2017 Drinking Water Quality Report ISSUED JUNE 2018 / BASED ON 2017 WATER QUALITY DATA

# City of The Dalles

**OUR GOAL** Safe water in abundant supply, for today and for future generations.

# Where does our **DRINKING WATER** come from?

The Dalles Municipal Watershed is the source for most of the drinking water delivered to our service area. The 22,000-acre protected watershed collects rainfall and snow melt from Dog River, Alder Creek, Crow Creek and the South Fork of Mill Creek, which is then stored behind Crow Creek Dam. Built in 1967, the dam provides storage for 267 million gallons of water. The Wicks Water Treatment Plant is located eight miles downstream of the dam.

Surface water treated at the Wicks Water Treatment Plant provides about 85% of the City's annual water supply. Three wells supplement the surface water supply during the summer months. From May to September well and surface waters mix throughout the distribution system. All city wells draw from

## Source Water Assessment

The City, along with other surface water providers across the country, is currently mandated by the EPA to sample our surface water source for two protozoans. Giardia was detected in 2 of 15 monthly samples tested October 2016 through December 2017. Cryptosporidium was not detected in any samples. Source water is treated to remove or inactivate these protozoans before delivery to the water distribution system.

The City's sources have been evaluated for susceptibility to contamination. For information call Larry McCollum at the Wicks Water Treatment Plant.

Mill Creek Road

Phone: (541) 298-2248 x5000



# **2017 Water Quality Summary**

What's in our drinking water? During 2017, our water was tested by state- and federal-certified laboratories for many possible contaminants, including bacteria, turbidity, inorganic, and organic chemicals, like the disinfection by-products. Only the materials that were actually detected are listed in the tables below. All of the others were not detected. All substances detected were present at levels considered safe by the US Environmental Protection Agency and the State of Oregon Health Authority.

Turbidity and Regulated Chemicals (including inorganic, synthetic and volatile organic, chemicals; IOCs, SOCs, VOCs)						
Substance	Ideal Maximum (MCLG)	This much allowed (MCL)	This much was found	Complies?	Major Sources Listed by EPA	
Turbidity (NTU)	Not Applicable	TT, 95% under 0.3	0.05 - 0.10; 100% comply	YES	Particulate matter from soil runoff	
Fluoride (ppm)	4	4	0.1-0.9	YES	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	
Total Organic Carbon (ppm)	Not Applicable	TT	0.5-1.8	YES	Naturally present in the environment	
Chlorine (ppm)	4 (MRDLG)	4 (MRDL)	0.98-1.20*	YES	Water additive used to control microbes	

\* range of monthly averages used to calculate compliance

Disinfection By-products (DBPs, a subset of VOCs)(Four locations are sampled quarterly)							
Substance	Ideal Maximum (MCLG)	Highest Running Annual Average allowed, by location (MCL)	This much was found	Highest 12-month Locational Running Average	Complies?		
Total Trihalomethanes (TTHMs) (ppb)	Not Applicable	80	6.2 - 34	27	YES		
Haloacetic Acids (HAA-5) (ppb)	Not Applicable	60	4-28	21	YES		

Disinfection by-products (DBPs) are substances formed when water is chlorinated to protect customers from disease-producing organisms. The challenge is to apply enough chlorine to kill microorganisms while keeping the by-products formed as low as possible.

Lead and Copper Sampling (Sampled in June 2015, next round Summer 2018)						
Substance	Ideal Maximum (MCLG)	Action Level (AL)	90th Percentile	Homes exceeding the AL	Complies?	Major Sources Listed by EPA
Lead (ppb)	0	15	1	0 of 32 (0%)	YES	Corrosion of household plumbing
Copper (ppm)	1.3	1.3	0.09	0 of 32 (0%)	YES	Corrosion of household plumbing

The 90th percentile is the highest result found in 90% of the samples when they are listed in order from lowest to highest results. EPA requires testing for Lead and Copper at customers' taps most likely to contain these substances based on when the house was built. Because of the quality shown by these, and previous results, the City has been allowed to reduce testing to 30 samples every three years.

