

CITY OF CARNATION



ANNUAL WATER QUALITY REPORT

Voted Best Tasting Water in King County!

**City of
Carnation**

(425) 333 - 4192

PO Box 1238 / 4621 Tolt Ave

Carnation WA, 98014

www.carnationwa.gov

Reporting Period

January 1 - December 31,
2022

Where Your Water Comes From

The City of Carnation's water comes from two primary sources. The dominant source is the spring located at the watershed, one mile south of Carnation at NE 24th Street and 344th Avenue NE. The secondary source is the community well, which is sunk 160 feet into an underground source of water, located at the corner of Entwistle and Milwaukee Streets. Carnation owns the land around the spring and the well, thus protecting and restricting any activity that could contaminate it.

The targets on the map below demonstrate the locations of the water sources:



Definitions

Microbial Contaminants: unwanted/unintentional microorganisms that can cause harm to humans or other organisms. These microorganisms, also known as pathogens, can enter the food chain through various sources and cause foodborne illness or infection. Some examples of microbial contaminants are bacteria, viruses, parasites, and chemicals.

Chlorine Tablets: a safe way to sanitize water by killing bacteria. They dissolve slowly in water, releasing chlorine over time, maintaining clean and safe water quality.

EPA: Environmental Protection Agency

PFA's: Polyfluoroalkyl Substances

Treatment Process

*The City of
Carnation
does not add
fluoride.*

After the water comes from the source, Carnation treats the water with chlorine tablets to protect the consumer against microbial contaminants. The average chlorine residual in Carnation water after treatment is 0.04 ppm. The Water Department staff attends training throughout each year concerning regulations and techniques for treating and distributing water to customers. This training is vital to providing the highest quality drinking water available.

Information from the Environmental Protection Agency

Drinking water, including bottled water, may reasonably be expected to contain small amounts of 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. For example, 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:

A graphic with a blue background showing water droplets. A white rectangular box is centered on the graphic, containing contact information for the EPA's Safe Drinking Water Hotline.

EPA Safe Drinking Water Contact Information

Hotline: (800) 426 - 4791

Website: www.epa.gov/safewater

2022 Sampling Results

The City of Carnations water is tested daily for pH levels (7.3 Neutral), turbidity (average 0.09 ppm) and chlorine residual (average 0.04 ppm). Unless otherwise noted, the data presented is from testing done January 1-December 31, 2022. The state requires the city 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.

In 2023, the City shall test for PFA's.

Abbreviations used:

MCL: maximum contaminant level

mg/L: milligrams per liter

ug/L: micrograms per liter

pCi/L: picocuries per liter (a measure of radioactivity)

ND: None Detected

Spring Source (SO-1)

Analyte	MCL	Carnation Water	State Reporting Level	Sample Date	Violation
Nitrate	10 mg/L	0.65 mg/L	0.50 mg/L	July 2022	NO
Gross Alpha	15 pCi/L	< 3 pCi/L	3 pCi/L	July 2022	NO
Radium 228	5 pCi/L	< 0.189 pCi/L	1 pCi/L	July 2022	NO

Spring Source (SO-1) Volatile Organic Compounds



Well Source (SO-2)

Analyte	MCL	Carnation Water	State Reporting Level	Sample Date	Violation
Nitrate	10 mg/L	ND	0.50 mg/L	July 2022	NO
Gross Alpha	15 pCi/L	< 3 pCi/L	3 pCi/L	June 2022	NO
Radium 228	5 pCi/L	< 0.157 pCi/L	1 pCi/L	June 2022	NO

Distribution System Samples (Haloacetic Acids - HAA5)

