

2018 Drinking Water Quality Report

ISSUED JUNE 2019 / BASED ON 2018 WATER QUALITY DATA

City of The Dalles

Our Water Utility is a State of Oregon Recognized Outstanding Performer



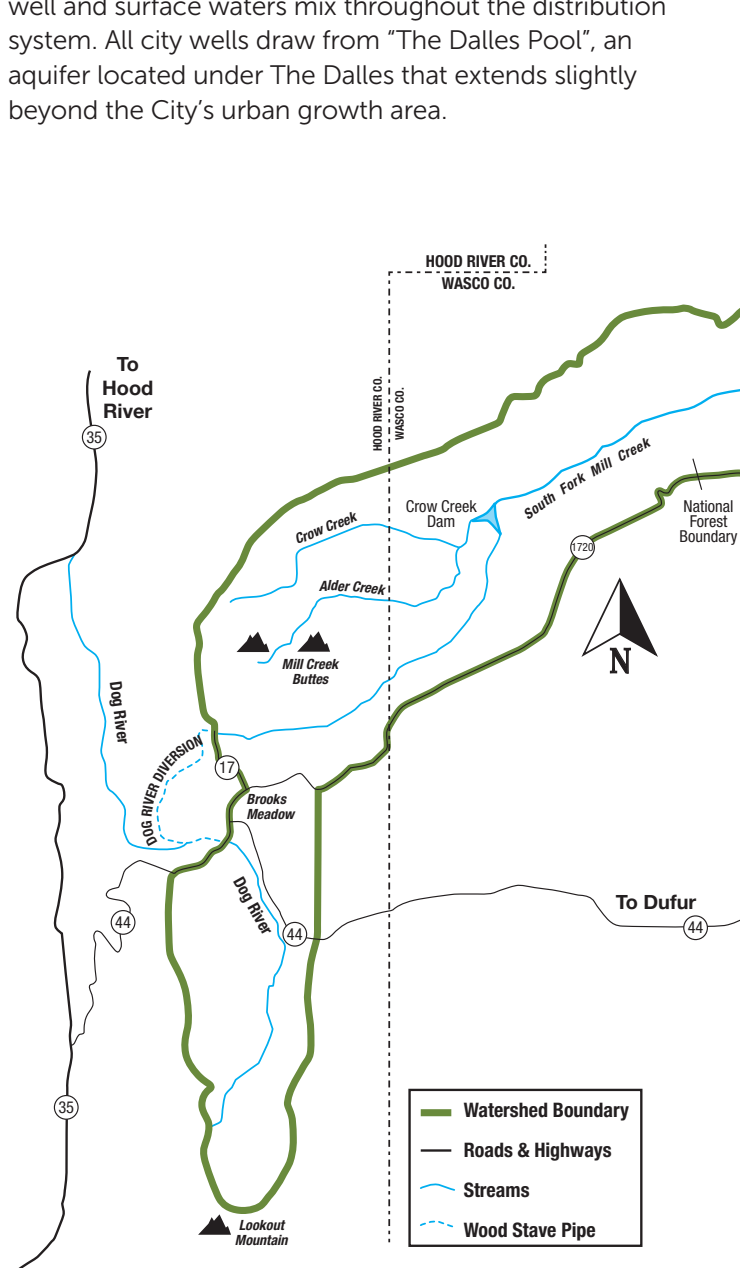
OUR GOAL

**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 "The Dalles Pool", an aquifer located under The Dalles that extends slightly beyond the City's urban growth area.



Source Water Assessment

The City, along with other surface water providers across the country, was mandated by the EPA to sample our surface water source (before treatment) for two organisms, Cryptosporidium (a protozoan) and E. coli (a type of bacteria) from October 2016 to September 2018 as part of the Long Term 2 Enhanced Surface Water Treatment Rule. Giardia (another protozoan) was analyzed along with the Cryptosporidium, but was not a required analysis. Testing showed very low levels or none of these disease causing organisms. Wicks Water Treatment Plant has the proper level of treatment to ensure safe drinking water.

