CITY OF FERNDALE

Water Quality

REPORT 2023

Mayor Hansen at the Water Treatment Plant

2023 City of Ferndale Water Report – Mayor's Message

Life requires water. It is not an exaggeration to say that water is the life blood of all living things. Throughout human history, civilizations have flourished in those places that have access to clean and abundant water. Water is a fundamental necessity for civilization, and throughout history, some of the most ambitious engineering projects have been undertaken to supply drinking water to growing cities: the Roman and Myan aqueducts, the New River project in London, and the Hoover dam, are just a few of the historic efforts to support civilization.

In Ferndale, our water infrastructure projects are not historic in size and significance, but are critically important to our community. In early in 2024, the City of Ferndale, working with Tiger Construction, began a $9.3 million water treatment plant expansion and upgrade. This long-awaited project will boost the water treatment plant's capacity to 2,300 gallons per minute (GPM) and transition the water treatment process to 100% reverse osmosis. Additionally, included in this project are provisions for future expansion to increase the water treatment plant's capacity by an additional 25%, enabling the treatment the plan plant capacity to a maximum of 2880 GPM.

In addition to our water treatment plant expansion and upgrade, the City has also initiated the Douglas Well #2 project. This project will establish a second well into the deep aquifer, doubling our capacity to draw water from this previously untapped water source, which the city of Ferndale began using in 2022.

Water touches almost every part of city City operations, from Finance to Public Works, to Community Development to Administration. Every day, numerous dedicated and well-trained individuals work tirelessly to ensure that our city's City's water infrastructure operates seamlessly – providing clean drinking water to all residents 24 hours a day, seven days a week.

For more information about these projects or any other City projects, you can visit our city website at www.cityofferndale.org. Rest assured; we are working around the clock and are committed to meeting our residents' water needs both now and in to into the future.

Greg C. Hansen

Mayor of Ferndale

The City has implemented mandatory watering restrictions effective June 1st through September 15th. Residents with odd numbered street addresses are mandated to water only on Wednesdays, Fridays and Sundays. Residents with even numbered street addresses water only on Tuesdays, Thursdays and Saturdays. Mondays are non-watering days to allow the City's reservoirs to recharge after the weekend. For more information visit www.Cityofferndale.org or contact the City at 360-384-4302.

WATERING EXEMPTIONS:

The Mandatory Watering Restrictions do not apply to the following situations:

- Drip irrigation systems or handheld watering
- Watering of flower and vegetable gardens
- Watering of outdoor potted plants and hanging baskets
- Watering newly planted lawns

MANDATORY WATERING RESTRICTIONS: JUNE 1 – SEPTEMBER 15

SUN	MON	TUES	WED	THUR	FRI	SAT
✓ ODD	⊗ NO WATERING	✓ EVEN	✓ ODD	✓ EVEN	✓ ODD	✓ EVEN

WHATCOM WATER ALLIANCE Partner

The City of Ferndale is a partner of the Whatcom Water Alliance, a regional water conservation group. The Alliance shares a passion in providing clean and safe water to protect your health, planet and quality of life.

WATER'S WORTH IT

We must all work together to keep our water clean and healthy. To do that, we each need to learn to value water. To learn more, visit www.watersworthit.org.

WATER'S WORTH IT™ is a trademark of the Water Environment Federation.

City of Ferndale
P.O. Box 936, Ferndale, WA 98248

Your Comments Are Welcomed!

The Ferndale City Council meets the first and third Mondays of every month at the City Hall Annex Building located at 5694 2nd Avenue, Ferndale, starting at 6:00 p.m. Public comment is taken at the beginning of each meeting.

For more information, please call City Hall at (360) 384-4302.

The City of Ferndale water source is a system of three groundwater wells. Two of the wells are completed in the Vashon-Olympia (V-O) aquifer and one well is completed in the Possession-Whidbey (P-W) aquifer. Water in the V-O aquifer appears to be semi-confined to confined by an overlying thick sequence of fine-grained glacial sediments located in the Mountain View and Boundary uplands in western Whatcom County. The P-W aquifer is located at greater depths and is highly confined by overlying low permeability glacial and non-glacial sediments. Water from both aquifers is treated at the City's treatment plant where it is softened and chlorinated (to protect against microbiological contaminants).

