

# ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2020



*Presented By*  
**Mauriceville Municipal Utility District**



## Our Mission Continues

We are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2020. We are committed to providing safe, high-quality water services to our community, while maintaining a standard of excellence in customer

service and environmental conservation.

We are always available should you have any questions or concerns.

## Information about your Drinking Water

The following information is required by the Texas Commission of Environmental Quality (TCEQ) to be published by all Texas Water and Sewer Utilities to inform customers about potential problems that may occur in their systems.

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 EPA's 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 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 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. 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 the taste, odor, or color of drinking water, please contact the system's business office.

## Important Health Information

The following information is required by the Texas Commission of Environmental Quality (TCEQ) to be published by all Texas Water and Sewer Utilities to inform customers about potential problems that may occur in their systems.

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 for 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.

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>.



**QUESTIONS?** For more information about this report, or for any questions related to your drinking water, please call Brad Haeggquist at (409) 745-4882.



## Community Participation

Board meetings are normally held every other month on the third Tuesday, beginning at 6:00 p.m. at our office at 15509 FM 1442, Orange, TX. Please check our website for updated dates and times ([www.mauricevillemud.com](http://www.mauricevillemud.com)).

Whenever there is a message or emergency involving the district system, we send out Alerts that can be sent directly to your cell phone or email. We would like to encourage our customers to sign up for Alerts on our website ([www.mauricevillemud.com](http://www.mauricevillemud.com)).

## Source Water Assessment



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 Brad Haeggquist, (409) 745-4882.

## Level 2 Assessment Update

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year, one Level 2 assessment was required to be completed for our water system, which was completed. During this comprehensive Level 2 assessment, we were given 10 corrective actions that were completed or are an ongoing process that have been implemented by the district.

## Water Loss Audit

In the water loss audit submitted to the Texas Water Development Board during the year covered by this report, our system lost an estimated 62,093,304 gallons of water. If you have any questions about the water loss audit, please call (409) 745-4882.

