

2024 WATER QUALITY REPORT

Water is the most abundant compound on Earth’s surface. Water covers 70% of Earth’s surface but only 3% is fresh water and 30% of that water is ground water. Water is the only compound found naturally in all common states of matter and it is essential for life.

This annual report summarizes the analytical testing results from samples of your area’s water supply and compares your tap water to federal and state standards. All of Fox Island Mutual Water comes from underground aquifers, meaning the water you consume is pumped from a series of wells to your home or business through our system of reservoirs and mains. We regularly draw water from eight wells, which vary in depth from 88 to 850 feet.

Again, we are pleased to report that your water meets or exceeds all health-related standards for quality and safety. We do have some elevated iron (MCL of 0.3 mg/l). Iron in our water ranges from <0.01 to 0.16 mg/l. Manganese (MCL of 0.05) ranges from < 0.01 to 0.076 mg/l. This raw water is either mixed with other sources or treated to reduce the iron and manganese level. 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.

The Federal Safe Drinking Water Act (SDWA) divides drinking water *Inorganic Contaminants* into two categories: **Primary** standards (Table 1) relate to constituents that affect public health. **Secondary** standards relate to constituents that effect esthetic qualities such as appearance, taste, odor, and color. The following is the **highest primary level** of each chemical from all eight wells. As you examine Table 1, notice that organic chemical levels are expressed in mg/l (milligrams per liter) of water (0.1mg/l = 1part per 100 million) (0.001mg/l = 1 part per billion). To illustrate how small a milligram is; one milligram per liter is equal to a single penny to \$10,000.

Table 1 Primary Standards, Health-Related Standards
Established by Washington State Department of Health and USEPA

Compound	Unit	MCL	Highest level from any well	Likely Source of Contamination
Antimony	Mg/l	0.006	<0.003	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
Arsenic	Mg/l	0.010	0.004	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium	Mg/l	2	<0.1	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Beryllium	Mg/l	0.004	<0.0003	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium	Mg/l	0.005	<0.001	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.
Chromium	Mg/l	0.1	<0.007	Discharge from steel and pulp mills; erosion of natural deposits.
Mercury	Mg/l	0.002	<0.0002	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.
Selenium	Mg/l	0.05	<0.002	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.

Nitrate	Mg/l	10	3.22	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
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< - Less than (MCL) maximum contaminant level

Compound	Unit	SAL	Highest level from any well	Likely Source of Contamination
PFBS	ng/L	345	11.5	Man Made – firefighting foams, cleaning products, water-resistant fabrics, personal care products (shampoo, dental floss, nail polish).
PFHxS	ng/L	65	2.27	
PFHxA	ng/L	N/A	9.75	
PFBA	ng/L	N/A	2.15	
PFPeA	ng/L	N/A	10.5	

(SAL) State Action level (ng/L = 1 part per trillion)

PFBS (tested every three years) was detected in 3 of our wells (11, 22 & 14) near the center of the island, just above the limit of detection. These wells contributed 16.5% of the water production across the Island, and this water is blended with the other 5 Wells (15, 20, 21, 23, and 24) that we also tested with NO DETECTION of the 25 PFAS compounds tested.

LEAD AND COPPER RULE (tested every three years)

Elevated levels of lead can cause serious health problems, especially in pregnant women and young children. FIMWA customers should recognize that the water delivered to their homes contains lead concentrations far below the level which are known to affect health. However, water has the ability to leach metals from household plumbing. Flushing for 30 seconds before consuming water that has been standing in the plumbing for more than a few hours can minimize the potential for lead exposure.

Highest lead level from samples analyzed July 2022 of 10 residential taps: < 0.0011 Mg/l EPA action level: 0.015 Mg/l

Highest copper level from samples analyzed July 2022 of 10 residential taps: 0.145 Mg/l EPA action level: 1.3 Mg/l

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.

For more information on lead in drinking water, microbial contaminants, organic chemical contaminants, including synthetic and volatile organic chemicals. **Call the EPA’s Safe Drinking Water Hotline (800-426-4791) or <http://www.epa.gov/safewater>**

In accordance with WAC 246-290-840 (Water Use Efficiency Requirements), we are providing information on our efforts to conserve water use. In 2023 we produced 166 million gallons of water. Our meter reading suggests we are losing less than 2.5% of the water we produce. In the period from 2019-2023 our average daily demand for water was 351 gallons per connection per day. For 2024 that decreased to 319. To comply with the Water Use Efficiency Rule our goal is to reduce water use by 5 Gallons per connection per day. In 2024, we completed our meter replacement and backflow installation project and finished drilling our newest well, which is 765’. In 2025, we will construct a water treatment plant for the new well, which will remove elevated levels of Iron and manganese from the well water. Chlorine and permanganate will be added to oxidize and settle out these minerals, and the water will then be filtered for clarity.

We have never had e.coli or fecal coliform detected in our system

We will hold our annual meeting this year on Tuesday, March 18th. If you have questions, please feel free to visit us at our web site, www.foxislandwater.org or call the office at 549-2671.