



Water Quality Report

Annual Consumer
Confidence Report

1 Jan — 31 Dec 2024

We are proud to report that the water provided on Sheppard AFB meets or exceeds established water quality standards

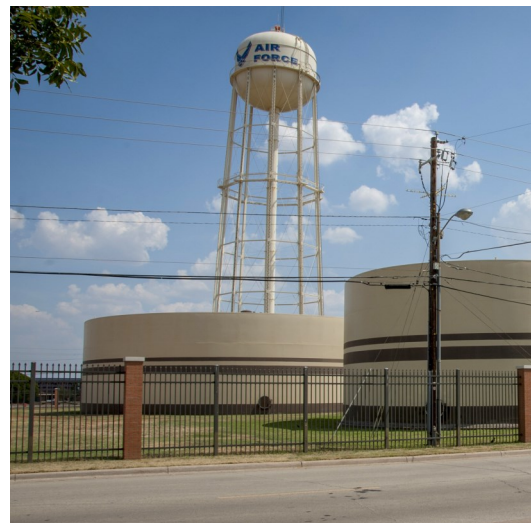


www.sheppard.af.mil
Office: 940-676-3080
Public Water System: TX2430007

Este informe contiene informacion muy importante sobre la calidad de su agua beber. Traduscalo o hable con alguien que lo entienda bien.

The 82d Bioenvironmental Engineering office is pleased to present this year's Annual Water Quality Report (or Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to the standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

This Consumer Confidence Report summarizes drinking water quality for the period between January 1 and December 31, 2024. In order to conserve natural resources and make it more efficient to distribute, an electronic copy can be downloaded at www.sheppard.af.mil. Hardcopies are also available upon request by contacting the 82d Bioenvironmental Engineering office at 940-676-3080.



Information About Your Drinking Water

The sources of drinking water (both tap and bottled) include rivers, lakes, ponds, reservoirs, springs and wells. As water travels over the surface of the land or underground, it can dissolve naturally occurring minerals. In some cases, water can pick up radioactive material, or substances resulting from the presence of animals or 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. Contaminates that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that 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 discharge, oil and gas production, mining, or farming.
- Pesticides and herbicide, 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 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 tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

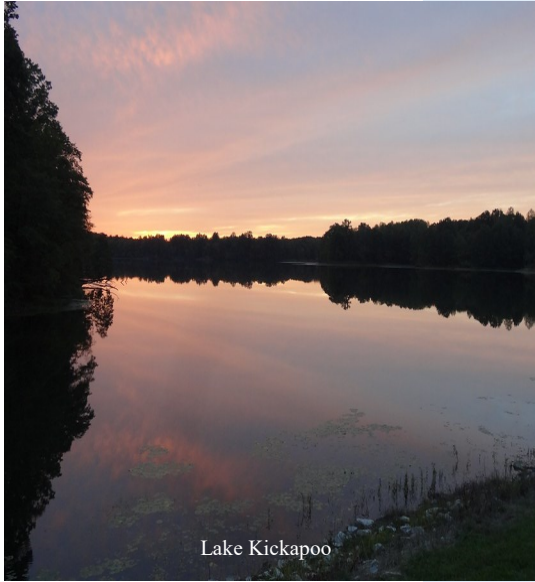
Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the 82d Bioenvironmental Engineering Office at (940) 676-3080.

Do I need to take special precautions?

Some people may be more vulnerable than the general population to certain microbial contaminants. At-risk populations include: infants, elderly, immunocompromised, those undergoing chemotherapy, those who have undergone organ transplants, those who are undergoing treatment with steroids, and people with HIV/AIDS can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on measures to reduce the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

Water Sources & Treatment

Sheppard AFB purchases water from the City of Wichita Falls. The City of Wichita Falls has previously utilized only two of its surface water reservoirs; Lake Arrowhead and Lake Kickapoo. While these two lakes have provided the citizens of Wichita Falls with a reliable source of drinking water for the last 60 years. The addition of Lake Kemp became possible in 2008 with new, advanced treatment technologies. In 2018, the addition of the indirect potable reuse project further bolstered the City's supply for years to come.