## 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 can 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.



## Information on the Internet

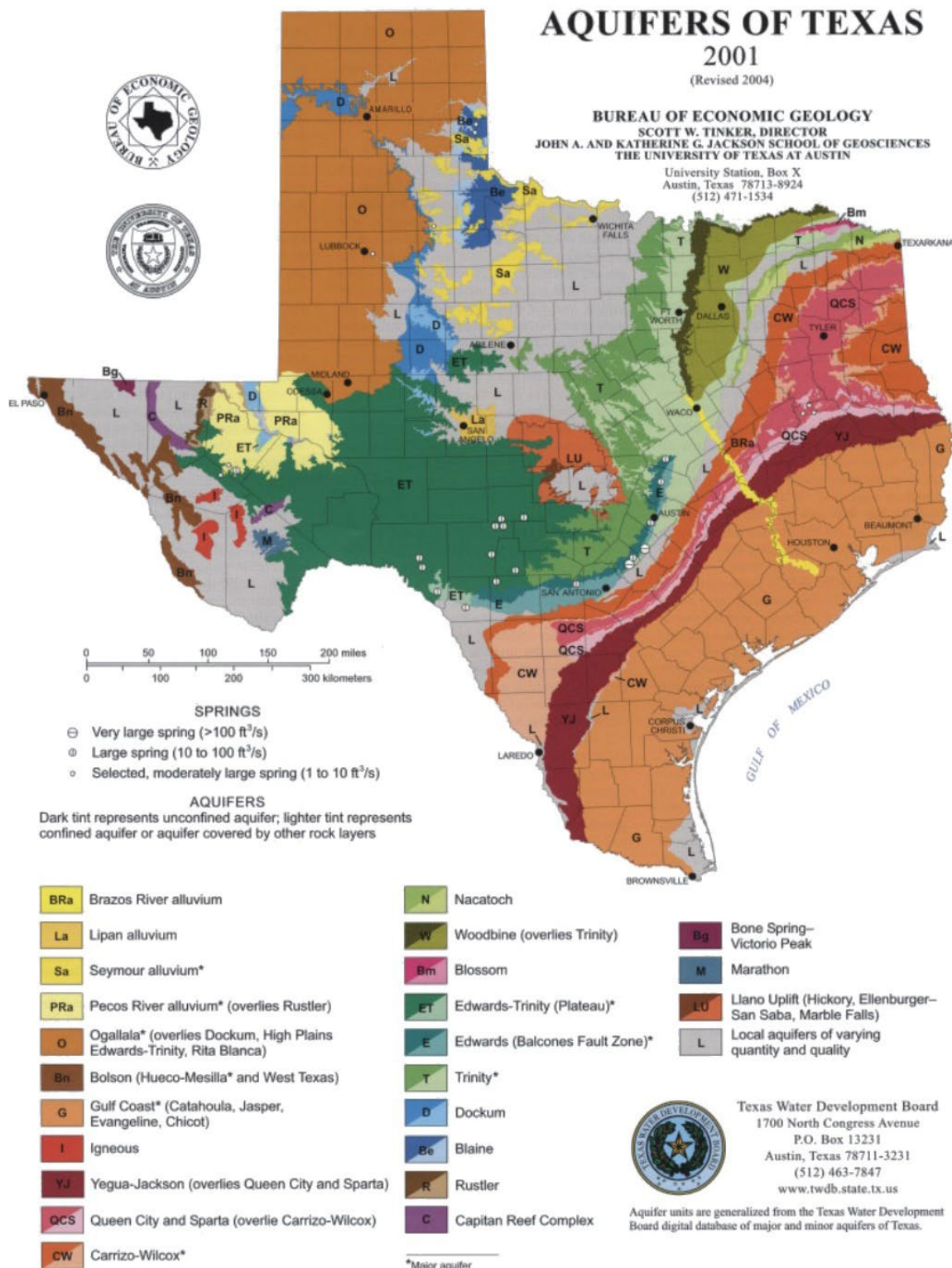
The U.S. EPA (<https://goo.gl/TFAMKc>) and the Centers for Disease Control and Prevention ([www.cdc.gov](http://www.cdc.gov)) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation and public health. Also, TCEQ has a Web site (<https://goo.gl/vNHNJN>) that provides complete and current information on water issues in Texas, including valuable information about our watershed.



## Where Does My Water Come From?

Mauriceville Municipal Utility District has five water wellsites that all pull from the Gulf Coast Aquifer. The Gulf Coast Aquifer is a major aquifer paralleling the Gulf of Mexico coastline from the Louisiana border to the border of Mexico. It consists of several aquifers, including the Jasper, Evangeline, and Chicot aquifers, which are composed of discontinuous sand, silt, clay, and gravel beds. The maximum total sand thickness of the Gulf Coast Aquifer ranges from 700 feet in the south to 1,300 feet in the north. Freshwater-saturated thickness averages about 1,000 feet.

\*Information provided by Texas Water Development Board: <http://www.twdb.texas.gov/groundwater/aquifer/majors/gulf-coast.asp>





## District Updates

### Financial Updates:

In 2020 your Utility District paid \$1,685,056.26 in principal and interest and retired \$1,290,000 in bond indebtedness. Our \$19,355,000 December 2011 bonds now have a remaining balance of \$8,810,000 that will be paid off by November of 2026.

Our 2020 Financial Audit showed that MMUD generated positive cash flow that covered our bond payments by 118%. We are now in a financial position to self-fund our operations.

We consider our district to be solvent, and our auditor informed us that he did not see anything that would prevent us from paying off these bonds as they mature. All of this has been accomplished without a rate increase in 12 years and without taxing our community.

### TCEQ Oversight:

The Texas Commission of Environmental Quality (TCEQ) is the Texas agency that oversees water and wastewater activities. Like all utilities, we receive intensive oversight with frequent inspections. Since our last report, we went through the extensive process of renewing our wastewater treatment plant license, a water system inspection, a wastewater inspection, and a Level 2 assessment of our water system. Along with our weekly wastewater discharge samples, we flushed about 160 water lines a month, and took a minimum of 11 water quality samples each month. This intensive oversight serves the purpose of making our utility better and assuring the quality of our water and safeguarding our wastewater treatment systems. We follow their guidelines and make their suggested improvements.

