



2020 Annual **WATER QUALITY REPORT**

Joint Base San Antonio – Sam Houston
PWS ID: TX0150116



**QUALITY. ONE MORE WAY
WE KEEP LIFE FLOWING.**



AMERICAN WATER
Military Services

A message from **Military Service Group's American Water's President**

American Water's Military Services Group owns and operates water and wastewater utilities under the Utilities Privatization program and proudly provides water and wastewater services to military communities around the country, including yours. Our Company's Vision – "We Keep Life Flowing" drives everything we do for you, our customers. To reinforce our vision and maintain your trust, it's important that we share with you information about our commitment to providing high-quality water service.

I am pleased to provide you with the 2020 Annual Water Quality Report with detailed information about the source and quality of your drinking water. We have prepared this report using the data from water quality testing conducted for your local water system from January through December 2020.

With equal importance, we place a strong focus on acting as stewards of our environment. In all of the communities we serve, we work closely with the local directorates of public works, civil engineering squadrons, local environmental departments and state regulatory agencies to protect environmental quality, educate customers on how to use water wisely, and ensure the high quality of your drinking water every day.

At American Water, our values – safety, trust, environmental leadership, teamwork, and high performance – mean more than simply making water available "on-demand". It means every employee working to deliver a key resource for public health, fire protection, the economy and the overall quality of life we enjoy – We Keep Life Flowing. For more information or for additional copies of this report, visit us online at www.amwater.com.

Mark McDonough
Military Service Group
American Water

This report contains important information about your drinking water. If you do not understand it, please have someone explain or translate it for you.

Este informe contiene información muy importante sobre su agua potable. Si no lo comprende, favor acudir a alguien que se lo pueda traducir o explicar.



ATTENTION: Landlords and Apartment Owners

Please share a copy of this notice with your tenants. It includes important information about their drinking water quality.

A photograph of a man and a young girl in a kitchen. The man, wearing a blue and white striped shirt, is leaning over a stainless steel sink, washing several bright orange carrots under running water. The girl, wearing a white dress with a small pattern, is standing next to him, smiling and watching him. The background shows a typical kitchen with various items on the counter and a window letting in light.

What is a Consumer Confidence Report (CCR)

Once again, we proudly present our Annual Water Quality Report, also referred to as a Consumer Confidence Report (CCR). CCRs let consumers know what contaminants, if any, were detected in their drinking water as well as related potential health effects. CCRs also include details about where your water comes from and how it is treated. Additionally, they educate customers on what it takes to deliver safe drinking water and highlight the need to protect drinking water sources.

The Military Service Group American Water is committed to delivering high quality drinking water service. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, environmental compliance, sustainability and community education while continuing to serve the needs of all our water users.

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About Your Drinking Water Supply

WHERE YOUR WATER COMES FROM

The raw drinking water supply is from 5 groundwater wells that terminate in the Edwards Aquifer. The Salado Creek flows south through this area and is the main watershed for Fort Sam Houston. Learn more about local waterways at <https://mywaterway.epa.gov/>. The Texas Commission on Environmental Quality (TCEQ) completed a source water assessment for the Salado Creek System in 2020 to meet Federal requirements of the Safe Drinking Water Act. The study looked at the drainage area and ranked various usability parameters. The watershed is considered in good condition for all parameters except recreational use. To get a copy of the assessment, contact TCEQ Region 13, San Antonio 210-490-3096 or go to: https://mywaterway.epa.gov/waterbody-report/TCEQMAIN/TX-1910_03/2020

Disinfection
treatment: Groundwater supplies are disinfected with chlorine to maintain water quality in the distribution system.



QUICK FACTS ABOUT THE JBSA SAM HOUSTON SYSTEM

Communities served:

Fort Sam Houston Military Base

Water source:

5 Groundwater wells provide water for this system

**Average amount of
water supplied to customers on
a daily basis:**
3.523MGD



SPECIAL HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

What are the Sources of Contaminants?

To provide tap water that is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which 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 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's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, aquifers and/or groundwater. 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 may 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 may also, come from gas stations, urban storm water runoff, and septic systems.
Radioactive Contaminants	which can be naturally occurring or may be the result of oil and gas production and mining activities.



Protecting Your Drinking Water Supply

Protecting drinking water at its source is an important part of the process to treat and deliver high quality water. It takes a community effort to protect our shared water resources. This includes utilities, businesses, residents, government agencies and organizations. Everyone who lives, works, and plays in the area has a role and stake in clean water supplies.

WHAT CAN YOU DO?