Lake Kickapoo

Lake Kickapoo is the first lake in the Little Wichita River watershed and has a drainage area of 275 square miles. Kickapoo was constructed in 1945, 18 miles southwest of Wichita Falls in Archer County. At its maximum capacity, Lake Kickapoo contains 106,000 acre feet (35 billion gallons) of water, making it the 61st largest (of 122) fresh water reservoir in the State of Texas. It was named for the Kickapoo Indians and for Kickapoo Creek, which empties into the reservoir.

Lake Arrowhead is the the last lake in the Little Wichita River watershed and has a drainage area of 832 square miles. Construction on Lake Arrowhead began in 1965, 15 miles southeast of Wichita Falls, primarily in Clay County. At its maximum capacity, Lake Arrowhead contains 228,000 acre feet (74 billion gallons) of water, which makes it the 40th largest (of 122) fresh water reservoir in the State of Texas.

Lake Kemp is the largest lake in the Big Wichita River watershed and has a drainage area of 2,086 square miles. Construction of Lake Kemp was completed in 1924, located 37 miles west of Wichita Falls. At maximum capacity, Lake Kemp contains 245,308 acre feet (80 billion gallons) of water, which makes it the 39th (of 122) largest fresh water reservoir in the State of Texas. It was named in honor of Joseph A. Kemp, who sought its construction to alleviate flooding issues within Wichita Falls.

Texas Commission on Environmental Quality completed an assessment of your drinking water, and results indicate that some 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. The source water assessment information is available on Texas Drinking Water Watch at <http://dww2.tceq.texas.gov/DWW/>. For more information on source water assessments and protection efforts at our system, please contact the City of Wichita Falls Public Works Department at (940) 761-7477

Terms and Abbreviations Used:

Action level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (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 (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow a margin of safety.

Maximum Residual Disinfection 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 Disinfection Level Goal (MRDLG): The level of 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.

Million fibers per liter (MFL): Used to measure asbestos concentrations.

Not Applicable (NA): No applicable maximum contaminant level goals or maximum residual disinfection level goal.

Not Detected (ND): The contaminant is below the detectable limits of the testing method.

Nephelometric Turbidity Unit (NTU):

A measure of water clarity .

Parts per billion (ppb): Equal to microgram per liter ($\mu\text{g/L}$).

Parts per million (ppm): equal to milligram per liter (mg/L).

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

Drinking Water Monitoring Results

City of Wichita Falls Monitoring Results

Contaminant (units)	Analysis Year	90th Percentile	# Sites Over AL	Action Level	MCLG	Violation	Typical Source
Source Water							
Copper (ppm)	2023	0.04394	0	1.3	1.3	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead (ppb)*	2023	2.53	0	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.

**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 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>.*

Contaminant (units)	Analysis Year	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Violation	Typical Source
Disinfection By-Products							
Chlorite (ppm)	2024	0.65	0.53 - 0.65	0.8	1	No	By-product of water disinfection.
Haloacetic Acid (ppb)*	2024	19	0 - 23.1	N/A	60	No	By-product of water disinfection.
Total Trihalomethanes (ppb)*	2024	34	17.7 - 51	N/A	80	No	By-product of water disinfection.

**The value in the Highest Level or Average Detected column is the highest average of all sample results at a location over a year.*

Contaminant (units)	Analysis Year	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Violation	Typical Source
Inorganic Contaminates							
Arsenic (ppb)	2024	1	0.0 - 1.2	0	10	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium (ppm)	2024	0.032	0.028 - 0.032	2	2	No	Discharge of drilling wastes; Discharge from metal refiner-ies; Erosion of natural deposits.
Fluoride (ppm)	2024	0.6	0.627 - 0.640	4	4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer and aluminum factories
Nitrate (ppm)	2024	0.184	0.111 - 0.184	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite (ppm)	2024	0.0624	0.0624 - 0.0624	1	1	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants							
Gross Beta Emitters (pCi/L)*	2023	12.3	12.3 - 12.3	0	50	No	Decay of natural and man-made deposits.
Combined radium (pCi/L)	2023	1.5	1.5 - 1.5	0	5	No	Erosion of natural deposits.

**EPA considers 50 pCi/L to be the level of concern for beta particles*

Contaminant (units)	Analysis Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Violation	Typical Source
Disinfectant Residual							
Chlorine, Total (ppm)	2024	3.24	2.90 - 3.59	4	4	No	Water additive used to control microbes.

