



2021 Annual Drinking Water Quality Report

Where do we get our drinking water?

The CITY of WHITE SETTLEMENT (PWS# TX2200081) purchases water from the CITY of FORT WORTH. The CITY of FORT WORTH provides purchase surface water from Lake Worth, Eagle Mountain Lake, Lake Bridgeport, Richland Chambers Reservoir, Cedar Creek Reservoir, Lake Benbrook and Clear Fork Trinity River, located in various counties including, Tarrant County, Wise County, Richland County, Morrow County, Parker County, Henderson County and Kaufman County. The City of White Settlement also draws water from six (6) Groundwater wells from within the city limits from the Paluxy and Trinity aquifers.

Annual Water Quality Report for the period from
January 1st to December 31st, 2021



View this report online at <http://www.wstx.us/ccr2021>
For question, call 817-575-8984

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 the Consumer Confidence Report. For more information on source water assessments and protection efforts at our system contact Joshua Davis (817) 246-4971 ext.853.

Chloramines:

The addition of chloramines may cause problems to persons dependent on dialysis machines. A condition known as hemolytic anemia can occur if the disinfectant is not completely removed from the water that is used for the dialysate. Consequently, the pretreatment scheme used for the dialysis units must include some means, such as charcoal filtering, for the removal of chloramines. If you are utilizing a dialysis machine, please contact the manufacturer for information concerning this matter. In addition, chloramines in certain concentrations may be toxic to fish. If you have a fish tank, please make sure that the chemicals or filters you are using are designed for use in water that has been treated with chloramines. Your local pet store is a good source of information on this topic along with the appropriate reagents for neutralizing chloramines.

Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, and people with HIV/AIDS or other immune problems:

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. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the [Environmental Protection Agency \(EPA\) Safe Drinking Water Hotline](http://www.epa.gov/safewater) at 1-800-426-4791 or www.epa.gov/safewater.

Annual Water Quality Report for the period of January 1 to December 31, 2019

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. 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 \(EPA\) Safe Drinking Water Hotline at 1-800-426-4791](https://www.epa.gov/safewater) or www.epa.gov/safewater.

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 causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office. For more information regarding this report, call the Arlington Water Utilities laboratory at 817-575-8984. Este reporte incluye informacion importante sobre el agua potable. Para asistencia en español, favor de llamar al teléfono 817-575-8984.



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.

Contaminants that may be present in source water before treatment 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 be the result of oil and gas production and mining activities.



Public Participation Opportunities

Public participation at advisory board and council meetings is welcome and encouraged. City Council typically meets the first Tuesday of each month at 6:30 p.m. at White Settlement City Hall (214 Meadow Park Dr.). Upcoming meeting dates are available online at <http://www.wstx.us/calendar.aspx>

Be Water Wise

Please remember to conserve water. Find useful water-saving tips at www.WaterIsAwesome.com. Year-round irrigation restrictions are in effect which prohibit lawn watering between 10:00 a.m. and 6:00 p.m. and require customers to irrigate twice a week on designated days only. To see the complete list of current restrictions, visit our website at <http://www.wstx.us/216/water-division>

City of White Settlement Watering Schedule

Monday

**NOWATERING ALLOWED
TUESDAY & FRIDAY**

NON RESIDENTIAL SITES
(APARTMENTS, BUSINESSES, SPORTS
FIELDS, PARKS, COMMON AREAS, HOA)
WEDNESDAY & SATURDAY

RESIDENTIAL ADDRESSES
ENDING IN EVEN NUMBERS (0, 2, 4, 6, 8)
THURSDAY & SUNDAY
RESIDENTIAL ADDRESSES
ENDING IN ODD NUMBERS (1, 3, 5, 7, 9)

Sprinklers are not allowed
from 10 a.m. to 6 p.m.
Hand watering only.

Monitoring and Reporting Violations: NO VIOLATIONS IN 2021

Superior Water Rating:

We would also like to inform that the City of White Settlement is now designated as a Superior Public Water System!

The requirements, outlined by the Texas Commission on Environmental Quality, are listed below. The designation is about the overall water system operation and not just the quality of the drinking water. In addition to water quality, the requirements include factors related to treatment, pumping and storage capacity.

Figure: 30 TAC §290.47(a) - APPENDIX A



Requirements

Public water supply systems which achieve and maintain recognition must exceed the minimum acceptable standards of the commission in these sections.

