



**Fairchild Air Force Base**  
**2022**

**Drinking Water Consumer  
Confidence Report (CCR)**

## What is a CCR?

A Consumer Confidence Report (CCR) is an annual summary required by the Environmental Protection Agency (EPA) and the Safe Drinking Water Act (SDWA), providing need-to-know information about the water quality of a given distribution system to its customers. Such information includes details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. Mandated to be reported by July 1st for the previous calendar year, a CCR helps you make informed decisions about the water you drink. We are pleased to present the following 2022 Fairchild AFB CCR, outlining that your tap water is safe and meets all EPA and Washington Department of Health (DOH) drinking water health standards. Such standards include testing for PFOS/PFOA, microbiological contaminants, lead, copper, and many others. We are committed to providing you with information because informed customers are our best allies.



## Where does my water come from?

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

## Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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.



## 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 any contaminants at all in my drinking water?

All drinking water, including bottled water, is reasonably expected to contain at least small amounts of some contaminants, but the presence of contaminants does not necessarily indicate that water poses a health risk. As mentioned previously, and as seen in the data tables that follow, all contaminants that are present in Fairchild's drinking water are well below any critical values. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline.

## 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 even 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!

# Water Quality Data Table

Monitoring data below represents the water quality of the entire base water distribution system. Sample years coincide with monitoring frequencies established by the EPA, and while some samples are required on an annual basis, others may not be due for another 3+ years. Thus, the sample year denotes the most up-to-date data required for that specific contaminant.

**See Page 7 for pertinent definitions and unit descriptions.**

Contaminants (units)	MCLG	MCL	Results	Sample Year	Violation		Typical Source
<b>Inorganic Contaminants</b>							
Nitrate [measured as Nitrogen] (ppm)	10	10	1.29	2022	No		Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Disinfection By-Products</b>							
Total Trihalomethanes (ppb)	NA	80	2.05	2022	No		By-product of drinking water disinfection
Dibromochloromethane (ppb)	0.06	80	0.810	2022	No		By-product of drinking water disinfection
Bromoform (ppb)	0	80	0.940	2022	No		By-product of drinking water disinfection
Contaminants (units)	MCLG	AL	Result	Sample Year	# of Samples Exceeding an AL	Overall Exceeds AL	Typical Source
Halo-Acetic Acids (HAA5)	60	60	ND	2022	0	No	Byproduct of drinking water disinfection
Asbestos (µm)	7	7	0.117	2019	0	No	Decay of asbestos cement water mains; Erosion of natural deposits
Added Substances	MCLG	MCL	Range	Sample Year	Violation		Typical Source
<b>Continuous Fluoride Monitoring Results</b>							
Fluoride (ppm)	4	4	0.629-1.07	2022 (monthly)	No		Added to promote healthy teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories

# Lead and Copper Monitoring

During 2021, Bioenvironmental Engineering Tested 20 facilities around Fairchild AFB for lead & copper as part of our routine 5 year sample requirement per EPA guidelines. Given that all samples were below the state MCL, the next sampling event for lead & copper is not scheduled until 2026.

Contaminants (units)	MCLG	MCL	90th Per-centile	Sample Year	Violation	Typical Source
Lead (mg/L)	0	0.015	0.00137	2021	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (mg/L)	1.3	1.3	0.221	2021	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservation

# 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 every 3 years to ensure results are consistently below the HA.

Contaminants (units)	HA	Your Water	Sample Year	Typical Source
Perfluorooctane sulfonic acid (PFOS) (ppt)	70	ND	2021	Fire retardant foam
Perfluorooctanoic acid (PFOA) (ppt)	70	ND	2021	Fire retardant foam

# 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 (units)	MCL	Positives	Sample Date	Typical Source
Total Coliform Bacteria	1 Monthly Positive Sample	0	Monthly	Naturally present in the environment. All samples were negative for Total Coliform Bacteria.
Fecal Coliform and E. Coli	0	0	Monthly	Human and animal fecal waste.

## Unit Descriptions

Term	Definition
NA	Not Applicable
ND	Not Detected
ppb	parts per billion, or micrograms per liter ( $\mu\text{g/L}$ )
ppm	parts per million, or milligrams per liter ( $\text{mg/L}$ )
ppt	parts per trillion, or nanograms per liter ( $\text{ng/L}$ )

## Important Drinking Water Definitions

Term	Definition
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	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	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	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:

2d Lt Samantha Kigin

Bioenvironmental Engineering Flight Commander

SrA John Alvarado

Environmental Health Operations Element NCOIC

Address:

Attn: Bioenvironmental Engineering

701 Hospital Loop Fairchild AFB, WA 99011

Phone: (509) 247-2391



- To view this report electronically, please visit the following URL on the Fairchild AFB website at: <https://www.fairchild.af.mil/Information/Featured-Links/>
  - Listed as “Water Quality Drinking Report”