Analyte	MCL	Distribution Area Sample	State Reporting Level	Sample Date	Violation
Monochloroacetic Acid (MCAA)	Varies	< 2 ug/L	2.0 ug/L	August 2022	NO
Dichloroacetic Acid (DCAA)	Varies	< 1 ug/L	1.0 ug/L	August 2022	NO
Trichloroacetic Acid (TCAA)	Varies	< 1 ug/L	1.0 ug/L	August 2022	NO
Monobromoacetic Acid (MBAA)	Varies	< 1 ug/L	1.0 ug/L	August 2022	NO
Dibromoacetic Acid (DBAA)	Varies	< 1 ug/L	1.0 ug/L	August 2022	NO
Total Haloacetic Acids (HAA5)	60 ug/L	< 1 ug/L	6.0 ug/L	August 2022	NO

Distribution System Samples (Trihalomethanes - TTHM)

Analyte	MCL	Distribution Area Sample	State Reporting Level	Sample Date	Violation
Chloroform	Varies	< 0.5 ug/L	0.5 ug/L	August 2022	NO
Bromodichloromethane	Varies	< 0.5 ug/L	0.5 ug/L	August 2022	NO
Dibromochloromethane	Varies	< 0.5 ug/L	0.5 ug/L	August 2022	NO
Bromoform	Varies	< 0.5 ug/L	0.5 ug/L	August 2022	NO
Total Trihalomethanes (TTHM)	80 ug/L	< 0.5 ug/L	Varies	August 2022	NO

Distribution System Samples (Lead)

Sample Location	MCL	Distribution Area Sample	State Reporting Level	Sample Date	Violation
W. Morrison St.	0.015 mg/L	ND	0.001 mg/L	June 2022	NO
326th Ave NE	0.015 mg/L	ND	0.001 m/L	June 2022	NO
Royal Court	0.015 mg/L	0.0012 mg/L	0.001 mg/L	June 2022	NO
Palace Court	0.015 m/L	ND	0.001 mg/L	June 2022	NO
Palace Court	0.015 mg/L	ND	0.001 mg/L	June 2022	NO
Queens Court	0.015 mg/L	ND	0.001 mg/L	June 2022	NO
Regency Place	0.015 mg/L	ND	0.001 mg/L	June 2022	NO

Regency Place	0.015 mg/L	ND	0.001 mg/L	June 2022	NO
Royal Court	0.015mg/L	ND	0.001 mg/L	June 2022	NO
Royal Court	0.015 mg/L	ND	0.001 mg/L	June 2022	NO

Distribution System Samples (Copper)

Sample Location	MCL	Distribution Area Sample	State Reporting Level	Sample Date	Violation
W. Morrison St.	1.3 mg/L	0.14 mg/L	0.02 mg/L	June 2022	NO
326th Ave NE	1.3 mg/L	0.30 mg/L	0.02 mg/L	June 2022	NO
Royal Court	1.3 mg/L	0.14 mg/L	0.02 mg/L	June 2022	NO
Palace Court	1.3 m/L	0.18 mg/L	0.02 mg/L	June 2022	NO
Palace Court	1.3 mg/L	0.37 mg/L	0.02 mg/L	June 2022	NO
Queens Court	1.3 mg/L	0.28 mg/L	0.02 mg/L	June 2022	NO
Regency Place	1.3 mg/L	0.38 mg/L	0.02 mg/L	June 2022	NO
Regency Place	1.3 mg/L	0.35 mg/L	0.02 mg/L	June 2022	NO
Royal Court	1.3 mg/L	0.16 mg/L	0.02 mg/L	June 2022	NO
Royal Court	1.3 mg/L	0.4 mg/L	0.02 mg/L	June 2022	NO

Typical Sources of Contamination: runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits; gradual accumulation in soil; heavy rainfall and irrigation; disinfection byproducts; agricultural livestock operations; etc.

Conservation Focused

Water conservation is important for Carnation, the environment and future generations. Water conservation helps protect an important, shared natural resource. 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 2022 water loss was seven percent (7%).



Reaching Our Water Customers & Community Participation

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 Brandon Schell at (425) 333-4192 or send an email to: brandon.schell@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 6:00 pm at Carnation City Hall, 4621 Tolt Avenue.

Report for 2022 - Prepared June 2023 by Kati Fulton (Municipal Fellow)