Naturally occurring	N/A
MAGNESIUM	2022	18.9	11.4	27.4	Not Regulated	N/A	ppm	Naturally occurring	N/A
POTASSIUM	2022	5.52	5.15	6.04	Not Regulated	N/A	ppm	Naturally occurring	N/A
SODIUM	2022	135	40.8	206	Not Regulated	N/A	ppm	Naturally occurring	N/A
HARDNESS	2022	201	123	252	Not Regulated	N/A	ppm	Naturally occurring	N/A
CONDUCTANCE	2022	1270	1210	1330	Not Regulated	N/A	µmho/cm	Naturally occurring	N/A
TOTAL ALKALINITY	2022	180	172	187	Not Regulated	N/A	ppm	Naturally occurring	N/A

Abbreviations & Definitions

Action Level (AL)- 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 (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 (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 (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 (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 measurement of turbidity)

pCi/L- picocuries per Liter (a measurement of radioactivity)

ppb- micrograms per liter or parts per billion

ppm- milligrams per liter or parts per million

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.

Turbidity- A measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

The state allows us to monitor for some substances less than once per year because the concentrations of these substances do not change frequently. Some of our data, though representative, are more than one year old.

*The MCL for beta/photon emitters is 4 mrem/year. The EPA considers 50 pCi/L to be the level of concern for beta particles.

**Note: 100% of plant turbidity meets the <0.3 NTU MCL

***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.

****The value in the Highest Level or Average Detected column is the highest average of all HAAS sample results collected at a location over a year.

*****Results reported as (Presence/Absence). Presence is defined as total coliforms found (positive). Absence is defined as no total coliforms found (negative).

[^]Highest Locational Running Annual Average

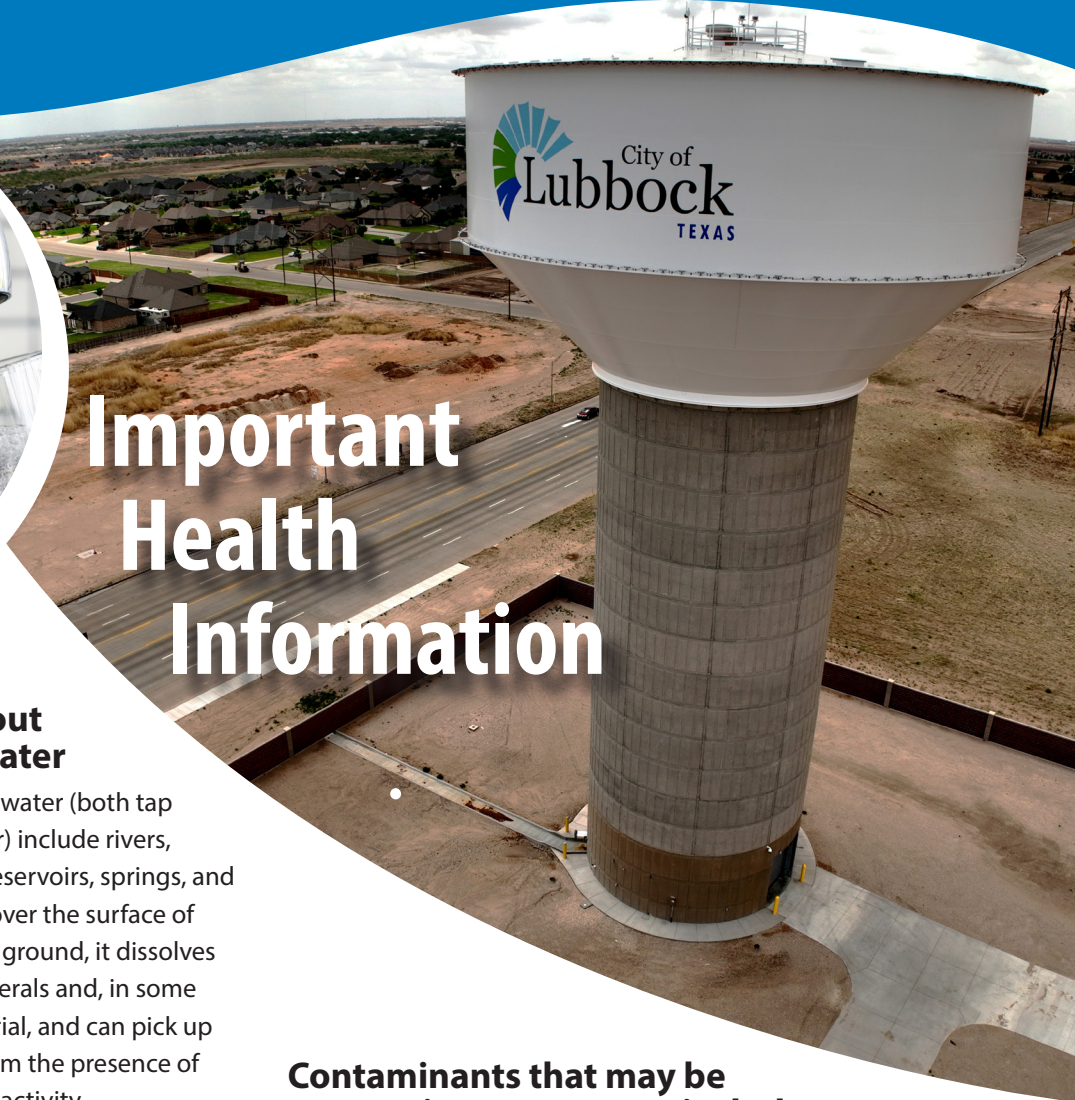
^{^^}Secondary Constituent Levels set by the Texas Commission of Environmental Quality.

