



Deschutes Valley Water District

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Madras, OR 97741
(541) 475-3849

www.dvwd.org

Joel Gehrett - General Manager

Spanish (Español)

Este informe contiene información muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuníquese con alguien que pueda traducir la información.

Is my water safe?

Deschutes Valley Water District is pleased to report that our drinking water is safe and meets federal and state requirements. The purity of our water is of the degree that the Environmental Protection Agency (EPA) does not require us to test for every contaminant every year. A waiver granted by the Oregon Health Division (OHD) in 1996 stipulated the elements and frequency of testing. This report is a snapshot of last year's water quality sampling data. Included are details about where your water comes from, what it contains and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other

microbial contaminants are available from the **Safe Water Drinking Hotline (800-426-4791)**. We are committed to providing you with the latest information, because informed customers are our best allies.

Where does my water come from?

The **Opal Springs** aquifer supplies the domestic water for Deschutes Valley Water District's approximately 4,500 services. The artesian spring is located 5 miles Southwest of Culver at the bottom of the 850 foot deep Crooked River canyon, less than 150 feet from the river. The artesian wells are located on the East side of the canyon ranging from 300 to 600 feet South of Opal Springs.

Opal Springs flows approximately 108,000 gallons per minute at 54° degrees Fahrenheit with no seasonal variation. There has been no detectable change in flow, temperature, or pH since the spring was first tested in 1925. Well # 1 is 750 feet deep and produces 3,750 gallons per minute. Well #2 is 513 feet deep and produces 5,360 gallons per minute. Well #3 is 661 feet deep and produces 4,000 gallons per minute. It has been determined that the wells and Opal Springs are fed from the same aquifer.

Source Water Assessment and Availability

An assessment of our water system has been completed by the Oregon Department of Human Services to determine susceptibility to potential sources of contamination. A copy is on file and available by contacting the District office at (541) 475-3849. Source Water Assessment findings conclude that the water system would be moderately to highly susceptible to a contamination event inside the identified Drinking Water Protection Area. (Sec.6.2 & 7)

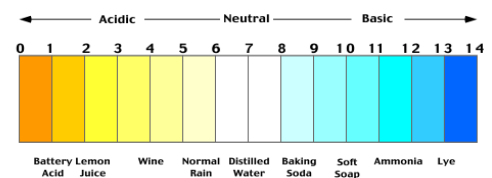
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. Currently, there is no filtration or treatment of Opal Springs of any kind (nor is any needed). Historic and continuing water quality analysis indicates an absence of man-made contaminants in the captured Opal Springs water.

The source is well protected because it is hundreds of feet below the surface and under pressure. It is unlikely that contaminants introduced on the surface would reach the deep aquifer. The spring and wells have yet to show radiation from the WWII-era nuclear testing (1953) placing the age of the water from Opal Springs at 66 years old minimum.

According to "USGS Report 97-197" and "USGS Report 97-4233", studies show the age of the water could be one to four thousand years old. An analysis for waterborne particulates shows conclusively that Opal Springs is a ground water source, not influenced by surface water. Also see "USGS Water Supply Report 637D" for historical Spring information (p. 201).

Hardness of water is caused by the presence of magnesium and calcium. Excessive hardness is undesirable because it causes difficulties when doing laundry or washing dishes. Domestic water should have hardness less than 85 mg/l. The District's water tests at 42 mg/l and is considered very soft.

The pH of water is measured on a scale of 1 to 14. A low reading would indicate acidic water (which is corrosive) while a high reading connotes basic water. Neutral water (neither acidic nor basic) would have a reading of 7. The District's pH tested at 7.67 which means our water is just a little basic.



How can I get involved?

If you have any questions about this report or concerning your utility, please contact our General Manager at (541) 475-3849. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Board Meetings. They are held on the second Monday of each month at 7:00 PM at the District office at 881 SW Culver Hwy, Madras, Oregon.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day?

Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature!

- 💧 Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- 💧 Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- 💧 Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- 💧 Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- 💧 Water plants only when necessary. Try **Xeriscaping** (water wise gardening)
- 💧 Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- 💧 Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- 💧 Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!

Visit <http://www.epa.gov/watersense> for more information.

Basic information about drinking water contaminants

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 storm water 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 storm water runoff, and septic systems.
- ❖ Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, 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.

Additional Information for Lead

There is no detectable lead or copper in our water source; however, these metals can enter the drinking water supply through corrosion within the distribution system or household plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Deschutes Valley Water District 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 or at <http://www.epa.gov/safewater/lead>.

When the water is tested at the source, neither copper nor lead have been detected.



Water Quality Data Table

The table on the following page lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of 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 in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.



If a contaminant is not listed, it was not detected in our sampling.

Primary Standards (directly related to the safety of drinking water)								
Inorganic Contaminants	Units	MCL	MCLG	TT/AL	Range /Result	Sample Year	Violation?	Likely Source
Arsenic	ppb	10	0	NA	2.6	2019	No	Erosion of natural deposits
Barium	ppm	2	2	NA	0.0015	2019	No	Erosion of natural deposits
Chromium	ppb	100	100	NA	1	2019	No	Erosion of natural deposits
Nitrate-Nitrite	ppm	10	10	NA	0.22	2019	No	Erosion of natural deposits
Unregulated Contaminants								
Sodium*	ppm	NA	NA	NA	11.1	2019	No	Erosion of natural deposits
*Sodium is not regulated and is a recommendation only. If you are on a sodium restricted diet, please contact your health care provider.								
Lead and Copper	Units	MCLG	AL	90th %	Sample Year	Violation?	Likely Source	
Copper	ppm	1.3	1.3	0.03	2019	No	Household Plumbing	
Unit Descriptions								
Term	Definition							
NA	Not applicable							
ND	Not detected							
NR	Monitoring not required, but recommended							
ppb	Parts per billion or µg/L or micrograms per liter.							
ppm	Parts per million, or milligrams per liter (mg/L)							
Important Drinking Water Definitions								
Term	Definition							
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which 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.							

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791. Also, you can find more comprehensive test results for Deschutes Valley Water District drinking water at the Oregon Health Division website <https://yourwater.oregon.gov/inventory.php?pwsno=00501>