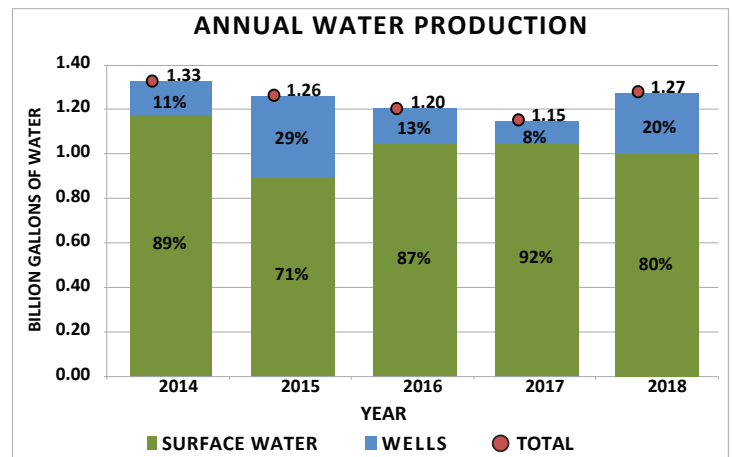
Long Term-2 Enhanced Surface Water Treatment Rule (full 24 month program, from Oct 16 through Sep 18)			
Organism	occurrences	range	average
Cryptosporidium ¹	0/24	0 - 0	0
E. coli ²	24/24	1 - 140	31.4
Giardia ³	4/24	0.5 - 1	0.05

1- Oocysts/L; 2- MPN/100mL; 3- Cysts/L

The City's sources have been evaluated for susceptibility to contamination. For information call Larry McCollum, Water Quality Manager. Phone: (541) 298-2248 x5000

Opportunities for Public Participation

The Dalles City Council Meets 2nd and 4th Mondays at 5:30 p.m. in the City Council Chambers at 313 Court Street
 More information at thedalles.org/agendas



2018 Water Quality Summary

What's in our drinking water? During 2018, 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	0.4 - 1.0	YES	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Total Organic Carbon (ppm)	Not Applicable	TT	0.6 - 1.5	YES	Naturally present in the environment
Chlorine (ppm)	4 (MRDLG)	4 (MRDL)	0.88 - 1.11*	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	7 - 35	28	YES
Haloacetic Acids (HAA-5) (ppb)	Not Applicable	60	5 - 29	25	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.

The City had a single technical violation by missing the reporting deadline for the 4th-quarter 2018 DBPs. While the report was late by a few days all constituents were well within the health limits. This technical violation posed no health risk to our consumers.

Lead and Copper Sampling (Sampled in June 2018, next round Summer 2021)						
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 34 (0%)	YES	Corrosion of household plumbing
Copper (ppm)	1.3	1.3	0.1	0 of 34 (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				
Substance	Ideal Maximum (MCLG)	Range	Average	Typical Source
Bromodichloromethane (ppb)	0	0.5 - 4.8	1.6	By-product of chlorinating water
Bromoform (ppb)	0	0.6	0.6	By-product of chlorinating water
Chloroform (ppb)	70	6.4 - 33	17.3	By-product of chlorinating water
Dibromochloromethane (ppb)	60	0.08 - 3.7	2	By-product of chlorinating water
Dichloroacetic Acid (ppb)	0	3 - 12	6.7	By-product of chlorinating water
Trichloroacetic Acid (ppb)	20	2 - 17	9	By-product of chlorinating water
Sodium (ppm)	Not Applicable	6.1 - 44	31.4	Erosion of natural deposits
HAA6Br	Not Applicable	0 - 3.5	1.3	By-product of chlorinating water
HAA9	Not Applicable	7.3 - 30	17.5	By-product of chlorinating water
Manganese	Not Applicable	0.5 - 63	32.9	Erosion of natural deposits
Germanium	Not Applicable	0.37 - 0.48	0.43	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.

