

The City of Ferndale is pleased to present this year's Annual Water Quality Report. This report is designed to inform you about the quality of the water the City delivers to you every day. Our goal is to provide you with a safe and dependable supply of drinking water while ensuring the protection of this natural resource.

Watering Schedule	
June 1–September 15	
Sunday	
Odd Street Address	
Monday	
No Watering	
Tuesday	
Even Street Address	
Wednesday	
Odd Street Address	
Thursday	
Even Street Address	
Friday	
Odd Street Address	
Saturday	
Even Street Address	

Watering Exemptions

The Voluntary Watering Schedule does 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

Outdoor Watering Tips

- Only water your lawn when it needs it. If you leave footprints in your lawn, it's time to water.
- One Inch Per Week! Turf-grasses only need 1 inch of water per week to stay green and healthy.
- Adjust mower height. Longer grass shades root systems and holds soil moisture better than closely clipped lawns.
- Regularly check and adjust your sprinklers. Water only your lawn, not your sidewalk or driveway.

Water Conservation

The City will begin implementing a voluntary watering schedule affective June 1st through September 15th. Residents with odd numbered street addresses are asked 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 Cities reservoirs to recharge after the weekend. For more information visit www.Cityofferndale.org or contact the City at 360-384-4302.

How do contaminants enter our water?

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. 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 the 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: 1 (800) 426-4791.

Should I take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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. Environmental Protection Agency (EPA)/Centers for Disease Control (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.

Is our drinking water safe?

The City of Ferndale routinely monitors for substances in our drinking water according to Federal and State laws. We're proud that the drinking water we provide to our customers meets or exceeds all Federal and State requirements. **OUR SYSTEM HAS HAD NO VIOLATIONS!** We have learned through our monitoring and testing, however, that some substances have been detected. The Environmental Protection Agency (EPA) and Washington State Department of Health (DOH) have determined that **YOUR DRINKING WATER IS SAFE** at these levels. A comprehensive list of these detected items is shown in the table on the back of this report.

Which contaminants were detected in our water?

The City of Ferndale tests for more than 150 substances including microbiological, radioactive, inorganic, synthetic organic and volatile organic contaminants regulated by the EPA and DOH. The table on the back page shows only those that have been detected in your water. These are the results of our monitoring for the period of January 1st to December 31st, 2011, except for copper and lead, which we monitor less than once per year, in accordance with our monitoring requirements.

As the table shows, the City of Ferndale's water is in compliance.

How can I get involved?

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.

City of Ferndale Water Quality Report



What do these Terms Mean?

In this report you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

- **Action Level** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Maximum Contaminant Level (MCL) or Maximum Residual Disinfectant Level (MRDL)** The highest level of a contaminant or residual disinfectant that is allowed in drinking water. MCL/MRDLs are set as close to the MCLG/MRDLGs as feasible using the best available treatment technology.
- **Maximum Contaminant Level Goal (MCLG) or Maximum Residual Disinfectant Level Goal (MRDLG)** The level of a contaminant or residual disinfectant in drinking water below which there is no known or expected risk to health. MCLG/MRDLGs allow for a margin of safety. MCL/MRDLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.
- **Milligrams per Liter (mg/L) or Parts per Million (ppm)** One part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Nephelometric Turbidity Unit (NTU)** is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **Parts per billion (ppb)** or Micrograms per Liter One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Treatment Technique (TT)** A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- **Cryptosporidium** is a microbial parasite found in surface water throughout the U.S. Although filtration will remove cryptosporidium, the most commonly used methods cannot guarantee 100% removal. Our monitoring indicates the presence of these organisms in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease.

Substance	Level Detected	MCL	MCLG	Likely Source
Regulated at the Treatment Plant				
✓ Turbidity	Range detected: 0.02 - 0.05 NTU Average 0.03 NTU	1.0 NTU TT	0.3 NTU	Soil Run-off.
Regulated at the Consumer Tap				
✓ Chlorine (residual)	Range detected: 1.2 - 2.0 ppm Average: 1.6 ppm	4.0 ppm (MRDLG)	4.0 ppm (MRDL)	Water additive used to control microbes.
✓ Copper* *tested 2010	Range detected: 0 - .131 ppm 90th Percentile: 0.131 ppm	Action Level 1.3 ppm	1.3 ppm	Corrosion of household plumbing systems; erosion of natural deposits.
✓ Lead* *tested 2010	90th Percentile: 0 ppm Range detected: 0 - .002 ppm	Action Level 0.015 ppm	0	Corrosion of household plumbing systems; erosion of natural deposits.
✓ Total Coliform	Not Detected	0	0	Naturally present in the environment.
✓ Nitrate	Annual Sample: 0.14 ppm	10 ppm	0	Runoff from fertilizer use; Leaking from septic tanks, sewage; Erosion of natural deposits.
✓ Haloacetic Acids (HAA)	Range detected: 14.6 - 31.0 ppb Average: 23.1 ppb	60 ppb	Not Applicable	By-product of drinking water disinfection.
✓ Total Trihalomethanes	Range detected: 17.7 - 30.1 ppb Average: 23 ppb	80 ppb	Not Applicable	By-product of drinking water disinfection.
Raw Water Before Treatment				
✓ Total Organic Carbon	Range detected: 0.50 - 3.26 ppm Average 1.49 ppm	Not Applicable	Not Applicable	Naturally present in the environment.
✓ Cryptosporidium	Range detected: Not Detected to 0.2/L	Not Applicable	Not Applicable	Naturally present in the environment.



meets or exceeds all State and Federal Regulations

Where does our water come from?

In 2011 the City of Ferndale's water source was surface water taken from the Nooksack River, whose headwaters originate in the North Cascade Mountains and eventually empty into Bellingham Bay.

We purchased raw water from Whatcom County Public Utility District Number One (PUD). The PUD draws water from their intake facility located south of the Nooksack River Bridge on Ferndale Road. After the PUD allows time for much of the river silt to settle, we took the settled water and treated it using a variety of techniques, including filtration and chlorination, to remove suspended particles and harmful microorganisms that may contaminate the water.

A Word from our Mayor

I'm very proud of the fact that Ferndale always exceeds state and federal water quality standards. Clean drinking water for our community is crucial to our quality of life. At the end of 2011, we switched to groundwater for our water supply, a healthier water source. The switch also gives the City more direct control over our costs, and that's an important taxpayer benefit.

Gary S. Jensen
Mayor



City of Ferndale Water Treatment Plant
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