### Disaster Activities:

Since our last report, we have had to contend with the many challenges and limitations of COVID-19, and the natural and man-caused disasters of Hurricane Laura, Hurricane Delta, a catastrophic train wreck, and a winter storm.

Due to the winter storm, your utility helped over 90 customers by adjusting their bills because of their catastrophic leaks, totaling over 3,431,000 gallons.

Throughout these disasters and challenges, we have stayed open and responded to your needs 24 hours a day. Many of these disasters have required our crews to work around the clock. We would not have been this successful without you, our customers, doing your part helping us keep our systems operational. We are extremely grateful to our community for your help and resilience.

### Economic Development:

We are very excited about the growth in our community. In 2020, our crews installed 111 new customers, including a concrete plant, pizza restaurant, donut shop, RV parks,

restaurants, new homes, and a fuel stop, along with miles of new water and wastewater lines. We assisted many of our existing customers in reopening their businesses and who have had to rebuild and or relocate their homes. We are talking to multiple developers about new businesses and residential projects that should positively impact our community.

### Commitment To Improving Customer Service:

We are here to serve our community. We have several initiatives that will help us do a better job, including the following:

- Our ongoing project to inspect all wastewater grinder systems
- Dramatically improving response times for our service calls to your homes and businesses
- Installing grinder pumps and components with improved technology
- During each service call, spending the time necessary to diagnose, repair, and replace everything that needs to be repaired or replaced

We have purchased the pictured permanent generator at our FM 1136 wellsite and are budgeting the purchase of additional generators during the upcoming years. These generators have become an urgent need with the number of natural and man-made disasters that are impacting us.



Your wastewater system is made up of a grinder pump, pipe, tubing, tank, lid, seals, wiring, breakers, electrical components, floats, parts, valves, and plumbing that require maintenance. On average, we service each customer annually. We are committed to continually maintain your system 24 hours a day, 365 days a year. If you have a problem, just call.

### How You Can Help:

Water and wastewater systems have challenges and require repairs. Your water and wastewater systems remain operational during weather events. Your wastewater system does not operate without power from your home or business.

Areas that flood experience difficulties. If your grinder tank wastewater system is under water or your neighborhood has been flooded, your wastewater system probably will not operate normally. When this happens, please turn your breaker off to your wastewater grinder system when you are not running water or flushing your toilets. This may prevent extensive repairs to your system. If your light or alarm comes on, please call us. If our community loses power, please limit your water use.

Please call us at (409) 745-4882 as soon as you notice any problems with your water or wastewater systems (24 hours a day).

## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. Also, the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). 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 (unless a TOC violation is noted in the Violation column).

*NOTE: No violations for regulated substances occurred during 2020.*

### REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
<b>Barium</b> (ppm)	2020	2	2	0.139	0.046–0.139	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
<b>Chlorine</b> (ppm)	2020	[4]	[4]	1.19	0.93–1.29	No	Water additive used to control microbes
<b>Combined Radium</b> (pCi/L)	2019	5	0	1.5	1.5–1.5	No	Erosion of natural deposits.
<b>Fluoride</b> (ppm)	2020	4	4	1.36	0.16–1.36	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
<b>Haloacetic Acids</b> [HAAs] <sup>1</sup> (ppb)	2020	60	NA	12	1.1–18	No	By-product of drinking water disinfection
<b>TTHMs [Total Trihalomethanes]</b> <sup>2</sup> (ppb)	2020	80	NA	40	6.1–68	No	By-product of drinking water disinfection

### Tap Water Samples Collected for Copper and Lead Analyses from Sample Sites throughout the Community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
<b>Copper</b> (ppm)	2020	1.3	1.3	0.237	0/30	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
<b>Lead</b> (ppb)	2020	15	0	0.6	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits.

<sup>1</sup>The value in the Amount Detected column is the highest average of all HAA5 sample results collected at a location over a year.

<sup>2</sup>The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results at a location over a year.

## Definitions

**90th %ile:** 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.

**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.

**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.

**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.

**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).

