2010 Drinking Water QUALITY REPORT

City of The Dalles

Photo credit: Bob Koch

Continuing Our Commitment

Once again we are proud to present our annual water quality report. This issue covers all testing performed between January 1 and December 31, 2010. As in years past, we are committed to delivering the highest quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and planning for the future, while continuing to serve the needs of all of our water users.

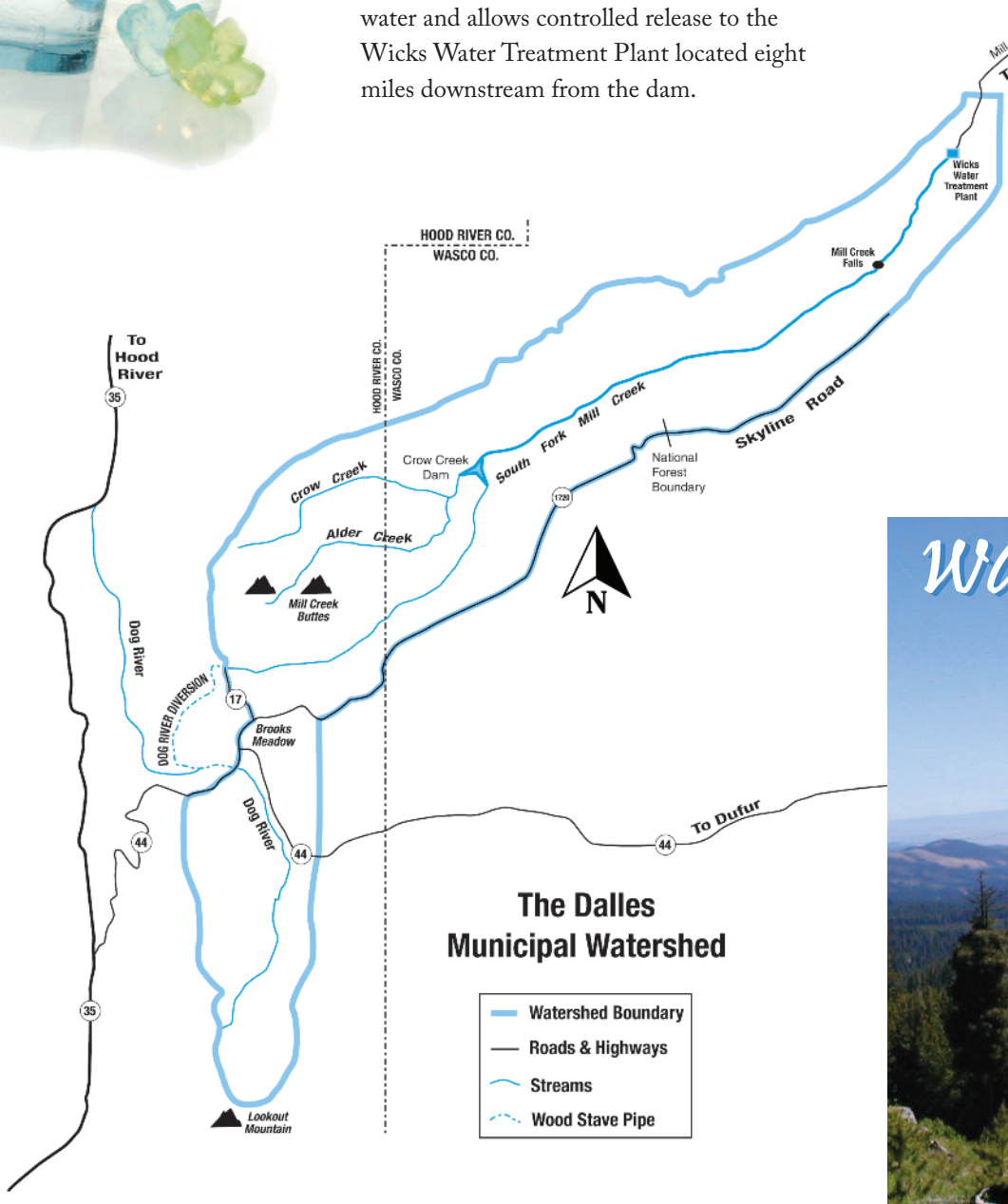
OUR GOAL

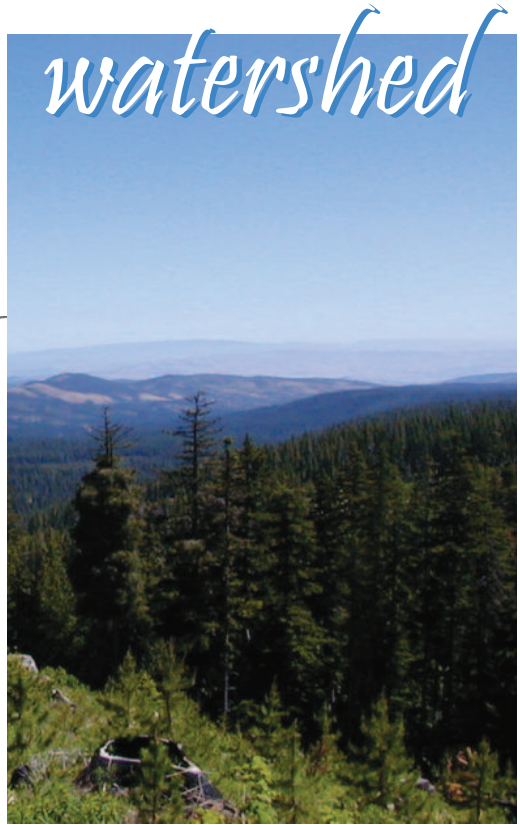
Safe water in abundant supply, for today and for future generations.

Where Does Our *drinking water* Come From?

Your drinking water is primarily treated surface water from The Dalles Municipal Watershed, with groundwater from one or more of the City's three wells supplementing the surface supply during the summer months. The Municipal Watershed is a 22,000 acre drainage basin southwest of The Dalles which collects water in the form of rainfall and snow melt into a single receiving stream and lake. This protected area collects water from the subdrainages of Dog River, Alder Creek, Crow Creek and the South Fork of Mill Creek for storage in Crow Creek Dam. Built in 1967, the dam provides storage for 267 million gallons of water and allows controlled release to the Wicks Water Treatment Plant located eight miles downstream from the dam.

