2020 Annual Drinking Water Quality

Consumer Confidence Report TX1110001

City of Granbury

January 1, 2020 to December 31, 2020

Website: www.granbury.org/PublicWorks or

Links: www.granbury.org/WaterQualityReport

For more information regarding this report please contact:
Rick Crownover, Director of Public Works
(817) 573-7030

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono
(817) 573-7030

2020 Annual Drinking Water Quality Report

Consumer Confidence Report TX1110001 for the Period of January 1 to December 31, 2020

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. The TCEQ completed an assessment of your source water and results indicated that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confident Report. For more information on source water Assessments and protection efforts at our system, *contact Rick Crownover, Director of Public Works at (817) 573-7030.*

CURRENT PROJECTS

This Report Includes:

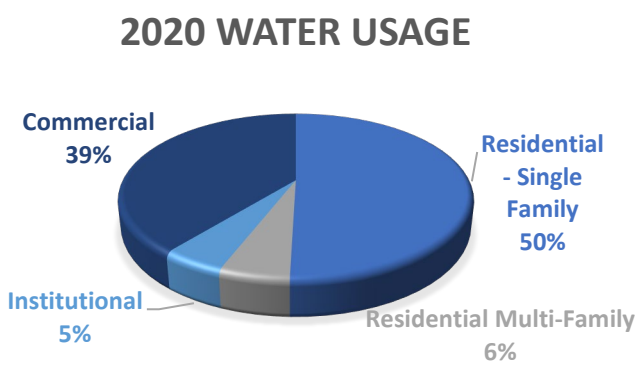
- Current/Completed Projects for 2021
- Public Participation Opportunities
- Sources of Drinking Water
- Possible Contaminants in Drinking Water Sources
- Information about Source Water
- Water Quality Test Results
- Keep Our Water Clean – Irrigate Efficiently to Reduce Runoff and Erosion
- Violations Table
- Definitions and Abbreviations
- Keep Our Water Clean – Pick Up Pet Waste

The City of Granbury Water Treatment Plant has completed Phase II of the plant upgrades. Phase II increased the plant's capacity from 2.5 to 5.0 million gallons per day (MGD) to meet the City of Granbury's daily water requirements. The plant improvements expanded the raw water pump station, flocculation and sedimentation basins, microfiltration and reverse osmosis systems, a high service pump station, as well as constructing the new one-million-gallon storage tank that is seen from Business 377.

New Raw Pump Station on Lake Granbury at the Water Treatment Plant.

The City of Granbury used 693,961,100 Gallons of Water in 2020.

Where did it go?



For more information, visit: granbury.org/PUBLICWORKS

Did you know…

To Report Leaks, Water Main Breaks or Sanitary Sewer Spills, as well as City Electric and City Street issues…

You can Call the City of Granbury Municipal Service Center

Mon – Thurs 7:30 am – 5:30 pm and Fri 8:00 am – 5:00 pm at:

(817) 573-7030

AFTER-HOURS Emergencies, weekends, and Holidays call the 24-Hour Answering Service at: (817) 588-0488

You can also visit our Citizen Request Tracker on the City website at granbury.org and click on the Report It button to report any City issues on-line.

2020 Annual Drinking Water Quality Report

Consumer Confidence Report TX1110001 for the Period of January 1 to December 31, 2020

Public Participation Opportunities

The Granbury City Council meets regularly on the first and third Tuesday of each month. City Council meetings are held at City Hall, which is located at 116 West Bridge Street, Granbury, Texas 76048.
Visit granbury.org for schedules, agendas, and minutes to all the current and previous City Council meetings, as well as other available boards within the City of Granbury.

Sources of 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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

The source of water used by the City of Granbury is Surface Water and Ground Water from the Brazos River and Trinity Aquifer located in Hood County, City of Granbury, Texas.

Possible Contaminants in Drinking Water Sources

- 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 amounts 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 cause 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 provider's 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.

Electronic Version of this Report is available on our website: granbury.org/WaterQualityReport

2020 Annual Drinking Water Quality Report

Consumer Confidence Report TX1110001 for the Period of January 1 to December 31, 2020

HOW TO READ YOUR WATER QUALITY REPORT

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Substance	2020	1.2	0 – 1.2	0	10	ppb	NO	Erosion of National deposits

The year tests were conducted

The highest amount a contaminant is detected in the drinking water.

The amount from lowest to highest a contaminant is detected.

Below this level, a contaminant has no known or expected health risks.

The highest level of a contaminant that is allowed in drinking water.

Parts per billions – or one ounce in 7,350,000 gallons of water.

How a contaminant may end up in your drinking water

This describes some of the way's contaminants enter drinking water; wording is provided by the EPA and may or may not apply to your drinking water.

Information about Source Water

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 Rick Crownover (817) 573-7030.*

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2020	1.3	1.3	0.072	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2020	0	15	1.5	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

2020 WATER QUALITY TEST RESULTS

The following tables contain scientific terms and measures. Some of which may require explanation. Refer to definitions and abbreviations.

