



A Community Update

City of Stanwood 2012 Water Quality Report

Public Water System ID #83650H

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City of Stanwood Water Quality Report For the Year 2012



The City of Stanwood is pleased to present the annual Water Quality Report for the 2012 calendar year. We are committed to delivering quality drinking water. You can be confident that the water provided at your tap meets or exceeds national and state regulations. This report will inform you on the source of your water, what compounds are currently in your water, and how well your water complies with current regulations enforced by the Environmental Protection Agency (EPA) and Washington State Department of Health (DOH).

Your Water Sources

The City of Stanwood currently has five groundwater sources that withdraw water from aquifers. Aquifers are natural reservoirs of water found underground within layers of gravel, rock and sand. This water becomes replenished as rainwater seeps through layers of earth, which act as a natural filter. Bryant Well #1 (source 2) and Cedarhome Well (source 7) are supplied by aquifers. Hatt Slough Springs (source 1), Bryant Well #2 (source 3) and Fure Well (source 4) are not in operation at this time.

The DOH Office of Drinking Water rates all water sources based on their contaminant susceptibility as part of the Source Water Assessment Program (SWAP). Most of the city's sources are designated as high susceptibility due to the type of aquifer, depth of well and nearby contaminant sources. SWAP data for the City of Stanwood is online at:

<http://www.doh.wa.gov/ehp/dw/sw/assessment.htm>

The Bryant Well #1 is the city's primary source of water and it provides the majority of the city's water supply. The Bryant Wells are located near Stanwood High School off 268th Street NW (Stanwood-Bryant Road). Water pumped from Bryant Well #1 is filtered for purity and chlorinated for disinfection before it is sent out to the distribution system and finally arrives at your tap. Water pumped from all other sources is chlorinated for disinfection before it is sent to the distribution system.

Our distribution system is a network of underground pipes that carry water from our sources to your tap. Our water system operators continue to track the quantity and quality of water from source to sink every day.

Important Health Information

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline (1-800-426-4791).

Contaminants that may be present in water include:

- ◆ **Microbial contaminants**, such as viruses and bacteria, from wildlife;
- ◆ **Inorganic contaminants**, such as salts and metals, which are naturally occurring;
- ◆ **Organic contaminants**, which are byproducts of disinfection processes; and
- ◆ **Radioactive contaminants**, which can be naturally occurring.

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 for 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).

Get Involved!

For questions regarding your water utility, call (360) 629-9781.

City Council meetings are held on the 2nd and 4th Thursdays of each month, 7:00pm at the School District Office located at 26920 Pioneer Highway. Please join us.

For More Information Please Contact

U.S. Environmental Protection Agency Safe Drinking Water
Hotline 1-800-426-4791 www.epa.gov/safewater
Or

Washington State Department of Health
(253) 395-6750 www.doh.wa.gov/ehp/dw

Mayor

Dianne White

2012 Council Members

Elizabeth Callaghan
Jenna Friebel
Leonard Kelley
Matt McCune
Rick Randall
Roger Haskin
Tim Pearce

Interim Public Works Director

Kevin Hushagen

Water Treatment Operator

Gina Melander

A Note From Your Water Department

In 2012 the water department competed in the BEST TASTING WATER competition put on by AWWA Pacific Northwest Sub Section. There were 6 other water systems who submitted water for the competition. After a panel of 4 judges tasted and compared the samples, the City of Stanwood came out on top, winning the competition.



Erik Gina Frank

In trying to lower our percentage of water loss, a leak detection company, Leakmasters, evaluated half of the water system with their leak detecting equipment. Several leaks were located and repaired.

Two of the water reservoirs were cleaned and inspected by a dive team from Liquavision. Iron and manganese sediment was removed from the floor of the reservoirs; hatches and seams were inspected ensuring the safe storage of your drinking water.

The water department is working hard to maintain your water system, and make any repairs or upgrades needed in a timely manner. If you have any water quality questions or would like to report a water leak, please contact the water department at (360)629-9781. If you have billing questions please contact the billing department at (360)629-9617.

Help Conserve Water: Water Use Efficiency Performance Report

Through the commitment to water conservation, you have reduced the residential water use by 28% in the past 6 years. We had set a goal in 2008 to reduce single-family household water use to 201 gallons per day (gpd) by 2019, based on a 4 year rolling average. This average is used to assess our conservation performance, because weather can have a large impact on water use year to year. Our 4 year rolling average for 2009 – 2012 was 185 gpd per household, and our 2012 average water use was 152 gpd per household. Thank you for continuing to conserve water and helping us maintain our goal.

