



ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2019



Presented By
SJW TX for Deer Creek Water

A Message from the General Manager

We are excited to provide you with our 2019 Consumer Confidence Report (CCR). The annual water quality report covers all testing performed between January 1 and December 31, 2019. Our team has worked diligently analyzing data and compiling this report for your review. The focus of our vision, “to serve customers, communities, employees, shareholders and the environment at world-class levels,” binds us together to provide exceptional water quality.

As you review the data in the Test Results section, keep in mind that many substances are detected at levels that vary throughout the year and at different locations. As a reminder, just because a substance is detected does not mean the water is unhealthy. Natural waters, contain a wide range of natural substances; in fact, some of the minerals detected are essential for good health.

The water source is one of the primary factors that affect the detection levels of these substances. SJWTX supplies purchased surface water to customers in your system. Surface water typically contains small levels of natural organic substances and requires treatment by filtration. Regardless of the source, regulations require that we disinfect the water and maintain a minimum level of disinfectant residual. Deer Creek uses chloramines for disinfection.

Our Mission Continues

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.

We remain vigilant in delivering the best-quality drinking water

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.



Count on Us

Delivering high-quality drinking water to our customers involves far more than just pushing water through pipes. Water treatment is a complex, time-consuming process. Because tap water is highly regulated by state and federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified. Our licensed water professionals have a basic understanding of a wide range of subjects, including mathematics, biology, chemistry, and physics. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water;
- Monitoring and inspecting machinery, meters, gauges, and operating conditions;
- Conducting tests and inspections on water and evaluating the results;
- Maintaining optimal water chemistry;
- Applying data to formulas that determine treatment requirements, flow levels, and concentration levels;
- Documenting and reporting test results and system operations to regulatory agencies; and
- Serving our community through customer support, education, and outreach.

So, the next time you turn on your faucet, think of the skilled professionals who stand behind each drop.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please contact Laura Gloria, Water Quality Specialist, at (830) 312-4600.

Contaminates in Source 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. The U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water that 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 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 the taste, odor, or color of drinking water, please contact our business office, (830)312-4600. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

What Are PPCPs?

When cleaning out your medicine cabinet, what do you do with your expired pills? Many people flush them down the toilet or toss them into the trash. Although this seems convenient, these actions could threaten our water supply.

Recent studies are generating a growing concern over pharmaceuticals and personal care products (PPCPs) entering water supplies. PPCPs include human and veterinary drugs (prescription or over-the-counter) and consumer products, such as cosmetics, fragrances, lotions, sunscreens, and household cleaning products. From 2006 to 2010, the number of U.S. prescriptions increased 12 percent to a record 3.7 billion, while nonprescription drug purchases held steady around 3.3 billion. Many of these drugs and personal care products do not biodegrade and may persist in the environment for years.

The best and most cost-effective way to ensure safe water at the tap is to keep our source waters clean. Never flush unused medications down the toilet or sink. Instead, check to see if the pharmacy where you made your purchase accepts medications for disposal, or contact your local health department for information on proper disposal methods and drop-off locations. You can also go on the Web (<https://goo.gl/aZPgeB>) to find more information about disposal locations in your area.

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.



Information on the Internet

The U.S. EPA (<https://goo.gl/TFAMKc>) and the Centers for Disease Control and Prevention (<https://www.cdc.gov/healthywater/drinking/>) 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.

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 6,028,561 gallons of water. If you have any questions about the water loss audit, please call (830) 312-4600.

Safeguard Your Drinking Water

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – They contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed Web site to locate groups in your community.
- Organize a storm drain stenciling project with others in your neighborhood. Stencil a message next to the street drain reminding people "Dump No Waste – Drains to River" or "Protect Your Water". Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Where Does My Water Come From?

Deer Creek Water purchases water from West Travis County Public Utility Agency (WTCPUA). West Travis County Public Utility Agency provides purchased surface water from Lake Austin located in Austin, Texas. SJWTX then treats, stores, and delivers water to the Deer Creek Water system.

SOURCE NAME / LOCATION	SOURCE WATER	TYPE OF WATER	REPORT STATUS	TCEQ SOURCE ID
West Travis County Regional Water System	Lake Austin	Surface Water	Active	P2270049A

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <https://dww2.tceq.texas.gov/DWW/>.



Source Water Assessments

Deer Creek 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 are 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 Laura Gloria, Water Quality Specialist, at (830) 312-4600.

SYSTEM SUSCEPTIBILITY SUMMARY

ASBESTOS	CYANIDE	METALS	MICROBIAL	MINERALS	RADIOCHEMICAL	SYNTHETIC ORGANIC CHEMICALS	DISINFECTION BYPRODUCT	VOLATILE ORGANIC CHEMICALS	DRINKING WATER CONTAMINANT CANDIDATE	OTHER
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West Travis County Public Utility Agency

TCEQ completed an assessment of SJWTX source water, and results indicate that some of the 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 will be found in this Consumer Confidence Report.

