



Consumer Confidence Report Annual Water Quality Report 2020

Is my water safe?

Your tap water is safe and meets all Environmental Protection Agency (EPA) and Washington drinking water health standards.



We are pleased to present this year's annual 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 standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?



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 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.

Where does my water come from?

Sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Fairchild AFB's drinking water comes primarily from four groundwater wells, drawing water from the underground Spokane Valley-Rathdrum Prairie and Hangman Creek Aquifers.



Source water assessment

Twenty-four commercial and industrial locations were evaluated as potential contamination sources to the primary water source. Based on the evaluation, the main well field's risk level is categorized as "low." Additionally, no commercial or industrial operations exist that would pose a risk to the water pumped from the auxiliary well field. If you require further information on the quality of our source water, a copy of the source water assessment, or wellhead protection plan, please contact 92d Civil Engineer Squadron, Operations Engineering (92 CES/CEOE) at (509) 247-5839.

Why are there contaminants in my 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 Safe Drinking Water Hotline.

How can I get involved?

This report was prepared by the 92d Operational Medical Readiness Squadron's Bioenvironmental Engineering Flight. For additional information, or if you have any questions or concerns about your drinking water, please contact us at (509) 247-2391.

Description of Water Treatment Process

Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century. Fluoride is also added to your water to promote healthy teeth.

Auxiliary & Emergency Water Sources

Auxiliary Well

Additional water is obtained from the West Plains Aquifer through a well located on FAFB when demand dictates. Water is disinfected with chlorine before being pumped into the distribution system for consumption. Water provided by the auxiliary source is safe to drink and meets all EPA and Washington drinking water health standards.

Spokane Water System

During water contingencies, Fairchild AFB can be supplied water by the City of Spokane through an interconnection or from the Auxiliary Well. For information about Spokane's water quality or their current Consumer Confidence Report, contact the City of Spokane Water Department at (509) 625-7800 or visit <https://my.spokanecity.org/publicworks/water/quality/>



A few words about lead in drinking water

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. Fairchild AFB 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>.



Water conservation!



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 showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and 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.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. 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!

Your Water Quality

To ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve drinking water's taste and have nutritional value at low levels. The tables below list all of the contaminants and added substances that we detected during the calendar year of this report as well as samples that were collected within the previous five years. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions near the end of this report.

WATER QUALITY DATA TABLE

Monitoring data below represents the water quality of the entire base water distribution system.

Contaminants (units)	MCLG	MCL	Range or Result	Sample Year	Violation	Typical Source	
Inorganic Contaminants							
Nitrate [measured as Nitrogen] (ppm)	10	10	0.763-1.49	2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
Disinfection By-Products							
Total Trihalomethanes (ppb)	NA	80	2.08	2020	No	By-product of drinking water disinfection	
Contaminants (units)	MCLG	AL	Result	Sample Year	# Samples Exceeding AL	Overall Exceeds AL	Typical Source
Halo-Acetic Acids (HAA5) (ug/L)	60	60	ND	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Added Substances (units)	MCLG	MCL	Range	Sample Year	Violation	Typical Source	
Continuous Fluoride Monitoring Results							
Fluoride (ppm)	4	4	0.55-0.969	2020 (Monthly)	No	Added to promote healthy teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories	

Unregulated Contaminant Monitoring Rule (UCMR) Results

UCMR contaminants are used to evaluate and prioritize contaminants on the Drinking Water Contaminant Candidate List, a list of contaminants EPA is considering for possible new drinking water standards. These contaminants do not have an EPA MCL but do have a health advisory (HA) level. EPA HA's identify the concentration in drinking water at or below which adverse health effects are not anticipated to occur over a lifetime of exposure. Bioenvironmental Engineering conducts ongoing monitoring to ensure results are consistently below the HA.

Contaminants (units)	HA	Your Water	Sample Date	Typical Source
Perfluorooctanesulfonic acid (PFOS) (ppt)	70	0.49	2020	Fire retardant foam
Perfluorooctanoic acid (PFOA) (ppt)	70	0.65	2020	Fire retardant foam

- 2020 PFOS/PFOA sample results are associated with the JPRA White Bluff water system. The Fairchild AFB water system will be sampled for these contaminants in 2021.

Undetected Contaminants

The following contaminants were monitored for but not detected in Fairchild AFB's alternate water source.

Contaminants	MCLG	MCL	Sample Date	Typical Source/Explanation
Volatile Organic Contaminants (VOCS)	Varies	Varies	Nov 2020	Over 25 VOCs sampled; none detected above lab detection limits.

Microbiological Contaminants

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Fecal coliforms and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely-compromised immune systems.

Contaminants	MCL	Positives	Sample Date	Typical Source/Explanation
Total Coliform Bacteria	1 monthly positive sample	1	Monthly	Naturally present in the environment. Total Coliform was present in the initial sample taken at the Ross Dining Facility, reported on 23 Oct 20. A resample was taken 23 Oct 20 at the initial sampling site in conjunction with an upstream and downstream sample. All samples were negative for Total Coliform Bacteria.
Fecal Coliform and <i>E. Coli</i>	0	0	Monthly	Human and animal fecal waste.

Unit Descriptions

Term	Definition
ppm	parts per million, or milligrams per liter (mg/L)
ppb	parts per billion, or micrograms per liter (µg/L)
ppt	parts per trillion, or nanograms per liter (ng/L)
NA	not applicable
ND	not detected

Important Drinking Water Definitions

Term	Definition
MCLG	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.
MCL	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.
HA	HA: Health Advisory: The concentration in drinking water at or below which adverse health effects are not anticipated to occur over a lifetime of exposure.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

For more information please contact:

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30 September 2021

MEMORANDUM FOR 92 ARW

FROM: 92 OMRS/SGXB

SUBJECT: 15 JUNE 21 PFAS Results_Addendum to Annual CCR

1. On 15 June 2021, TSgt Kyle Schmidt and A1C Isiah Gomez from Bioenvironmental Engineering (BE) conducted PFAS Sampling in accordance with EPA method 537.1. BE conducted this survey as required by AF policy memo *USA001087-20* dated 23 July 2020. The results were obtained from Anatek Labs on 8 July 2021, the lab report showed all results as **non-detect**. Meaning that there is no concern for Fairchild Air Force base for PFAS contamination.
2. To learn more about PFAS please visit the EPA website at <https://www.epa.gov/pfas>. If there are any further questions or concerns please contact the BE office at 247-2391.

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NCOIC, Environmental Health Element