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

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

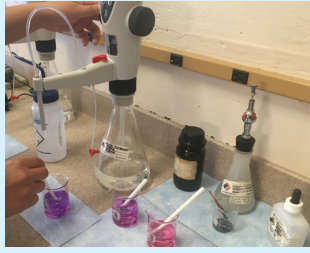
ND - Not Detected - No detection above the analytical method detection level

NTU - Nephelometric Turbidity Unit - Standard unit to measure water clarity

Turbidity - Clarity of water, measured to evaluate filtration effectiveness

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

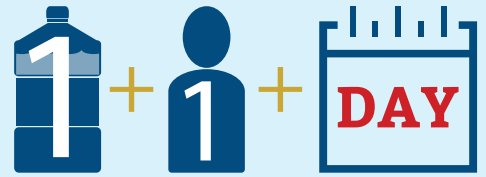
The EPA requires water providers to routinely test drinking water after filtration to ensure that it is safe to drink. The Dalles submits test results to the State of Oregon. View test results go to yourwater.oregon.gov and enter The Dalles Public Water System No. 00869.

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

Emergency Preparedness



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





Water - Too Good To Waste

Know Your Water Budget

American households now use about 2,000 gallons per person for indoor uses each month. The City measures water use in kgal, or 1,000 gallon increments.

For example, a family of 2 would use about 4 kgal per month. A family of 4 would use about double that amount of water.

Calculate your indoor water budget (if your water use is higher, look for leaks):

Number of people in your household _____ x 2 kgal per month = _____

Look for leaks:

Toilet flappers are the most common cause of household leaks. Take 3 simple steps to find and fix a toilet leak.

- Put food coloring in the toilet tank. Do not flush.
- After 15 minutes, look in the toilet bowl.
- If there is food coloring in the bowl, replace the flapper, then test again.

If this simple repair doesn't stop the leak, the fill valve may be broken.

Calculate Your Outdoor Water Budget

Many households use three or four times more water in the summer months compared with winter water use. Most of the extra water is used for sprinkling lawns and gardens. Overwatering is the number one waste of water in the summer.

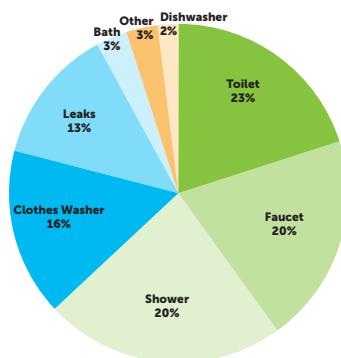
Lawn is the thirstiest area of the landscape. Use these guidelines to give your lawn just the right amount to drink.

- May: 1 inch per week
- June: 1.5 inches per week
- July: 2 inches per week
- August: 1.75 inches per week
- September: 1 inch per week

Shrubs only need half of these amounts.

Adjust these guidelines as needed. Actual water needs vary according to the age and type of plant. Watch and learn the water needs of the plants in your yard.

Where does the water go?



Source: Residential End Uses of Water Study 2016

The tuna can trick:

- Place 3-5 cans at different distances from the sprinkler.
- Run the sprinkler for 30 minutes.
- Measure the depth of water in each can with a ruler.
- Add all measured water together; then divide by the number of cans to calculate average inches.
- Check the guidelines to the left to see how many inches of water are needed per week.
- Schedule your watering times for two or three days per week.

Take note of the weather. Water a little more when it is hotter than normal. Don't water in the rain.

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 in-home lead sampling conducted since 1994 indicates 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.



City of The Dalles

Public Works Department
1215 West First Street
The Dalles, OR 97058

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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, 2018. 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 more than 300 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 since the year 2000 for meeting goals for continuous improvement and producing high quality drinking water. Learn more at awwa.org/Resources-Tools/Programs/Partnership-for-Safe-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

More information at thedalles.org/water_distribution

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