WHY PROVIDE A

WATER QUALITY REPORT?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. 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 result from urban stormwater 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 stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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 that tap water is safe to drink, 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.

WATER QUALITY RESULTS FOR 2023

PWSID#24850M

Substance (units)	Level Detected	MCL	MCLG	Likely Source	In Compliance?
RAW WATER (Before Treatment)					
Total Organic Carbon (ppm)	Range Detected: 0.66-0.97 Average: 0.76	TT		Naturally present in the environment.	Yes
REGULATED AT THE TREATMENT PLANT					
Arsenic (ppm) (Tested 2021)	0.001	0.010	0	Erosion of natural deposits.	Yes
Barium (ppm) (Tested 2021)	0.032	2	2	Erosion of natural deposits.	Yes
Copper (ppm) (Tested 2021)	0.027	SMCL =1		Erosion of natural deposits.	Yes
Nitrate (ppm)	Annual Sample: ND	10	0	Runoff from fertilizer use; Leaking from septic tanks, sewage; Erosion of natural deposits.	Yes
Free Chlorine Residual (ppm)	Range Detected: 0.34-0.99 Average: 0.86	4 (MRDL)	4 (MRDLG)	Water additive used to control microbes.	Yes
REGULATED IN THE DISTRIBUTION SYSTEM					
Copper (ppm) (Tested 2021)	90th Percentile Copper: 0.116 Range Detected: 0.015 - 0.173	Action Level 1.3	1.3	Corrosion of household plumbing systems.	Yes
Lead(ppm) (Tested 2021)	90th Percentile Lead: 0.007 Range Detected: 0 - 0.0175	Action Level 0.015	0	Corrosion of household plumbing systems.	Yes
Total Coliform (presence/absence)	240 samples collected Zero positive samples	more than 1 positive sample per month	0	Naturally present in the environment.	Yes
Haloacetic Acids (ppb)	Range Detected: 3.5-3.9 Average: 3.7	60		By-product of drinking water disinfection.	Yes
Total Trihalomethanes(ppb)	Range Detected: 27.9-37.8 Average: 32.9	80		By-product of drinking water disinfection.	Yes

UNIT DESCRIPTIONS

mg/L: Milligrams per Liter

pCi/L: Picocuries per Liter

ppm: Parts per Million

ppb: Parts per Billion

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

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.

MRDLG: Maximum Residual Disinfectant Level Goal: 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.

MRDL: Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of mivcrobial contaminants (e.g. chlorine, chloramines, chlorine dioxide).

SMCL: Secondary Maximum Contaminant Level: The maximum concentration or level of certain water contaminants in public water supplies set by the U.S. Environmental Protection Agency (EPA) to protect the public welfare. The secondary levels are written to address aesthetic considerations such as taste, odor, and color or water, rather than health standards. Also see Primary Drinking Water Standards, Maximum Contaminant Level (MCL), and Maximum Contaminant Level Goal (MCLG).

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

ND: Not detected

EPA: Environmental Protection Agency

CDC: Center for Disease Control & Prevention

The U.S. Environmental Protection Agency (EPA) required the testing of Per- and Polyfluoroalkyl Substances (PFAS) for Unregulated Contaminant Monitoring Rule 5 (UCMR5) in 2023. Sampling was conducted as prescribed by the EPA in June and December for 30 unregulated contaminants and all 60 individual test results were below the detection limit or non-detect (ND). The City of Ferndale drinking water contains no detectable levels of PFAS.

City of Ferndale Water Treatment Plant
Phone (360) 384-4607 | www.cityofferndale.org
Mike Olinger • Public Utilities Superintendent

MESSAGE FROM THE

ENVIRONMENTAL PROTECTION AGENCY (EPA)

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 (1-800-426-4791).

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/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 (1-800-426-4791).

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. We are 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 drinking 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.