

CITY OF FERNDALE

# Water Quality

REPORT 2015



*Photo by: [unreadable] - May 1, 2015*



## A WORD FROM OUR MAYOR

Water is absolutely essential to all things. I'm proud of the safe, clean water used by our community. The Water Treatment Plant operators and Public Works crew work hard ensuring the drinking water supply received at our homes and business meets or exceeds every state and federal standard.

As the hot weather season begins, it is important that we all work to conserve our water resources. That means taking shorter showers, conserving whenever possible and not over watering your lawn. As a general rule, lawns only need watering every five to seven days in the summer. Little steps can have a big impact when everyone chips in.

**Thank you for enjoying and conserving our Ferndale water.**

**Jon Mutchler**

The City has implemented a voluntary watering schedule effective 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](http://www.Cityofferndale.org) or contact the City at 360-384-4302.

### 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

## VOLUNTARY WATERING SCHEDULE: JUNE 1 – SEPTEMBER 15

Addresses ending in EVEN numbers

0 2 4 6 8

water: Tuesdays, Thursdays and Saturdays

Addresses ending in ODD numbers

1 3 5 7 9

water: Wednesday, Friday and Sunday

**MONDAY is a non-watering day for ALL Ferndale water customers!**



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.



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](http://www.watersworthit.org). WATER'S WORTH IT™ is a trademark of the Water Environment Federation.

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 treated at the City's Water Treatment Plant where it is softened and chlorinated (to protect against microbial 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 2015

PWS# 24850M

Substance (units)	Level Detected	MCL	MCLG	Likely Source
<b>REGULATED AT THE CONSUMER TAP</b>				
<b>Arsenic (ppm)*</b>	Annual Sample: 0.002 ppm	0.01 ppm	0 ppm	Erosion of natural deposits.
<b>Barium (ppm)*</b>	Annual Sample: 0.039 ppm	2	2	Erosion of natural deposits.
<b>Chlorine (ppm)*</b>	Range Detected: 0.6 - 0.8 ppm Average: 0.7 ppm	4.0 ppm (MRDLG)	4.0 ppm (MRDL)	Water additive used to control microbes.
<b>Copper (ppm)* (tested 2015)</b>	90th Percentile Copper = 0.065 ppm Range Detected = 0-0.134 ppm Copper action level = 1.3 ppm	Action Level 1.3 ppm	1.3	Corrosion of household plumbing systems.
<b>Lead (ppm)* (tested 2015)</b>	90th percentile Lead = 0.002 ppm Range Detected = 0-0.003ppm Lead action level = 0.015 ppm	Action Level 0.015 ppm	0	Corrosion of household plumbing systems.
<b>Total Coliform (positive samples/month)</b>	132 samples collected 0 positive samples	More than 1 positive sample per month	0	Naturally present in the environment.
<b>Nitrate (ppm)*</b>	Annual Sample: Not Detected	10 ppm	0	Runoff from fertilizer use; Leaking from septic tanks, sewage; Erosion of natural deposits
<b>HaloaceticAcids (HAA) (ppb) *</b>	HAA(5) Range Detected 2.1 - 7.9 ppb Average: 4.4 ppb	60 ppb	Not Applicable	By-product of drinking water disinfection.
<b>Total Trihalomethanes (ppb)*</b>	THM Range Detected: 11.3 - 44.8 ppb Average: 22.6 ppb	80 ppb	Not Applicable	By-product of drinking water disinfection.
<b>RAW WATER (Before Treatment)</b>				
<b>Gross Alpha (pCi/L)</b>	Range Detected ND-3.33 Average = 1.44	15 pCi/L	0	Naturally present in the environment.
<b>Gross Beta (pCi/L)</b>	Range Detected=4.07-7.24 Average = 5.48	50 pCi/L	0	Naturally present in the environment.
<b>Total Organic Carbon</b>	T.O.C. Range Detected: 0.63 - 1.40 ppm Average: 0.78 ppm	Not Applicable	Not Applicable	Naturally present in the environment.
<b>Substance</b>	<b>Ferndale Tap Water Average</b>	<b>Ferndale Tap Water Maximum</b>		
<b>Unregulated Contaminants Rule 3 Monitoring (UCMR 3)</b>				
<b>Vanadium (ppb)</b>	1.2	1.2		
<b>Molybdenum (ppb)</b>	6.6	7		
<b>Strontium (ppb)</b>	248	269		
<b>Chromium (ppb)</b>	0.12	0.26		
<b>Hexavalent Chromium (ppb)</b>	0.74	0.13		
<b>Chlorate (ppb)</b>	0.12	0.26		

\*Key to abbreviations used in chart: UNIT DESCRIPTIONS: ppm (Parts per Million), ppb (Parts per Billion), mg/L (Milligrams per Liter), pCi/L (Picocuries per Liter)

**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 microbial contaminants (e.g. chlorine, chloramines, chlorine dioxide).

**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



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

#### 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>.