Quality drinking water starts upstream. Everyone can help maintain and improve drinking water supplies through the following actions:

- Properly dispose of pharmaceuticals, household chemicals, oils and paints. Materials can impact water ways if poured down the drain, flushed down the toilet, or dumped on the ground.
- Check for leaks from automobiles and heating fuel tanks. Clean up any spills using an absorbent material like cat litter. Sweep up the material and put it in a sealed bag in the trash.
- Clean up after your pets and limit the use of fertilizers and pesticides.
- Take part in watershed activities.

Report any spills, illegal dumping or suspicious activity to The EMCS Service Desk or Military Police.

FOR MORE INFORMATION

To learn more about your water supply and local activities, visit us online at www.amwater.com

Public Participation

Public input concerning water quality is always welcome. Water quality suggestions may be forwarded directly to the following:

Mail: P.O. Box 276260
San Antonio, TX 78227
Phone: (210) 965-8574.

The web sites of US EPA Office of Water, the Centers for Disease Control and Prevention, and Texas Department of Environmental Quality (TCEQ) provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. You may visit these sites as well as American Water's website at the following addresses:

Centers for Disease Control and Prevention
www.cdc.gov

United States Environmental Protection Agency
www.epa.gov/safewater

Texas Commission of Environmental Quality
www.TCEQ.com

American Water
www.amwater.com

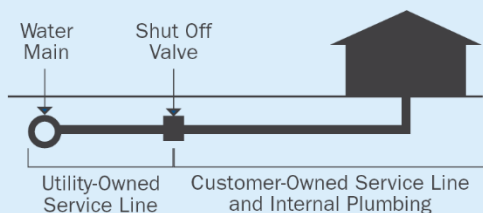
American Water Works Association
www.awwa.org

Safe Drinking Water Hotline: (800) 426-4791

About Lead

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. American Water 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>.

UTILITY-OWNED VS. CUSTOMER-OWNED PORTION OF THE SERVICE LINE



Please note: This diagram is a generic representation. Variations may apply.

The most common source of lead in tap water is from the customer's plumbing and their service line.

Our water mains are not made of lead; however, the water service line that carries the water from the water main in the street to your home could be. Homeowners' service lines may be made of lead, copper, galvanized steel or plastic. You can assess your service line material where it enters your home, typically in your basement, crawl space or garage, near the inlet valve.

MINIMIZING YOUR POTENTIAL EXPOSURE

You cannot see, smell or taste lead, and boiling water will not remove lead. Here are steps you can take to reduce your potential exposure if lead exists in your home plumbing.

CHECK YOUR PLUMBING AND SERVICE LINE

If you live in an older home, consider having a licensed plumber check your plumbing for lead. If your service line is made of lead, and you're planning to replace it, be sure to contact us at 1-210-965-8574.



1. Flush your taps. The longer the water lies dormant in your home's plumbing, the more lead it might contain. If the water in your faucet has gone unused for more than six hours, flush the tap with cold water for 30 seconds to two minutes before drinking or using it to cook. To conserve water, catch the running water and use it to water your plants.



2. Use cold water for drinking and cooking. Hot water has the potential to contain more lead than cold water. If hot water is needed for cooking, heat cold water on the stove or in the microwave.



3. Routinely remove and clean all faucet aerators.



4. Look for the "Lead Free" label when replacing or installing plumbing fixtures.



5. Follow manufacturer's instructions for replacing water filters in household appliances, such as refrigerators and ice makers, as well as home water treatment units and pitchers. Look for NSF 53 certified filters.



6. Flush after plumbing changes. Changes to your service line, meter, or interior plumbing may result in sediment, possibly containing lead, in your water supply. Remove the strainers from each faucet and run the water for 3 to 5 minutes.



Important Information About Drinking Water

CRYPTOSPORIDIUM

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

NITRATES

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness. Symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant or you are pregnant, you should ask for advice from your health care provider.



Water Quality Results

WATER QUALITY STATEMENT

We are pleased to report that during calendar year 2020, the results of testing of your drinking water complied with all state and federal drinking water requirements.

For your information, we have compiled a list in the table below showing the testing of your drinking water during 2020. The Texas Commission of Environmental Quality (TCEQ) allows us to monitor for some contaminants less than once per year because the concentration of the contaminants does not change frequently. Some of our data, though representative, are more than one year old.

Definitions of Terms Used in This Report

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

LRAA: Locational Running Annual Average

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. Secondary MCLs (SMCL) are set to protect the odor, taste, and appearance of drinking water.

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 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 contaminants.

MFL: Million fibers per liter.

micromhos per centimeter ($\mu\text{mhos/cm}$): A measure of electrical conductance.

