

## Information About Drinking Water 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).

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.

To ensure that tap water is safe to drink, the 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.

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. The City of Nehalem is 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 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

## Nehalem Water Monitoring & Reporting

To ensure water safety, our state-certified Public Works staff routinely monitor for contaminants in your drinking water according to federal and state laws.

Last year we tested our water for over 100 different contaminants. Alexin Analytical Laboratories analyzes our water using procedures established by the EPA. Detections are shown in the results table in this brochure. We are pleased to report that our drinking water exceeds all federal and state requirements.

We measure turbidity daily and test for bacteriological twice a month. We report these results at our City Council meetings, the second Monday of every month at 6:00 pm at City Hall. We welcome your participation at Council Meetings.



City of Nehalem Water Treatment Plant & Reservoir

## 2016 Water Quality Report

For more information regarding this report, please contact:

### City of Nehalem

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CITY OF NEHALEM

# 19th Annual Drinking Water Quality Consumer Confidence Report

January - December  
2016

The City of Nehalem vigilantly safeguards its water supply to provide safe drinking water for our community. We are proud to report that last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. This brochure is a snapshot of last year's water quality. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to providing you with a safe, high quality, dependable supply of drinking water.

**Where Does Our Water Come From?**

Our water source is Bob's Creek, which is a surface water source north of the City of Nehalem. The intake is located in the Cook Creek/Lower Nehalem River Watershed. The City owns 90% of our watershed, with the remaining upper portion owned by one private industrial timber company. The geographic area providing water to Nehalem's intake (the drinking water protection area) extends upstream just over one mile (1.15 miles) and encompasses a total area of approximately 0.66 square miles.

**How is Our Water Treated?**

The treatment plant utilizes a package-cartridge filter system. As raw water enters the plant, it is injected with a small amount of mixed oxidant solution to disinfect and eliminate any organic growth within the system's pre-filters.

**Source Water Assessment**

In 2016, the Oregon Department of Environmental Quality (DEQ) and the Oregon Health Authority (OHA) completed an Updated Source Water Assessment to identify the surface areas that supply water to our water system intake and to inventory the potential contaminant sources that may impact the water supply.

The potential contaminant sources identified in the watershed include areas of managed forest owned by the City and a private timber company that extend throughout the protection area. This poses a high-to moderate-risk to the water supply, based on a large area of high soil erosion potential, streams with high erosion potential, and landslide deposits.

It is important to remember that the sites and areas identified are only *potential* sources of contamination to the drinking water. Water quality impacts are not likely to occur when land use activities occur in such a way as to minimize erosion and contaminant releases.

The complete Source Water Assessment is available for review at City Hall, or online at: <http://www.oregon.gov/deq/wq/programs/Pages/>

**WATER QUALITY RESULTS 2016:**

*We test for over 100 contaminants. Our drinking water meets and exceeds state and EPA water quality regulations. There are no violations.*

Contaminant	MCLG (EPA Goal)	MCL (Highest Allowed)	Our Water (Highest Result)	Range of Results	Violation	Sample Year	Likely Sources
<b>DISINFECTION BYPRODUCTS</b>							
<b>Total Trihalomethanes (TTHM) (ppb)</b>	N/A	80 ppb	63 ppb (LRAA)	36-70 ppb	NO	2016	Byproducts of drinking water disinfection.
<b>5 Haloacetic Acids (HAA5) (ppb)</b>	N/A	60 ppb	59 ppb (LRAA)	41-99 ppb	NO	2016	Byproducts of drinking water disinfection.
<b>INORGANIC CONTAMINANTS</b>							
<b>Barium (ppm)</b>	2 ppm	2 ppm	0.00455 ppm	NA	NO	2016	Erosion of natural deposits.
<b>Nitrate (ppm)</b>	10 ppm	10 ppm	1.3 ppm	0.564-1.3 ppm	NO	2016	
<b>Sodium (ppm)</b>	NA	No limit	13 ppm	NA	NO	2016	
<b>MICROBIOLOGICAL CONTAMINANTS</b>							
<b>Turbidity (NTU)</b> Turbidity is a measure of the cloudiness of the water. We monitor it daily because it is a good indicator of the effectiveness of our filtration system.	0	TT/never more than 5 NTU and less than 1 NTU in 95% of samples	0.18 NTU highest single sample	100% Below 1 NTU	NO	2016	Soil runoff.
<b>LEAD &amp; COPPER TESTING</b>							
<i>Tested September 2016 at residential water taps, in compliance with monitoring regulations. Next scheduled test 2019.</i>							
<b>Lead (ppb)</b>	0	AL=15 ppb	2.1 ppb	100% below Action Level	NO	2016	Corrosion of household plumbing. Erosion of natural deposits.
<b>Copper (ppm)</b>	1.3 ppm	AL=1.3 ppm	0.422 ppm	100% below Action Level	NO	2016	

**Definitions/Abbreviations:**

**AL:** Action Level: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

**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.

**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.

**LRAA:** Locational running annual average

**NA:** Not applicable

**NTU:** Nephelometric Turbidity Unity: A measure of water clarity.

**ppb:** Parts per billion or micrograms per liter (µg/L)

**ppm:** Parts per million or milligrams per liter (mg/L)

**TT:** Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.