(1) To attain recognition as a “Superior Public Water System”, the following additional requirements must be met:

- 💧 (A) Physical facilities shall comply with the requirements in these sections.
- 💧 (B) There shall be a minimum of two certified operators with additional operators required for larger systems.
- 💧 (C) The system’s microbiological record for the previous 24 months period shall indicate no violations (frequency, number or MCL) of the drinking water standards.
- 💧 (D) The quality of the water shall comply with all primary water quality parameters listed in the drinking water standards.
- 💧 (E) The chemical quality of the water shall comply with all secondary constituent levels listed in the drinking water standards.
- 💧 (F) The system’s operation shall comply with applicable state statutes and minimum acceptable operating practices set forth in §290.46 of this title (relating to Minimum Acceptable Operating Practices for Public Drinking Water Supplies).
- 💧 (G) The system’s capacities shall meet or exceed minimum water system capacity requirements set forth in §290.45 of this title (relating to Minimum Water System Capacity Requirements).
- 💧 (H) The system shall have at least two wells, two raw water pumps or a combination of these with enough capacity to provide average daily consumption with the largest well or pump out of service. This requirement shall also apply to treatment plant pumps necessary for operation in accordance with §290.42 of this title (relating to Water Treatment).
- 💧 (I) The water system shall be well maintained and the facilities shall present a pleasing appearance to the public.

Signs

Systems which have met the requirements for recognition as a superior or approved system may erect signs denoting this honor.

Inspections

To receive or maintain recognition as a superior water system, the system must be inspected and evaluated by commission personnel as to physical facilities, appearance and operation. Systems which fail to meet the above requirements in this section will be denied recognition or will have their recognition revoked. The signs shall be immediately removed on notice from the executive director.

CITY OF WHITE SETTLEMENT

GROUNDWATER ANALYSIS RESULTS

Definitions and Abbreviations

Scientific Terms and Measures, Some of Which May Require Explanation

- **Maximum Contaminant Level (MCL):** The highest permissible level of a contaminant 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 health risk. MCLGs allow for a margin of safety.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of 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 contamination.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in water.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **AVG:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

ABBREVIATIONS:

- NA:** not applicable
- NTU:** nephelometric turbidity units (a measure of turbidity)
- pCi/L:** picocuries per liter (a measure of radioactivity)
- ppm:** parts per million, or milligrams per liter (mg/L)
- ppb:** parts per billion, or micrograms per liter (µg/L)

City of White Settlement Water Quality Test Results 2021

| Lead and copper | Date Sampled | MCLG | Action Level (AL) | 90 th Percentile | # Sites over AL | Units | Violation | Likely Source of Contamination |
|-----------------|--------------|------|-------------------|-----------------------------|-----------------|-------|-----------|---|
| Copper | 08/13/2020 | 1.3 | 1.3 | .31 | 0 | Ppm | N | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |
| Lead | 8/13/2020 | 0 | 15 | 1.5 | 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 | Violations | Likely Source of Contamination |
|--|-----------------|------------------------|------------------------------|-----------------------|-----|-------|------------|--|
| *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 | | | | | | | | |
| Haloacetic Acids (HAA5) | 2021 | 6 | 1 – 9.4 | 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 TTHM sample results collected at a location over a year | | | | | | | | |
| Total Trihalomethanes (TTHM) | 2021 | 10 | 3.53 – 15.7 | No goal for the total | 80 | Ppb | N | By-product of drinking ater disinfection |
| Inorganic Contaminates | Collection Date | Highest Level Detected | Ranged of Individual Samples | MCLG | MCL | Ppb | N | Likely Source of Contamination |
| Barium | 5/20/2019 | .05 | .05 – 0.5 | 2 | 2 | ppm | N | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural depositis. |
| Chromium | 5/20/2019 | 2.1 | 2.1 – 2.1 | 100 | 100 | ppb | N | Discharge from steel and pulp mills; Rosion of natural deposits. |
| Fluoride | 5/6/2020 | 1.04 | 1.04 – 1.04 | 4 | 4 | ppm | N | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Nitrate (measured as Nitrogen) | 2021 | .382 | .0204 - .382 | 10 | 10 | ppm | N | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. |
| Radioactive Contaminants | Collection Date | Highest Level Detected | Ranged of Individual Samples | MCLG | MCL | Ppb | N | Likely Source of Contamination |
| Combined Radium 226/228 | 5/3/2017 | 1.5 | 0 1.5 | 0 | 5 | pCi/L | N | Erosion of natural deposits |
| Gross alpha excluding radon and uranium | 8/2/2017 | 3.1 | 3.1 – 3.1 | 0 | 15 | pCi/L | N | Erosion of natural deposits |

| Synthetic organic contaminants including pesticides and herbicides | Collection Date | Highest Level Detected | Ranged of Individual Samples | MCLG | MCL | Ppb | N | Likely Source of Contamination |
|--|-----------------|------------------------|------------------------------|------|-------|-----------------|-----------------|--|
| Atrazine | 2021 | .1 | 0 – 0.1 | MCLG | MCL | ppb | N | Likely Source of Contamination |
| Disinfectant Residual | Year | Average Level | Range of Levels Detected | MRDL | MRDLG | Unit of measure | Violation (Y/N) | Source of Drinking Water |
| | 2021 | 1.70 | .5 – 3.58 | 4 | 4 | mg/L | ppm | Water additive used to control microbes. |