NA: Not applicable

N/A: No data available

ND: Not detected

Nephelometric Turbidity Units (NTU): Measurement of the clarity, or turbidity, of the water.

pH: A measurement of acidity, 7.0 being neutral.

picocuries per liter (pCi/L): Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

parts per billion (ppb): One part substance per billion parts water, or micrograms per liter.

parts per million (ppm): One part substance per million parts water, or milligrams per liter.

parts per trillion (ppt): One part substance per trillion parts water, or nanograms per liter.

Primary Drinking Water Standard (PDWS): MCLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.

RAA: Running Annual Average

Secondary Maximum Contaminant Level (SMCL): Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

TON: Threshold Odor Number

Total Dissolved Solids (TDS): An overall indicator of the amount of minerals in water.

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

Variances and Exemptions: State or EPA permission not to meet an MCL or utilize a treatment technique under certain conditions.

%: Percent

MEASUREMENTS

Parts Per Million



in a 10 gallon fish tank

Parts Per Billion



in a 10,000 gallon swimming pool

Parts Per Trillion



in 35 junior size Olympic pools

Water Quality Results

American Water Military Service Group – Scott AFB conducts extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables. While most monitoring was conducted in 2020, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting the tables below, see the “Definition of Terms Used in This Report” on the previous page.

HOW TO READ THIS TABLE (FROM LEFT TO RIGHT)

- Starting with **Substance (with units)**, read across.
- **Year Sampled** is usually in 2020, but may be a prior year.
- A **Yes** under **Compliance Achieved** means the amount of the substance met government requirements.
- **MCLG/MRDLG** is the goal level for that substance (this may be lower than what is allowed).
- **MCL/MRDL/TT/Action Level** shows the highest level of substance (contaminant) allowed.
- **Highest, Lowest or Average Compliance Result** represents the measured amount detected.
- **Range** tells the highest and lowest amounts measured.
- **Typical Source** tells where the substance usually originates.

Some unregulated substances are measured, but maximum contaminant levels have not been established by the government. These contaminants are shown for your information.

NOTE: Regulated contaminants not listed in this table were not found in the treated water supply.

LEAD AND COPPER MONITORING PROGRAM - At least 30 tap water samples collected at customers' taps every year.

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Action Level (AL)	90 th Percentile	No. of Homes Sampled	Homes Above Action Level	Typical Source
Lead	2020	Yes	0	15	ND	34	0	Corrosion of household plumbing systems.
Copper (ppm)	2020	Yes	1.3	1.3	.126	34	0	Corrosion of household plumbing systems.

TOTAL COLIFORM RULE - At least 40 samples collected each month in the distribution system

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest % of Samples	Typical Source
Total Coliform	2020	Yes	NA	MCL = No more than 5% positive monthly sample	4.3	Naturally present in the environment.
E. Coli	2020	Yes	0	TT = No confirmed samples	0	Human and animal fecal waste.

NOTE: Coliforms are bacteria that are naturally present in the environment and are used as an indicator of the general bacteriological quality of the water. We are reporting the highest percentage of positive samples / highest number of positive samples in any month.

DISINFECTION BYPRODUCTS - Collected in the Distribution System							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Total Trihalomethanes (TTHMs) (ppb)	2020	Yes	NA	80	2	0 to 1.3	By-product of drinking water disinfection.
Haloacetic Acids (HAAs) (ppb)	2020	Yes	NA	60	ND	0 to 0	By-product of drinking water disinfection.

NOTE: Compliance is based on the running annual average at each location. The Highest Compliance Result reflects the highest average at any location and the Range Detected reflects all samples from this year used to calculate the running annual average.

DISINFECTANTS - Collected in the Distribution System and at the Treatment Plant							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Chlorine (ppm) (Distribution System)	2020	Yes	MRDLG = 4	4	1.46	.33 to 2.28	Water additive used to control microbes.

1 - Data represents the highest monthly average of chlorine residuals measured throughout our distribution system.

REGULATED SUBSTANCES							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Barium (ppm)	2020	Yes	2	2	0.0908	0.0513 to 0.0908	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chlorite (ppm)	2020	Yes	.8	1	.55	0.15 to 0.55	By-product of drinking water disinfection.
Fluoride (ppm)	2020	Yes	4	4	0.25	0.18 to 0.25	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (ppm)	2020	Yes	10	10	2	1.96 to 2.11	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.



