CITY OF FERNDALE

Water Quality

REPORT 2018





city of Ferndale provides Exceptional water for you!

A WORD FROM OUR MAYOR

Water is an essential part of our existence on this planet. From the moment we wake up until when we turn off the lights at night, we are interacting with our city water system. I am so proud of the work our team does around the clock to ensure that you have safe, quality and reliable water flowing to your home.

As our community grows, we are working to expand our water infrastructure to match. In 2017, we drilled a well over a 1,000 feet to tap a new aquifer. This year, we will be working to connect this fresh source to our existing water system to add more capacity and potentially, improve the taste. We are also working to expand our water treatment plant. This facility has reached capacity and needs to be upgraded. These essential investments in our community infrastructure will allow us to continue to provide water service for years to come.

Our proactive approach, making early commitments to our pipes, wells and treatment plant, protects all of us as we go about our day: drinking, cooking, washing and flushing. Here's to another great year of water in Ferndale.

Jon Mutchler

The City has implemented a mandatory watering schedule affective 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 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





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. WATER'S WORTH IT's 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 Regional 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 2018

| | WATER QUALI | | | | PWSID#24850 |
|-----------------------------------|--|-------------------------------------|--------------|---|----------------|
| Substance (units) | Level Detected | MCL | MCLG | Likely Source | In Compliance? |
| | RAW W | ATER (Before Tr | eatment) | | |
| Total Organic Carbon (ppm) | Range Detected: 0.50 - 5.12 Average: 1.35 | π | | Naturally present in the environment. | Yes |
| | REGULATE | D AT THE TREAT | MENT PLAN | | |
| Arsenic (ppm) | 0.002 | 0.010 | 0 | Erosion of natural deposits. | Yes |
| Barium (ppm) | 0.041 | 2 | 2 | Erosion of natural deposits. | Yes |
| Copper (ppm) | 0.035 | 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: 0.6 - 0.8 Average: 0.7 | 4 (MRDL) | 4 (MRDLG) | Water additive used to control microbes. | Yes |
| | REGULATED | IN THE DISTRIBU | JTION SYSTE | EM . | |
| Copper (ppm) (Tested 2018) | 90th Percentile Copper: 0.082 Range Detected: 0 - 0.109 | Action Level 1.3 | 1.3 | Corrosion of household plumbing systems. | Yes |
| Lead(ppm) (Tested 2018) | 90th Percentile Lead: 0.002 Range Detected: 0 - 0.004 | Action Level 0.015 | 0 | Corrosion of household plumbing systems. | Yes |
| Total Coliform (presence/absence) | 188 samples collected Two positive samples | ≥2 positive samples per month | 0 | Naturally present in the environment. | Yes |
| Halo-Acetic Acids(ppb) | Range Detected: 6.5 - 9.5 Average: 8.0 | 60 | | By-product of drinking water disinfection. | Yes |
| Total Trihalomethanes(ppb) | RRange Detected: 33.2 - 48.4 Average: 40.8 | 80 | | By-product of drinking water disinfection. | Yes |

UNIT DESCRIPTIONS

| pm | Parts per Million | mg/L | Milligrams per Liter |
|-----|-------------------|-------|----------------------|
| ppb | Parts per Billion | pCi/L | Picocuries per Liter |

- Action The concentration of a contaminate that, if exceeded, triggers treatment or Level (AL) 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 mivrobial 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



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

PWSID#24850M

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.