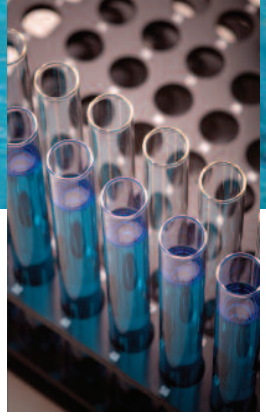
During the months of June through September, well water is used to supplement the treated surface water as needed. All three of the City wells draw water from the aquifer known as The Dalles Pool. Well and surface water mix in varying proportions in the distribution system and reservoirs. Two wells feed into the Garrison Reservoir - Jordan Well and Marks Well. Lone Pine Well feeds into the Intermediate and Columbia View Hts Reservoirs to serve the east side of town as far west as Thompson Street. The dividing lines for the service areas are not distinct but vary depending on water pressure and usage.





2010 Water Quality *summary*

What's in Our Drinking Water?



During 2010, our water was tested by state-certified laboratories for many possible contaminants, including bacteria, turbidity, inorganic and organic chemicals, and disinfection byproducts. 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 EPA.**

Turbidity and Other Regulated Chemicals

Substance	Units	Ideal Maximum (MCLG)	This much is allowed (MCL)	This much was found	Complies? (Is it OK?)	Major Sources Listed by EPA
Turbidity	NTU	NA	TT 95% under 0.3	0.065 - 0.159 100% comply	Yes	Patriculate matter from soil runoff
Barium	ppm	2	2	0.0109 - 0.0483	Yes	Erosion of natural deposits
Fluoride	ppm	4	4	Surface 1.2 Wells 0.7-0.8	Yes	Added to strengthen teeth; also, erosion of natural deposits