Unregulated Contaminants	5				
Substance	Ideal Maximum (MCLG)	Range	Average	Typical Source	
Bromodichloromethane (ppb)	0	0.6 - 6.3	1.5	By-product of chlorinating water	
Chloroform (ppb)	70	6.2-32	19.7	By-product of chlorinating water	
Dichloroacetic Acid (ppb)	0	2-11	6.8	By-product of chlorinating water	
Trichloroacetic Acid (ppb)	20	2-17	9.3	By-product of chlorinating water	
Sodium (ppm)	Not Applicable	6.2-46	33	Erosion of natural deposits	

#### **Key to Technical Terms**

**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 MCLG as feasible using the best available water treatment technology.

**MRDLG** - Maximum Residual Disinfectant Level Goal - The level of residual disinfectants in drinking water at which no adverse health effects are likely to occur.

**MRDL** - Maximum Residual Disinfectant Level - The highest level of residual disinfectants in drinking water, as an annualized average, set as close to the health goals as feasible.

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

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

 ${\rm ppm}$  - parts per million - one part of a contaminant for every million parts of water; equivalent to milligrams per liter (mg/L)

 ${\bf ppb}$  - parts per billion - one part of a contaminant for every billion parts of water; equivalent to micrograms per liter (ug/L)

 $\ensuremath{\operatorname{\textbf{ND}}}$  - Not Detected - No detection above the analytical method detection level

**NTU** - Nephelometric Turbidity Unit - Standard unit to measure water clarity **Turbidity** - Clarity of water, measured to evaluate filtration effectiveness



# Community

Wasco County is required to develop and update a Natural Hazard Mitigation Plan to be eligible for disaster aid in the future. The City of The Dalles developed a section that identifies hazards within the city limits and urban growth boundary. The planning process helps our community identify ways to reduce future losses from disasters.

# Two Divisions, One Goal: Reliable production and delivery of safe drinking water

The Wicks Water Treatment Plant provides about 85% of the City's annual water supply. The Water Treatment Division staff ensures continuous operation of the plant. The certified water quality laboratory at the plant is essential for day to day operations and even more essential during a disaster. The division also manages The Dalles Municipal Watershed.

The Water Distribution Division crews operate the City's wells, reservoirs, pumps and piping systems to ensure an uninterrupted supply of safe drinking water. The divisions work together to ensure adequate water volume and pressure for all customer uses.

# How do we ensure water system resiliency?

Citizens of The Dalles have enjoyed an extraordinarily reliable water system for decades. It requires constant evaluation and upgrades to keep the system reliable, even during emergencies. The City section of the NHMP is a first step in applying for disaster mitigation funds.

Local hazards include drought, earthquake, flood, wildlands fire, landslide and severe storms. The City has learned that when we prepare for big disasters, crews respond more effectively to smaller emergencies.

# The following drinking water related projects have been identified:

- **1.** The City will develop a long-range water resource plan to mitigate drought hazard.
- 2. The 2012 Oregon Resilience Plan is an expert report about the impact of a magnitude 9.0 Cascadia Subduction Zone Earthquake. The report prompted a recent change in Oregon drinking water regulation. Utilities are now required to develop an earthquake hazard assessment and mitigation plan. The City completed an earthquake risk assessment of water storage tanks in 2014. Upgrades have begun and will continue as funding becomes available.
- **3.** The City works with private landowners and forest management agencies to reduce wildlands fire hazard in The Dalles Municipal Watershed. A healthy forest in the watershed provides high quality water at the source. This minimizes the cost for treatment to drinking water standards.
- **4.** Severe storms have the ability to knock down power lines and cause outages. Drinking water pump stations rely on electrical power and are crucial to emergency response. Utility staff identified the lack of emergency backup power as a concern to be addressed as funds become available.

Questions about the City section of the NHMP can be directed to the Public Works Department at (541) 296-5401. You can see the plan on the Wasco County Emergency Management webpage.

#### A SPECIAL NOTE TO PEOPLE WITH HEALTH CONCERNS

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 U.S. EPA Safe **Drinking Water Hotline** (800) 426-4791.

### FLUSH YOUR TAP FOR BEST WATER QUALITY

The City adds food-grade phosphates at the Wicks Water Treatment Plant and the City wells to produce a protective coating in the pipes that prevents lead from leaching from household plumbing. All inhome lead sampling conducted since 1994 indicate that lead levels in drinking water are below regulated limits. However, if you are concerned about lead in your drinking water, please refer to the EPA recommendations below.

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 used in service lines and home plumbing. The City is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When water has been sitting for several hours in your home's pipes, you can minimize the potential for lead exposure by flushing your cold-water tap for 30 seconds to two 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 or at www.epa.gov/safewater/lead.