Tested for, but **Not Detected**

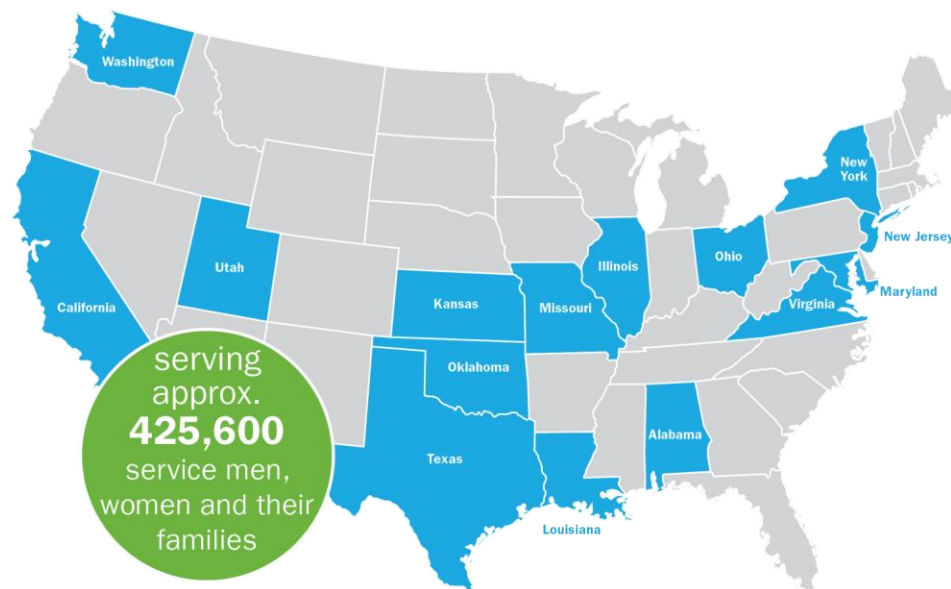
- | | | | |
|--|---|--|---|
| <ul style="list-style-type: none"> • 1,1,1,2-Tetrachloroethane • 1,1,1-Trichloroethane • 1,1,2-Trichloroethane • 1,1-Dichloroethene • 1,2,4-Trichlorobenzene • 1,2-Dibromo-3-chloropropane • 1,2-Dichloroethane • 1,2-Dichloropropane • 2,4,5-T • 2,4,5-TP (Silvex) • 2,4-DB • 3,5-Dichlorobenzoic Acid • 3-Hydroxycarbofuran Acifluorfen • Alachlor • Aldicarb • Aldicarb Sulfone Aldicarb Sulfoxide • Aluminum - Total • Antimony - Total Arochlor-1016 • Arsenic • Arochlor-1221 Arochlor-1232 • Arochlor-1242 | <ul style="list-style-type: none"> • Arochlor-1248 Arochlor-1254 • Arochlor-1260 Arsenic - Total • Benzene • Benzo(a)pyrene Beryllium - Total • Carbon tetrachloride Chlorobenzene • Chromium - Total • cis-1,2-Dichloroethene Cobalt - Total • Cyanide, Total • Dalapon • Di(2-ethylhexyl)adipate Di(2-ethylhexyl)phthalate • Dicamba • Dichloroprop • Dinoseb • Ethyl Dibromide • Endrin • Ethyl Benzene • Gamma Chlordane • Heptachlor • Heptachlor epoxide | <ul style="list-style-type: none"> • Hexachlorobenzene • Hexachlorocyclopentadiene Iron - Total • Lead - Total • Manganese - Total • Mercury - Total • Methiocarb • Methomyl • Methoxychlor • Methyl tert-Butyl ether (MTBE) • Methylene chloride • Oxamyl (Vydate) Pentachlorophenol • Perchlorate • Picloram • Silver - Total • Simazine (Princep) • Styrene • Thallium - Total • Toluene • Toxaphene • trans-1,2-Dichloroethene | <ul style="list-style-type: none"> • Trichloroethene (TCE) • Vinyl chloride • Xylene (total) • Zinc - Total |
|--|---|--|---|



About Us

With a history dating back to 1886, **American Water Works Company, Inc.** (NYSE: AWK) is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 6,800 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an 15 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing.

American Water's Military Services Group, a subsidiary of American Water, owns and operates water and wastewater systems on 17 military installations, serving approximately 425,600 service men, women and their families. For more information, visit amwater.com and follow us on Twitter and Facebook.



MILITARY SERVICES SITE LOCATIONS

ALABAMA

Fort Rucker

CALIFORNIA

Vandenberg Air Force Base

ILLINOIS

Scott Air Force Base

KANSAS

Fort Leavenworth

LOUISIANA

Fort Polk

MARYLAND

Fort Meade

MISSOURI

Fort Leonard Wood

NEW JERSEY

Picatinny Arsenal

NEW YORK

U.S. Army Garrison West Point

OHIO

Wright-Patterson Air Force Base

OKLAHOMA

Fort Sill

TEXAS

Fort Hood
Joint Base San Antonio

UTAH

Hill Air Force Base

VIRGINIA

Fort A.P. Hill
Fort Belvoir

WASHINGTON

Joint Base Lewis-McChord