Byproducts of Drinking Water Chlorination *Four locations are sampled quarterly*

Substance	Units	Ideal Maximum (MCLG)	Highest Running Annual Average allowed (MCL)	This much was found (Individual tests)	Highest 12-month Running Average	Complies? (Is it OK?)
Total Trihalomethanes	ppb	NA	80	4.7 - 35.6	17	Yes
Haloacetic Acids	ppb	NA	60	3.2 - 78.4	30	Yes

Disinfection Byproducts are substances formed when water is chlorinated to protect consumers from disease-producing organisms. The challenge is to apply enough chlorine to kill microorganisms while keeping the byproducts formed as low as possible.

Unregulated Contaminants

Substance	Units	Ideal Maximum (MCLG)	This much is allowed (MCL)	This much was found	Major Sources Listed by EPA
Bromodichloromethane	ppb	0	No individual MCL	Surface 0.7	Byproduct of chlorinating water
Chloroform	ppb	No MCLG	No individual MCL	Surface 5.6	Byproduct of chlorinating water
Sodium	ppm	No MCLG	No individual MCL	Wells 17.5 - 37.6	Erosion of natural deposits

Lead and Copper Sampling *Sampled in August 2009; next due in 2012*

Substance	Units	Ideal Maximum (MCLG)	Action Level (AL)	90th Percentile	Homes exceeding the Action Level	Complies? (Is it OK?)	Source of Contaminant
Lead	ppb	0	15	0	0 of 30 (0%)	Yes	Corrosion of household plumbing
Copper	ppm	1.3	1.3	0.12	0 0f 30 (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 results, the City has been allowed to reduce testing to 30 samples every three years.

Key to Technical Terms

Maximum Contaminant Level Goal (MCLG) 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.

Maximum Contaminant Level (MCL) 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.

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

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

what's not In Our Water?

Coliform Bacteria

During 2010, 320 samples were taken during weekly sampling of the distribution system for coliform bacteria testing. All were negative for Total Coliforms (naturally present in the environment) and *E. coli* (from human and animal fecal waste).

The City's surface water and three well sources also undergo testing for the following contaminants, which were not detected except as noted in the table.

- **Synthetic Organic Chemicals, including pesticides, with none detected.**
- **Volatile Organic Chemicals, including the disinfection byproducts in the table.**
- **Inorganic Chemicals, with only fluoride, barium and sodium detected as noted in the table.**

Special Groundwater Study

During 2010, the Oregon Health Authority and Department of Environmental Quality sought the City's participation in a special sampling of ten public water supply wells around the state for 245 different contaminants using test methods with very sensitive detection limits. The purpose of the study was to track emerging contaminants of concern for future use. One of those wells was the City's Lone Pine Well. According to evaluation by toxicologists of the state's Office of Environmental Public Health: "These results do not suggest to us that human health is compromised by drinking this water."

Flush Tap for Best Water Quality

Since 1992 the City has done extensive testing for lead at customers' taps that are most likely to contain lead based on when the house was built. Because of the water quality shown by these results, the City has been allowed to reduce testing to 30 samples every three years. City water is made less corrosive by adjusting its pH using sodium hydroxide, and polyphosphate is added to produce a protective coating in the pipes. However, if you are concerned about lead from the plumbing materials in your home, 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 and components associated with service lines and home plumbing. City of The Dalles 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 www.epa.gov/safewater/lead.

Important Health Information

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 (800) 426-4791.

Questions?

For more information about this report, or for any questions relating to your drinking water, please contact Karen Skiles at the Public Works Department.

By phone: 541.506.2005

By email: cityinfo@ci.the-dalles.or.us

Oregon's Drinking Water Program:

For information on all water systems in Oregon, including the City of The Dalles system, visit the Oregon Health Authority's Drinking Water Program data access page at: http://170.104.63.9

Opportunities for public participation:

The Dalles City Council meets on the 2nd and 4th Mondays at 5:30 pm in the Council Chambers at 313 Court Street. Check The Dalles Chronicle for meeting dates and agendas.

