ANGELINA COUNTY FWSD No. 1 provides groundwater from the Carrizo-Wilcox Aquifer located in Angelina County.

2019 Annual Drinking Water Quality Report

Consumer Confidence Report (CCR)

The source of drinking water used by ANGELINA COUNTY FWSD No. 1 is Purchased Ground Water from the City of Lufkin—TX0030004.

PWS ID Number: TX0030102

PWS Name: ANGELINA COUNTY FWSD No. 1 (ACF)

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

For more information regarding this report, contact:

Angelina & Neches River Authority (ANRA)
Chris Key, P.E. - (936) 632-7795

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (800) 282-5634.

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.

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).

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.

Information on 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 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.

Information about Source Water Assessments

TCEQ completed a Source Water Susceptibility for all drinking water systems that own their sources. This report describes the susceptibility and types of constituents that may come into contact with the drinking water source based on human activities and natural conditions. The system from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system, contact Chris Key, P.E. at (936) 632-7795.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL:
http://www.tceq.texas.gov/gis/swaview

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

Public Participation Opportunities

To learn more about future public meetings concerning your drinking water, please call or contact:

Angelina & Neches River Authority
Contact: Chris Key, P.E.
2901 N. John Redditt Drive
Lufkin, Texas 75904
Phone: (936) 632-7795

Next Regularly Scheduled Board Meeting:
Date: To be determined
Time: 5:30 PM
Place: Angelina County FWSD No. 1 Office
3098 FM 2251
Lufkin, Texas 75904

ANRA and ACF also welcome public comments in writing, mailed or emailed to:

Angelina County FWSD No. 1
2901 N. John Redditt Drive
Lufkin, Texas 75904

Email: **info@acfwater.org**

The following tables contain scientific terms and measures, some of which may require explanation. Please find below definitions and abbreviations to aid in understanding the results provided.

Avg:	**Regulatory compliance with some MCLs are based on running annual average of monthly samples.**
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.**
Maximum Residual Disinfectant Level Goal or 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.**
Action Level Goal or 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.**
Action Level:	**The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which 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 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.**

MFL:	**Million Fibers per Liter (a measure of asbestos)**	**ppb**:	**Micrograms per Liter or Parts per Billion—or one ounce in 7,350,000 gallons of water**
na:	**Not applicable**	**ppm**:	**Milligrams per Liter or Parts per Million—or one ounce in 7,350 gallons of water**
mrem:	**Millirems per year (a measure of radiation absorbed by the body)**	**ppt**:	**Parts per Trillion, or Nanograms per Liter (ng/L)**
NTU:	**Nephelometric Turbidity Units (a measure of turbidity)**	**ppq**:	**Parts per Quadrillion, or Picograms per Liter (pg/L)**
pCi/L:	**Picocuries per Liter (a measure of radioactivity)**	**Treatment Technique or TT**:	**A required process intended to reduce the level of a contaminant in drinking water**

2019 Water Quality Test Results
Angelina County FWSD No. 1

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positives	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	1		0	N	Naturally present in the environment.

Disinfectant Residual

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation	Source in Drinking Water
Chlorine	2019	2.50	0.40—4.00	4.0 mg/L	4.0 mg/L	ppm	N	Water additive used to control microbes, introduced at the City of Lufkin water treatment plant.

Lead and Copper

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	9/13/2018*	1.3	1.3	0.44	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

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

2019 Water Quality Test Results
Angelina County FWSD No. 1

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2019	0.0681	0.0681—0.0681	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	2019	30	29.4—30.3	No Goal for the Total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)**	2019	68	61.4—67.6	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 HAA5 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 TTHM sample results collected at a location over a year.**

2019 Water Quality Test Results
City of Lufkin

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positives	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	5% of monthly samples are positive.	1.9		0	N	Naturally present in the environment.

Disinfectant Residual

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation	Source in Drinking Water
Chlorine	2019	2.78	1.10—3.90	4.0 mg/L	4.0 mg/L	ppm	N	Water additive used to control microbes, introduced at the City of Lufkin water treatment plant.

Lead and Copper

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2019	1.3	1.3	0.32	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

2019 Water Quality Test Results
City of Lufkin

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2019	0.014	0.014—0.014	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	11/15/2018*	0.176	0.176—0.176	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]	2019	0.213	0.0303—0.213	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)**	2019	31	16.6—31.9	No Goal for the Total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)***	2019	59	37.8—68.3	No Goal for the Total	80	ppb	N	By-product of drinking water disinfection.

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

** 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.

*** 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.

2019 Water Quality Test Results
City of Lufkin

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	02/07/2017*	1.5	1.5—1.5	0	5	pCi/L	N	Erosion of natural deposits.

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