^{^^^}The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Safe Drinking Water Hotline: (800) 426-4791 | City of Lubbock Water Treatment Lab: (806) 775-2614



Important Health Information



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 Environmental Protection Agency's (EPA) 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 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 can also come from gas stations, urban stormwater 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. Food and Drug Administration (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.

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. 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>.

Arsenic

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Nitrate

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. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

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 is based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system contact Michael Lowe at (806) 775-2616.



Water Quality and Pipe Material

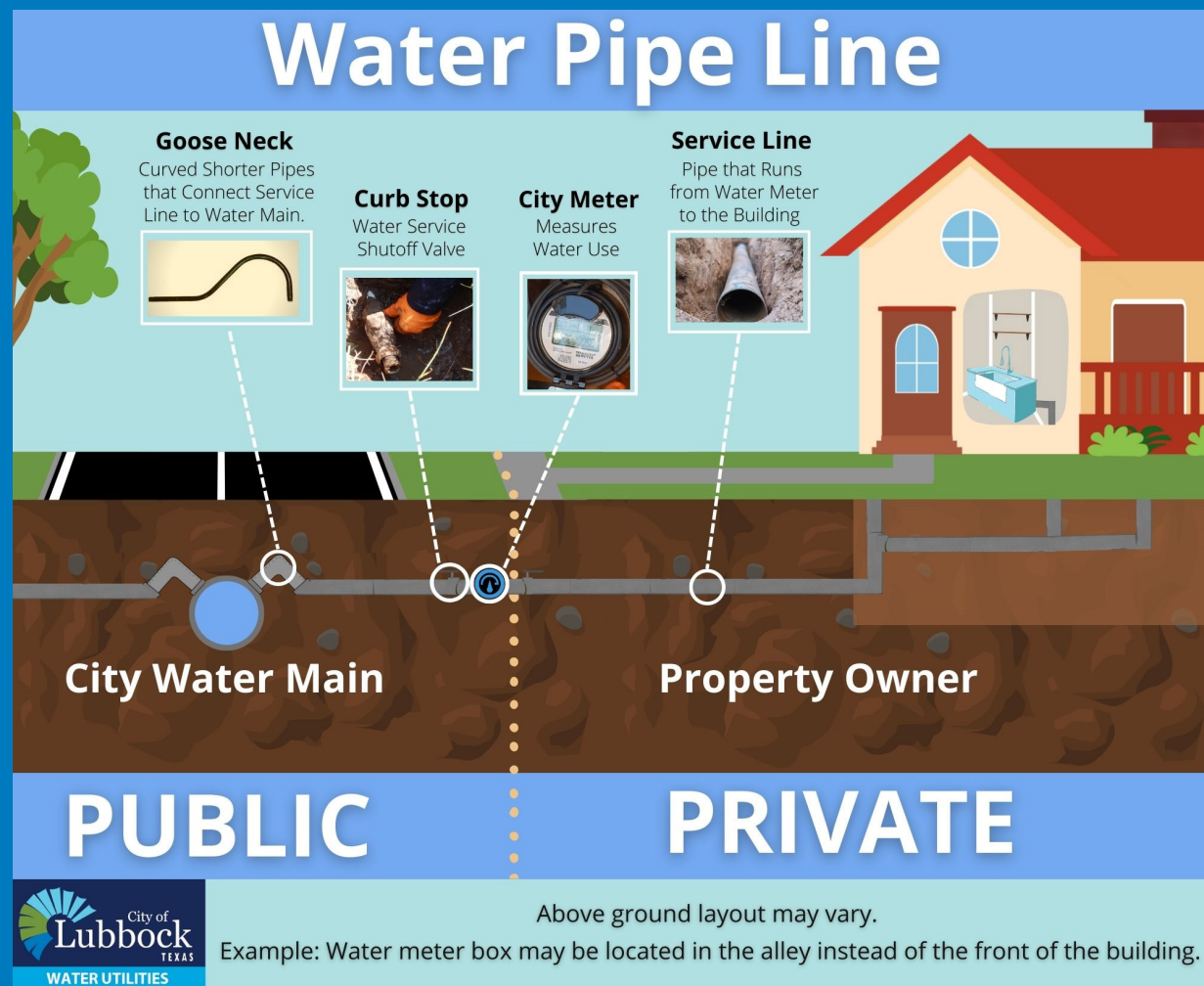
Overview

The City of Lubbock's Water Utilities Department takes delivering high-quality, safe water to our customers seriously.