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2020	0.455	0 – 0.455	0.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	2020	18	4 – 25.5	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)	2020	52	5.14 – 54.8	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

** 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.*

Electronic Version of this Report is available on our website: granbury.org/WaterQualityReport

2020 Annual Drinking Water Quality Report

Consumer Confidence Report TX1110001 for the Period of January 1 to December 31, 2020

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2020	1.2	0 – 1.2	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2020	0.13	0.016 – 0.13	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2020	1.5	0 – 4.5	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Cyanide	2020	75.6	0 – 75.6	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2020	0.1	0.0775 – 0.574	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)	2020	1	0.0179 – 0.955	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
Beta/photon Emitters	2020	7.9	0 – 7.9	0	50	pCi/L	N	Decay of natural and man-made deposits.
Gross alpha excluding radon and uranium	2020	6	0 – 6	0	15	pCi/L	N	Erosion of natural deposits.
Uranium	2020	2.4	0 – 2.4	0	30	ug/l	N	Erosion of natural deposits.

Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Xylenes	2020	0.00151	0 – 0.00151	10	10	Ppm	N	Discharge from petroleum factories; Discharge from chemical factories.

Electronic Version of this Report is available on our website: granbury.org/WaterQualityReport

2020 Annual Drinking Water Quality Report

Consumer Confidence Report TX1110001 for the Period of January 1 to December 31, 2020

Disinfectant Residual

Disinfectant Residual	*Year*	*Average Level*	*Range of Levels Detected*	*MRDL*	*MRDLG*	*Unit of Measure*	*Violation*	*Source in Drinking Water*
Total Chlorine	*2020*	*2.46*	*0.05 – 4.00*	*4*	*4*	*mg/L*	*N*	*Water additive used to control microbes.*

Turbidity

	Level Detected	*Limit (Treatment Technique)*	*Violation*	*Likely Source of Contamination*
Highest single measurement	*0.22 NTU*	*1.0 NTU*	*N*	*Soil runoff.*
Lowest monthly % meeting limit	*100%*	*0.30 NTU*	*N*	*Soil runoff.*

Information Statement: Turbidity is 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

Total Organic Carbon

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.

KEEP OUR WATER CLEAN

IRRIGATE EFFICIENTLY TO REDUCE RUNOFF AND EROSION.

Most lawns receive twice as much water as they require. Water too heavily or too rapidly weakens your lawn, causing erosion and runoff. Water that is applied too rapidly is lost as runoff, which may carry polluting fertilizers and pesticides to streams and lakes. Excess irrigation can leach nutrients deep into the soil away from the plant roots, increasing the chances of groundwater pollution.

- Apply water infrequently, yet thoroughly. A general rule is to water up to one inch, once a week. When water, always comply with your water system's restrictions.
- Water in the morning to save water from being evaporated by the midday heat.
- Sprinkler systems offer an effective method for irrigation, if used properly. Use larger drops close to the ground. The water in misters can evaporate quickly.
- Select grass carefully. Planting the turf grass adapted to your region that uses the least water is an effective way to reduce the need for irrigation.
- After mowing, leave grass clippings on your lawn to reduce your water needs.
- Composting and grass cycling can reduce runoff pollution by preventing erosion, increasing the soil's ability to absorb and retain water, and reducing the need for fertilizers.
- Planting native Texas plants increases the soils capacity to store water and reduce runoff.

For more information visit takecareoftexas.org

Electronic Version of this Report is available on our website: granbury.org/WaterQualityReport

2020 Annual Drinking Water Quality Report

Consumer Confidence Report TX1110001 for the Period of January 1 to December 31, 2020

DEFINITIONS AND ABBREVIATIONS

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

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

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.*

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 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.*

KEEP OUR WATER CLEAN

PICK UP PET WASTE.

Water is an essential part of our lives. In addition to quenching our thirst, we depend on it for recreation, to irrigate our farms and water our livestock, and to run our businesses. The job to protect water quality is complex. Governmental and nongovernmental organizations and citizens must all work together to protect and restore water resources. We encourage you to do your part.

Dog waste can contribute to bacterial pollution in urban watersheds. Even if you are not near a body of water, stormwater can carry your pet waste and other pollutants directly into waterways.

Pet waste is not a good fertilizer for your lawn and will not wash away on its own.

- Be prepared. Take bags with you to collect your pet's waste. Deposit it in a trash can or dump it in the toilet (without the bag).
- Many parks and recreational areas offer courtesy bags and disposal boxes designed for pet waste.
- Never throw pet waste into a storm drain or waterway.