City of Fort Worth

Surface Water Analysis Results 2021

| Compound | Measure | Year | Violation | MCL | Your water | Range | Public Health Goal | Common Sources of Substance |
|------------------------|---------------|------|-----------|------|------------|--------------|--------------------|---|
| Beta/positron emitters | pCi/L | 2021 | No | 50 | 7 | 7 to 7 | 0 | Decay of natural and man-made deposits |
| Uranium | ppb | 2021 | No | 30 | 1.1 | 1.1 to 1.1 | 0 | Erosion of natural deposits |
| Arsenic | ppb | 2021 | No | 10 | 1.5 | 0 to 1.5 | 0 | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes |
| Atrazine | ppb | 2021 | No | 3 | .1 | 0 to .2 | 3 | Runoff from herbicide used on row crops |
| Barium | ppm | 2021 | No | 2 | .07 | .05 to .07 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Chromium | ppb | 2021 | No | 100 | 1.8 | 0 to 1.8 | 100 | Erosion of natural deposits; discharge from steel and pulp mills |
| Cyanide | ppb | 2021 | No | 200 | 197 | 66.2 to 197 | 200 | Discharge from plastic and fertilizer factories; discharge from steel and metal factories |
| Fluoride | Ppm | 2021 | No | 4 | .68 | .18 to .68 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate (as Nitrogen) | ppm | 2021 | No | 10 | .66 | .16 to .66 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Bromate | ppb | 2021 | No | 10 | 4.23 | 0 to 13.6 | 0 | By-product of drinking water disinfection |
| Haloacetic Acids | ppb | 2021 | N/A | 60 | 12.4 | 2.6 to 15.9 | N/A | By-product of drinking water disinfection |
| Total Trihalomethanes | ppb | 2021 | N/A | 80 | 22.4 | 1.05 to 22.3 | N/A | By-product of drinking water disinfection |
| Compound | Measure | Year | Violation | MRDL | Your water | Range | Public Health Goal | Common Sources of Substance |
| Chloramines | ppm | 2021 | No | 4 | 3.4 | .6 to 4.6 | 4 | Water additive used to control microbes |
| Compound | MCL | Year | Violation | High | Low | Average | Public Health Goal | Common Sources of Substance |
| Total Organic Carbon | TT= % Removal | 2021 | No | 1 | 1 | 1 | N/A | Naturally occurring |

It is used to determine disinfection by-product precursors. Fort Worth was in compliance with all monitoring and treatment technique requirements for disinfection by-product precursors. A removal ration of 1 in Specific Ultra Violet Absorbance calculations is considered passing.

Interconnects of Emergency Sources

| Source of the Water | Length of Time Used | Explanation of Why It Was Used | Whom to Call for Additional Water Quality Information |
|---------------------|---------------------|--------------------------------|--|
| City of Fort Worth | All Year | To supplement Water Supply | Mary Gugliuzza at 817-392-8253 or visit www.fortworthtexas.gov/tapwater |

| Compound | Measure | Year | Violation | MCL | Your water | Public Health Goal | Common Sources of Substance |
|--|---------|-----------|---|---|-------------|--------------------|--|
| Turbidity | NTU | 2021 | No | TT=1 TT= Lowest monthly % of Samples ≤ 0.3 NTU | .7 99.3% | N/A | Soil runoff (turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of the filtration system.) |
| Compound | Year | Violation | MCL | Your Water | Range | Public Health Goal | Common Source of Substance |
| Total Coliforms (including fecal coliform & E. Coli) | 2021 | No | TT = 5% of monthly samples are positive | 2.0% | 0 to 2% | 0 | Coliforms are naturally present in the environment as well as feces; fecal coliforms and E. Coli only come from human and animal fecal waste. |

The data presented in this report is from the most recent testing done in accordance with regulations.

The full Water Quality Report for the City of Fort Worth can be viewed online at www.fortworthtexas.gov/tapwater.

Request a paper copy by calling Mary Gugliuzza at 817-392-8253