# Why do we treat the water?

As water travels over the surface of the land or through the ground, it dissolves naturally-occurring substances. Water may also carry contaminants from animals or human activity into water sources. The City



manages The Dalles Municipal Watershed to reduce or eliminate the risks of these substances that may be present in a surface water source:

- Viruses, parasites and bacteria from wildlife, livestock and human sewage
- Salts, metals or other inorganic contaminants may be naturally occurring or human caused
- Pesticides, herbicides and other chemicals including synthetic and volatile organic chemicals
- Radioactive material may be naturally occurring or human caused

The EPA requires water providers to routinely test tap water after filtration to ensure that it is safe to drink. The Dalles submits test results to the State of Oregon. View test results go to yourwater.oregon.gov and enter The Dalles Public Water System No. 00869.

## Tap water and bottled water safety

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of substances from source water. The presence of such substances in water does not necessarily pose a health risk. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water. U.S. Environmental Protection Agency (EPA) regulations restrict the amount of certain contaminants in tap water.

Call the EPA Safe Drinking Water Hotline at (800) 426-4791 for information about contaminants and potential health effects or visit *www.epa.gov/safewater* 







# Did you know?

You can find clean water in:

- A water heater
- A toilet tank

## 1 gallon per person per day

Go to this website for more information on emergency drinking water.

www.oregon.gov/OEM/2WeeksReady

#### Join us at:

www.facebook.com/2WeeksReady www.oregon.gov/OEM/2WeeksReady On Twitter @2WeeksReady

#### Credits

Oregon Office of Emergency Management Ashland Fire & Rescue Dept. of Geology & Mineral Industries Hood River County



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## Introduction to "Two Weeks"

Preparing for disasters can be done over a period of time. The traditional 3 days of supplies is a good start and great in the event of short term power outages or temporary evacuation. But a large earthquake or flood will leave much of the area's transportation routes destroyed. Delivery of assistance and supplies will be difficult to impossible initially. Families, neighborhoods and communities should strive to be self-sufficient for two weeks.

## How do I purify water?

You can add to your bottled water supply with water from other sources such as water heaters, rain barrels, etc. Use unscented household bleach, water purification tablets, boiling or other methods to purify it before drinking. It is recommended that in addition to stored water, Oregon households have at least one treatment method on hand to make water drinkable.

# Prepare to Hydrate





**City of The Dalles** Public Works Department 1215 West 1st Street The Dalles, OR 97058 PRSRT STD U.S. POSTAGE PAID PERMIT NO. 800 GOLDSTREET 97301

# Our Ongoing Commitment: Safe Water, Abundant Supply

We are proud to present our annual water quality report. This issue covers all testing performed between January 1 and December 31, 2017. We are committed to delivering the highest quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, while continuing to serve the needs of all of our water users.

### Informe Sobre de Calidad del Agua

Este informe contiene información muy importante sobre su agua potable. Tradúscalo o hable con un amigo quien lo entienda bien.

Printed on recycled paper.



## **Partnership For Safe Water**

City of The Dalles has been a member of the Partnership for Safe Water since 1997. Members of this nationwide partnership, which includes six drinking water organizations and about 230 water utilities throughout the United States, seek water system excellence by optimizing operations rather than relying solely on significant capital improvements. The Wicks Water Treatment Plant has achieved the Director's Award each year for 17 years for meeting goals for continuous improvement and producing high quality drinking water.

# What phone number do I call for help with water issues?

## Who do I call about my water service?

- Emergency Water Shutoff
- Water quality, low pressure, leak investigation
- Backflow prevention assembly installation/testing
- Water meter insulation (to prevent freezing)

### Call the Public Works Department: (541) 296-5401

Monday–Friday, 7:00a.m.–4:00p.m. After hour water emergencies (541) 980-7703 Who do I call about a new City water and sewer account or about my bill?

- Water/sewer billing questions
- Stop water or sewer service
- High water/sewer bill concerns

#### Call the Finance Department: (541) 506-2031

Monday-Friday 8:00a.m.-5:00 p.m.

Sign up for water/sewer service in person City Hall 313 Court Street 9:00 a.m. – 4:30 p.m. Applications for service at thedalles.org/watersewerbilling

More information at thedalles.org/water\_distribution