For more information visit takecareoftexas.org

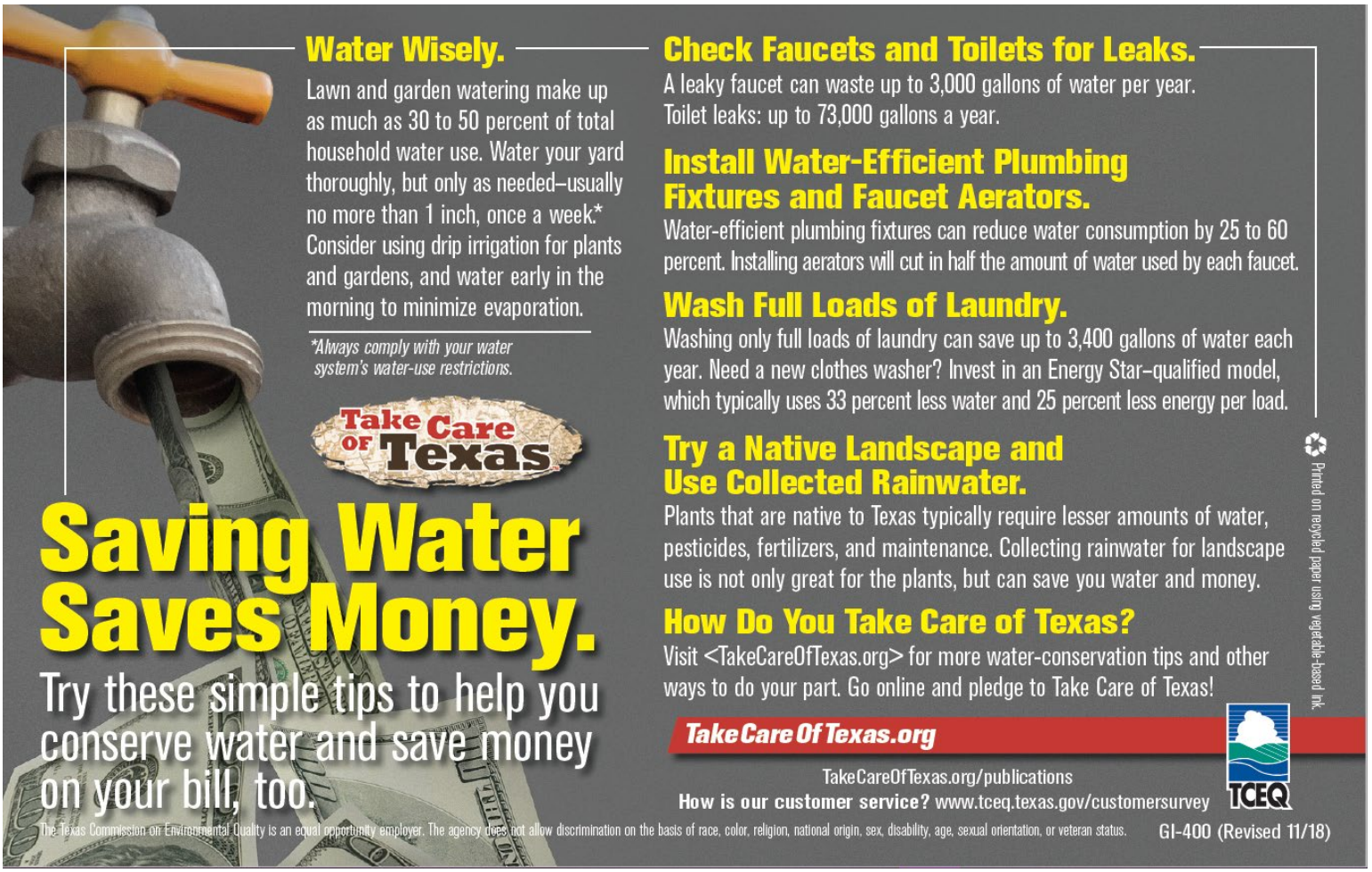
Electronic Version of this Report is available on our website: granbury.org/WaterQualityReport

2020 Annual Drinking Water Quality Report

Consumer Confidence Report TX1110001 for the Period of January 1 to December 31, 2020

Violations Table(s)

Public Notification Rule			
The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency).			
Violation Type	***Violation Begin***	***Violation End***	***Violation Explanation***
MONITORING, ROUTINE (DBP), MAJOR - CHLORITE	*06/01/2020*	*06/30/2020*	*We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.*
CORRECTION ACTION TAKEN:	*Due to third-party lab failures the testing during this month was not completed on a timely basis. We have contracted with a new third-party tester.*		
CHLORITE			
Violation Type	***Violation Begin***	***Violation End***	***Violation Explanation***
MONITORING, ROUTINE (DBP), MAJOR - CHLORITE	*07/01/2020*	*07/31/2020*	*We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.*
CORRECTION ACTION TAKEN:	*Due to third-party lab failures the testing during this month was not completed. We have contracted with a new third-party tester.*		
CHLORITE			



Electronic Version of this Report is available on our website: granbury.org/WaterQualityReport