Contaminant (units)	Analysis Year	Level Detected	Limit (Treatment Technique)	Violation	Typical Source
Turbidity					
Total Organic Carbon (ppm)	2024	percent measured monthly; all removal requirements met	TT	No	Naturally present in the environment.
Highest Single Measurement	2024	0.5 NTU	1 NTU	No	Soil runoff.
Lowest Monthly % Meeting Limit	2024	100%	0.3 NTU	No	Soil runoff.

Drinking Water Monitoring Results

Sheppard AFB Monitoring Results

Contaminant (units)	Analysis Year	90th Percentile	# Sites Over AL	Action Level	MCLG	Violation	Typical Source
Source Water							
Copper (ppm)	2024	0.1252	0	1.3	1.3	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead (ppb)*	2024	4.3	1	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.

**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 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>.*

Contaminant (units)	Analysis Year	Reported Value	Range of Detection	MCLG	MCL	Violation	Typical Source
Disinfection By-Products							
Haloacetic Acid (ppb)*	2024	15.7	8.8 - 18.7	N/A	60	No	By-product of water disinfection.
Total Trihalomethanes (ppb)*	2024	29.7	23.5 - 31.8	N/A	80	No	By-product of water disinfection.

**The value in the Highest Level or Average Detected column is the highest average of all sample results at a location over a year*

Contaminant (units)	Analysis Year	Reported Value	Range of Detection	MCLG	MCL	Violation	Typical Source
Inorganic Contaminates							
Asbestos (MFL)	2021	0.197	0.197 - 0.197	7	7	No	Decay of asbestos-cement water mains; Erosion of natural deposits.
Nitrate (ppm)	2024	0.377	0.377- 0.377	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite (ppm)	2024	0.0198	0.0198 - 0.0198	1	1	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Contaminant (units)	Analysis Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Violation	Typical Source
Disinfectant Residual							
Chlorine, Total (ppm)	2024	2.98	0.7 - 4.0	4.0	4.0	No	Water additive used to control microbes.

Contaminant (units)	Analysis Year	Highest No. of Positive	MCLG	MCL	Violation	Typical Source
Disinfectant Residual						
Total Coliform Bacteria	2024	1	0	1	No	Naturally present in the environment.
E. coli Bacteria	2024	0	0	0	No	Human and animal fecal waste.

Additional Information about Lead Service Lines and your Water System

The EPA Lead and Copper Rule was first introduced in 1991 to identify and reduce lead and copper in drinking water through corrosion control techniques and routine monitoring. The EPA recently revised the Lead and Copper Rule to further reduce the risk of lead in drinking water. The revision requires water systems to identify drinking water service lines that are either lead or galvanized downstream of a lead line, and implement a replacement plan for such service lines. Sheppard AFB recently completed a Lead Service Line Inventory in accordance with the Environmental Protection Agency's Safe Drinking Water Act Lead and Copper Rule Revision. We did not find any lead service lines in our drinking water distribution system. For more information on the installation service line inventory, call the Civil Engineering Installation Element, Environmental Compliance Section at (940) 676-2410.

Educational Information

Lead and Copper in Drinking Water

The EPA Safe Drinking Water Act requires public water systems to test water samples from its customers to determine lead and copper levels. If present, elevated levels of lead can cause serious health problems, especially in 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>



Water System Condition and Maintenance



During times of maintenance, the water may appear hazy or have a slight color at the consumer tap. Likewise, earthquakes, rapid changes in water velocity, and firefighting activities may also cause discolored water events. If this condition occurs, run several faucets until the water is clear. Additionally, maintenance activities may result in lower than normal pressure. This usually occurs during fire hydrant flow testing and water main flushing. Larger, more complex system maintenance, or repair activities may require the utility to lower all pressure within small areas of the water distribution network. As a result, utilities may issue a boil water notice to the affected area. These notices are usually issued out of an abundance of caution by the water supplier to ensure the public health is protected. It is important for the customer to read and follow the directions within the boil water notice. Contact Bioenvironmental Engineering office at 940-676-3080 for any questions.

Water Conservation Tips:

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short, five minute showers that use 4-5 gallons of water compared to up to 50 gallons for a bath.
- Shut off the water while brushing your teeth, washing your hair, and shaving to save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Wash your clothes and dishes only when the devices are full. You can save up to 1,000 gallons a month.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!

