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 Monday

#### **No Watering**

Tuesday	Wednesday		
Even Street Address	Odd Street Address		
Thursday	Friday		
Even Street Address	Odd Street Address		
Saturday	Sunday		
Even Street Address	Odd 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 has implemented 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 City's 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. Immunecompromised 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, 2012, 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





2012

#### 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 Residual or Maximum (MCLG) 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.
- 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.

Substance	Level Detected	MCL	MCLG	Likely Source	
Regulated at the Consumer Tap					
Chlorine (residual)	Range detected: 0.6 - 1.5 ppm Average: 0.9 ppm	4.0 ppm (MRDLG)	4.0 ppm (MRDL)	Water additive used to control microbes.	
Copper* *tested 2012	Range detected: 0 - 0.194 ppm 90th Percentile: 0.055 ppm	Action Level 1.3 ppm	1.3 ppm	Corrosion of household plumbing systems; erosion of natural deposits.	
Lead* *tested 2012	Range detected: 0 - 0.016 ppm 90th Percentile: 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: Not Detected	10 ppm	0	Runoff from fertilizer use; Leaking from septic tanks, sewage; Erosion of natural deposits.	
Haloacetic Acids (HAA)	Range detected: 7.5 - 11.8 ppb Average: 10.0 ppb	60 ppb	Not Applicable	By-product of drinking water disinfection.	
Total Trihalomethanes	Range detected: 56.3 - 68.2 ppb Average: 63.2 ppb	80 ppb	Not Applicable	By-product of drinking water disinfection.	
Raw Water Before Treatment					
Total Organic Carbon	Range detected: 0.51 - 0.8 1 ppm Average 0.64 ppm	Not Applicable	Not Applicable	Naturally present in the environment.	
City of Ferndale Water meets or exceeds all State and Federal Regulations					



# Where does our water come from?

The City of Ferndale's water source is a system of two ground water wells. The two wells tap into a thick layer of coarse sand and gravel within the source aquifer. The aquifer is recharged by precipitation that falls on the upland and the lowlands within several miles of the City's wells. The ground water is pumped to the City's Water Treatment Plant on Ferndale Road where it is pretreated with chlorine (a disinfected to protect against microbial contaminants) and filtered using a gravity system to remove manganese.

#### A Word from our Mayor

Your City is very proud of the clean, safe drinking water that we provide to you daily. The report you are reading explains the quality of our water and how we meet or exceed every state and federal standard.

The community switched back to ground water for our drinking water supply at the end of 2011 and we are now working on a water softening system to address water hardness. We hope to have that system up and running some time in 2014.



**City of Ferndale Water Treatment Plant** Phone (360) 384-4607• www.cityofferndale.org Mike Olinger • Chief Treatment Plant Operator