Water Quality and Pipe Material

A water service line is an underground pipe that connects your property to the City's water main and distribution system.

Water staff maintain over 1,200 miles of water distribution lines inside the City limits. The City is responsible for the water quality and pipe material on the City's side of the water meter, while the building or homeowner is responsible for the service line pipe material on their side of the meter.



Understanding Pipe Materials

The City provides safe drinking water through its distribution system, but the quality of water can be affected when it passes through the piping in your home or building. Building piping that distributes water to taps can be made of various materials. The materials of pipes, pipe fittings, solder, and faucets, and fittings can potentially affect the quality of your water. Metal pipe materials may become corroded over time and cause water quality issues, including contamination. As water passes through a building or home piping system, contaminants from the piping can be discharged at faucets and other fixtures.

Lead



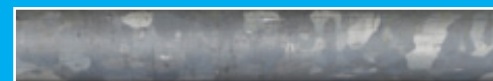
Lead pipes were commonly used before they were banned from new construction in 1986. Lead pipe has a dull silver-gray color. One method of testing a pipe to determine if it is lead is to use a strong magnet. If the magnet does not cling to the pipe then it may be lead. You can also test for lead piping by using a penny: if the penny scratches the pipe then it is likely a lead pipe.

Copper



A magnet will not stick to a copper pipe. Copper pipes look similar to the color of a penny and may also have areas of light green on the surface. Under some conditions, copper from the pipe can leach into the water.

Galvanized



Galvanized steel pipes are also silver or gray colored and look similar to lead pipes, but a magnet will be able to cling to it. Galvanized steel pipe will break down over time, often resulting in rusty-colored water. Galvanized steel itself does not contain lead. However, if lead from other piping materials are or were present in the piping system, then lead particles can accumulate on the inside surfaces of corroded galvanized steel pipe and then be released into the water again and appear at taps.

Brass



Brass pipes are a dark reddish brown or a light silvery color. Fixtures made primarily of brass typically have a coating of some other material than brass on the outside that is silver, chrome, or other color, but are dark reddish brown on the inside. Many older brass materials used for pipe and faucet fixture contained small amounts of lead and commonly referred to as "leaded brass". Corrosion from contact with water will release lead from leaded brass materials and enter drinking water. To meet federal regulations, brass pipe and fixtures manufactured since 2014 have extremely low levels of lead or are entirely lead-free.

PVC/Plastic



PVC or other plastic pipes are typically white and can be made of rigid or flexible materials. Plastic pipe materials do not contain lead and don't corrode from contact with drinking water.

Lubbock's Water and Fire Hydrants

Fire Hydrants

Fire hydrants are an essential part of our water distribution systems. The use of hydrants for fire emergencies is a top priority. When they are not being used for emergencies, hydrants still provide important functions for the city. They can be used by construction companies to build new facilities and by organizations hosting special events in our community.

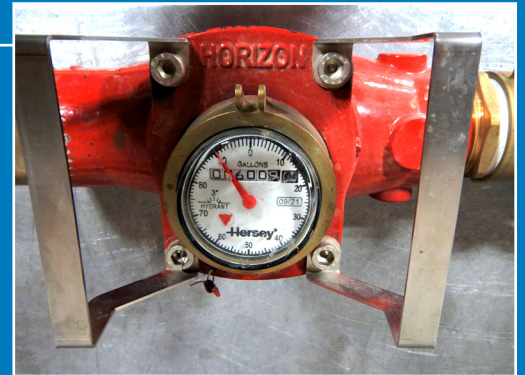


Flushing and Testing

Flushing fire hydrants periodically helps ensure that they are operational during emergencies. Flushing can also ensure that the new water is pulled into an area with low flows so the water does not become stale and still contains chlorine levels required to keep the water disinfected.

Meters

Fire hydrant meters can also be leased by third parties after signing a use agreement with the City. Lessors are required to provide a refundable deposit, identification, and the signed contract before picking up a fire hydrant meter. Lessors are responsible for providing monthly water usage, paying for their water usage and base rate, using the meters only on Lubbock's fire hydrants, and complying with all conditions under the use agreement. To download a copy of the use agreement and learn more about fire hydrant meters go to mylubbock.us/fhmeters



Get Involved

The Lubbock Water Advisory Commission conducts regularly scheduled board meetings that are open to the public. Visit our website at www.mylubbock.us/meetings to view upcoming meetings.



Stay Informed



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