Parts per million (ppm)
One part of a contaminant is present for every million parts of water.

Parts per billion (ppb)
One part of a contaminant is present for every billion parts of water.

Not Applicable (NA)
EPA has not established MCL Goals for these substances

Nephelometric Turbidity Unit (NTU)
Standard unit to measure water clarity.

Turbidity
Cloudiness of water, measured to evaluate filtration effectiveness.

Q&A our water system

Why do I get this report each year?

Community water systems are required by Federal law to provide their customers with an annual water quality report. The report helps people make informed choices about the water they drink. It lets people know the source of their water, what contaminants, if any, have been detected in their drinking water, and how those contaminants may affect their health. It also gives the water systems an opportunity to inform customers about their efforts in delivering safe drinking water.

My water sometimes has a white cloudiness when it first comes from the faucet and then it clears up. Why is that?

The white cloudiness is caused by tiny air bubbles in the water. This type of cloudiness forms when water travels through pipes at high speed and then meets an obstruction such as a valve or elbow. After a while the air bubbles rise to the top and escape, thus clearing up the water.

How much water is used during a typical shower?

The Federal Energy Policy Act set a nationwide regulation that limits showerheads to a maximum flow of 2.5 gallons per minute (GPM). Showerheads made before 1980 are rated at 5 GPM. Since the average shower is estimated to last 8.2 minutes, the old showerheads use 41 gallons of water while the newer, low-flow showerheads use only about 21 gallons.

Is it okay to use hot water from the tap for cooking and drinking?

No. Use cold water. Hot water is more likely to contain rust, copper, and lead from your household plumbing and water heater because these contaminants generally dissolve into hot water from the plumbing faster than into cold water. To get the freshest water, let the cold water run for a few minutes before you use it if that tap has not been used for a while, overnight or all day.

How many contaminants are regulated in drinking water?

The US EPA regulates over 80 contaminants in drinking water. Some states may choose to regulate additional contaminants or to set stricter standards, but all states must have standards at least as stringent as the US EPA's.

Substances That Could Be in Water

The sources of drinking water (both tap and bottled water) can be surface water, such as rivers, lakes, streams and reservoirs, or groundwater, including 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. Substances that may be present in source water include: Microbial contaminants, such as viruses and bacteria; Inorganic contaminants, such as salts and metals; Pesticides and herbicides; Organic chemical contaminants, including synthetic and volatile organic chemicals; and Radioactive contaminants, which can be naturally-occurring or a result of human activity.

To ensure that tap water is safe to drink, EPA issues regulations which limit the amount of certain contaminants in water provided by public water systems. US Food and Drug Administration regulations establish limits for contaminants in bottled water. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791 or by visiting www.epa.gov/safewater.

Tap vs. Bottled Water

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced many people that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, according to government and industry estimates, about 25 to 40 percent of bottled water is actually just bottled tap water, sometimes without receiving additional treatment. The Food and Drug Administration is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the US EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70 percent of all bottled water sold in the United States. People spend as much as 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to $1,400 annually. The same amount of tap water would cost about 49 cents. For a detailed discussion on the NRDC study results, check out their website at www.nrdc.org/water/drinking/bw/exesum.asp.

City of The Dalles
Public Works Department
1215 West 1st Street
The Dalles, OR 97058
www.ci.the-dalles.or.us

A message about the importance of this Water Quality Report:

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

"A major benefit of belonging to the Partnership for Safe Water is the message it sends your customers…you care about them and are taking extra steps to assure them high quality drinking water."

Bill Lauer
Partnership Program Manager

Partnership for Safe Water

The City is a member of the Partnership for Safe Water, a nationwide voluntary effort between six drinking water organizations and about 230 water utilities throughout the United States, whose primary goal is achieving excellence in water system operation by optimizing operations rather than relying solely on significant capital improvements. The Wicks Water Treatment Plant joined the Partnership about 10 years ago and has received the Director's Award each year for meeting the requirements. This year the City has also enrolled as a charter member of the newly-offered Distribution System part of the program.