



City of Carnation Annual Water Quality Report

In 2019 we conducted more than 300 tests for drinking water contaminants. This report is a snapshot of the quality of the water that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. The only water treatment we provide is disinfection against microbial contaminants. For more information please call City Hall at (425) 333-4192. Technical questions about your water will be referred to Public Works Superintendent Bill Ferry.

Where Your Water Comes From

Your water comes from **one spring (primary source)** located at the watershed one mile south of town at NE 24th Street and 344th Ave. NE, and **one community well (secondary source)** sunk 160 feet into an underground source of water, located at the corner of Entwistle and Milwaukee Streets. The city owns the land around the spring and the well and restricts any activity that could contaminate it.

Treatment Process

After the water comes out of the spring or well, we treat the water with a gaseous chlorinator to protect you against microbial contaminants. The average chlorine residual in Carnation water after treatment is 0.03 ppm. ***We do not add fluoride.*** Our Water Department staff attends training throughout each year concerning regulations and techniques for treating and distributing water to our customers. This training is vital to our commitment to you: to provide the highest quality drinking water available.

Conservation Focused

Water conservation is important for us, our environment and future generations. Water conservation helps protect an important, shared natural resource. Conservation stretches our valuable water supply to meet the needs of our growing region, ensuring we will have enough for future generations. Using water efficiently can help customers keep water and sewer bills as low as possible. To encourage efficient water use, the City of Carnation rates have been designed to favor the low water consumer, and historical usage information is graphed on the monthly water bill. As a water purveyor, the City performs annual system-wide leak detection, and distribution system repairs as needed to control water loss. Our 2019 water loss was ten percent (10%).



Reaching Our Water Customers

The Environmental Protection Agency (EPA) has informed water providers that having this report available on the City's website meets delivery requirements as long as customers are notified of this option, and those who would like a paper copy can request one. The City of Carnation has chosen this method to conserve paper and save printing and mailing costs. If you would like to provide feedback about the delivery method or request a copy to be mailed to you, please contact Becky Buelna at 425-333-4192 or send an email to: becky@carnationwa.gov.

Community Participation



You are invited to participate in our public City Council meetings and voice any concerns or suggestions you have about your drinking water. Our City Council meets on the first and third Tuesday of each month at 7:00 pm at Carnation City Hall, 4621 Tolt Avenue.



City of Carnation 2019 Water Sampling

Our water is tested daily for pH levels (7.2 Neutral), turbidity (average 0.09 ppm) and chlorine residual (average 0.03 ppm). **We had no microbial detections in 2019.**

The table below lists all the drinking water contaminants that were required samples during the 2019 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1-December 31, 2019. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

2019 Water Sampling Results

Spring Source (SO-1)

| Contaminant | MCL | Carnation Water | State Reporting Level | Sample Date | Violation | Typical Source of Contaminant |
|-------------|---------|-----------------|-----------------------|-------------|-----------|--|
| Nitrate | 10 mg/l | 0.72 mg/l | 0.50 mg/l | July 2019 | NO | Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits. |

Well Source (SO-2)

| Contaminant | MCL | Carnation Water | State Reporting Level | Sample Date | Violation | Typical Source of Contaminant |
|----------------------------|----------|-----------------|-----------------------|--------------|-----------|---|
| Nitrate | 10 mg/l | None Detected | 0.50 mg/l | July 2019 | NO | Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits |
| Volatile Organic Chemicals | varies | None Detected | varies | July 2019 | NO | Volatile organic compounds (VOCs) include a variety of chemicals and are emitted as gasses from certain solids or liquids |
| Iron | 0.3 mg/l | 0.22 mg/l | 0.1 mg/l | October 2019 | NO | Weathering processes release the element into the water |

Distribution System Samples

| Analytes | MCL | Distribution area sample | State Reporting Level | Sample Date | Violation | Typical Source of Contaminant |
|------------------------|------------|--|-----------------------|-------------|-----------|---|
| Haloacetic Acid (HAA5) | 60 ug/L | < 1 ug/L | 6 ug/L | July 2019 | NO | Haloacetic acids and trihalomethanes are disinfection byproducts. Caused by chemicals formed when disinfectants react with naturally occurring organic matter and other substances in the source water. |
| Trihalomethanes (TTHM) | 80 ug/L | 1.1 ug/L | 60 ug/L | July 2019 | NO | |
| Lead | 0.015 mg/l | Site #3: 0.0012 mg/l, all other sites: None Detected | 0.001 mg/l | June 2019 | NO | Corrosion of household plumbing systems |
| Copper | 1.3 mg/l | 0.052 mg/l to 0.45 mg/l | 0.02 mg/l | June 2019 | NO | Corrosion of household plumbing systems |

Contaminants that may be present in source water before we treat it include: Microbial contaminants such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; inorganic and organic 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; naturally occurring radioactive contaminants and pesticides and/or herbicides.

Abbreviations used: •MCL - maximum contaminant level •mg/l - milligrams per liter • ug/L - micrograms per liter

Drinking Water Information from the Environmental Protection Agency

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. **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, the elderly and infants can be particularly at risk from infections. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline.

EPA Safe Drinking Water
Contact Information

Hotline: 1-800-426-4791
Website: www.epa.gov/safewater



City of Carnation
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