SYSTEM SUSCEPTIBILITY SUMMARY

ASBESTOS	CYANIDE	METALS	MICROBIAL	MINERALS	RADIOCHEMICAL	SYNTHETIC ORGANIC CHEMICALS	DISINFECTION BYPRODUCT	VOLATILE ORGANIC CHEMICALS	DRINKING WATER CONTAMINANT CANDIDATE	OTHER
LOW	MEDIUM	HIGH	MEDIUM	MEDIUM	MEDIUM	MEDIUM	HIGH	HIGH	MEDIUM	LOW

ENTRY POINT SUSCEPTIBILITY SUMMARY

ASBESTOS	CYANIDE	METALS	MICROBIAL	MINERALS	RADIOCHEMICAL	SYNTHETIC ORGANIC CHEMICALS	DISINFECTION BYPRODUCT	VOLATILE ORGANIC CHEMICALS	DRINKING WATER CONTAMINANT CANDIDATE	OTHER
LOW	MEDIUM	HIGH	MEDIUM	MEDIUM	MEDIUM	MEDIUM	HIGH	HIGH	MEDIUM	LOW

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 show only 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 often 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.



Table Talk

Get the most out of the Testing Results data table with this simple suggestion. In less than a minute, you will know all there is to know about your water:

For each substance listed, compare the value in the Amount Detected column against the value in the MCL (or AL, SCL) column. If the Amount Detected value is smaller, your water meets the health and safety standards set for the substance.

Other Table Information Worth Noting

If there was a violation, you will see a detailed description of the event in this report.

The Range column displays the lowest and highest sample readings. If the lowest sample reading and the highest sample reading are the same, that means that only a single sample was taken to test for the substance (assuming there is a reported value in the Amount Detected column).

If there is a 0, that means that the substance was not detected (i.e., below the detectable limits of the testing equipment).

If there is sufficient evidence to indicate from where the substance originates, it will be listed under Typical Source.

REGULATED SUBSTANCES

				Deer Creek Water		West Travis County PUA			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	HIGHEST AMOUNT DETECTED	RANGE LOW-HIGH	HIGHEST AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2019	2	2	NA	NA	0.0617	0.0617–0.0617	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chloramines (ppm)	2019	[4]	[4]	2.08 ¹	1.20–3.00	NA	NA	No	Water additive used to control microbes
Cyanide (ppb)	2019	200	200	NA	NA	40	40–40	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Fluoride (ppm)	2019	4	4	NA	NA	0.16	0.16–0.16	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2019	60	NA	20 ²	16.7–21.4	NA	NA	No	By-product of drinking water disinfection
Nitrate (ppm)	2019	10	10	0.52	0.52–0.52	0.61	0.61–0.61	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2019	80	NA	46 ²	41.8–51.8	NA	NA	No	By-product of drinking water disinfection
Turbidity (NTU)	2019	TT	NA	NA	NA	0.82	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2019	TT = 95% of samples meet the limit	NA	NA	NA	98	NA	No	Soil runoff

Tap water samples were collected for lead and copper 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
Copper (ppm)	2017	1.3	1.3	0.288	0/10	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2017	15	0	1.37	0/10	No	Corrosion of household plumbing systems including fittings and fixtures; Erosion of natural deposits

SECONDARY SUBSTANCES

				Deer Creek Water		West Travis County PUA			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SCL	MCLG	HIGHEST AMOUNT DETECTED	RANGE LOW-HIGH	HIGHEST AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Fluoride (ppm)	2019	2.0	NA	NA	NA	0.16	0.16–0.16	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

UNREGULATED SUBSTANCES - DEER CREEK WATER ³

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	HIGHEST AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2019	21.4	16.4–21.4	Disinfection by-product
Bromoform (ppb)	2019	1.3	0–1.3	Disinfection by-product
Chloroform (ppb)	2019	20.1	14–20.1	Disinfection by-product
Dibromochloromethane (ppb)	2019	10.7	9.6–10.7	Disinfection by-product

UNREGULATED CONTAMINANT MONITORING RULE PART 4 (UCMR4) - DEER CREEK WATER ³

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	HIGHEST AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromochloroacetic Acid (ppb)	2019	8.5	6.6–8.5	Disinfection by-product
Dibromoacetic Acid (ppb)	2019	3.9	2.3–3.9	Disinfection by-product
Dichloroacetic Acid (ppb)	2019	13.1	10.5–13.1	Disinfection by-product
Trichloroacetic Acid (ppb)	2019	6.4	3.9–6.4	Disinfection by-product

¹Average

²Highest Locational Running Annual Average (LRAA)

³Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of monitoring unregulated contaminants is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

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 that, if exceeded, triggers treatment or other requirements that a water system must follow.

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 were found.

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 *Escherichia coli* (*E. coli*) maximum contaminant level (MCL) violation has occurred and/or why total coliform bacteria were found on multiple occasions.

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.

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

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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).

SCL (Secondary Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.