Your water department is also working towards a goal of less than 10% distribution leakage, based on a 3 year rolling average. The current 3 year rolling average is 15.9%. We are tracking all authorized consumption, and repairing water leaks in a timely manner. Please help us by notifying the Public Works Department of any water leaks you see.

City of Stanwood Comparison of 2007 and 2012 Water Use Data			
	Year		Percent Change
	2007	2012	
Total Water Production	341 MG	281 MG	-17%
Total Authorized Consumption	311 MG	247 MG	-20%
Distribution System Leakage	9.0%	12.5%	3.5%
Average Single Family Use per Household	214 gpd	152 gpd	-28%

MG = million gallons gpd = gallons per day

Here are some ways you can help us reach our water use goals by saving even more water around your house.

- ◆ Fix all leaks in toilets, faucets and sprinklers.
- ◆ Replace showerheads with low-flow models.
- ◆ Wash only full loads of clothes and dishes.
- ◆ Install aerators on bath and kitchen faucets.
- ◆ Replace dishwashers and washing machines with Energy Efficient models.
- ◆ Select drought-tolerant or native plants for your next landscaping project.
- ◆ Water your lawn once or twice a week for a longer duration (45 – 60 minutes, or 1 inch of water) to encourage deep roots.

Fun Facts

More than 25% of bottled water comes from a municipal water supply, the same place that tap water comes from.

It takes 2 gallons to brush your teeth, 2 to 7 gallons to flush a toilet, and 25 to 50 gallons to take a shower.

Ancient Egyptians treated water by siphoning water out of the top of huge jars after allowing the muddy water from the Nile River to settle.

If you drink your daily recommended 8 glasses of water per day from the tap, it will cost you about 50 cents per year. If you choose to drink it from water bottles, it can cost you up to \$1,400 dollars.

2012 Water Quality Monitoring Results

To ensure that tap water is safe to drink, the DOH and the EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Washington State Department of Agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Each of the City's water sources is chlorinated and the chlorine concentration is monitored as it enters the distribution system. The table on the right summarizes chlorine concentrations. Chlorine is necessary to properly disinfect your water supply from bacteria and microbes.

Chlorine Monitoring Point	Average	Range	Units
Cedarhome Well	0.29	0.04 – 1.35	ppm
Water Treatment Plant	0.43	0.15 – 0.78	ppm

The City of Stanwood routinely monitors the quality of all of our water sources and the distribution system to ensure that they meet the latest regulations. The table below summarizes the makeup of your water in the past year. In addition to the contaminants listed below, we also monitored our sources for synthetic organic compounds, volatile organic compounds, lead, copper, nickel, radon, sulfate, radionuclides and others. These contaminants measured below their MCL or action levels.

This is What is in Your Tap				This Much is Allowed		Where did this Compound Come From?
Detected Contaminants	Treatment Plant Results	Cedarhome Well Results	Units	EPA's MCL Standard	Do We Comply?	Typical Sources
Arsenic	Average: 8.5 Range: 7 - 10	None Detected	ppb	10	Yes	Erosion from natural deposits
Nitrate	None Detected	None Detected	ppm	10	Yes	Fertilizer runoff, animal waste, natural erosion
Sodium *	Sodium tests were not required in 2012	15.5	ppm	20	Yes	Erosion from natural deposits
Total Trihalomethanes	Average: 7.4 Range: 5.3 – 9.5		ppb	80	Yes	A byproduct of chlorination
Five Haloacetic Acids	Average: 2.4 Range: 1.0 – 3.8		ppm	60	Yes	A byproduct of chlorination
Total Coliform	Not detected in 116 Annual Samples		Positive Samples	0	Yes	Microbes naturally present in the environment
Fecal Coliform and E. Coli	Not Detected in 116 Annual Samples		Positive Samples	0	Yes	Bacterial contamination from human or animal waste

* Note: Sodium is unregulated, but the EPA recommends a 20 mg/L guidance level.

DEFINITIONS

Maximum Contaminant Level or MCL: 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.

Maximum Contaminant Level Goal or 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 Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk of health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

ppb = parts per billion = micrograms per liter (µg/L). This can be compared to one cent in \$10 million.

ppm = parts per million = milligrams per liter (mg/L). This can be compared to one cent in \$10,000.

NTU = Nephelometric Turbidity Units: Turbidity is a measure of the cloudiness of the water.

Arsenic and Lead Information

Arsenic is naturally present in our water source and is removed at the Bryant Well Field Treatment Facility. While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. There is a small chance that some people who drink water containing low levels of arsenic for many years could develop circulatory disease, cancer, or other health problems. Most types of cancer and circulatory disease are due to factors other than exposure to arsenic. EPA's standard balances the current understanding of arsenic's health effects against the cost of removing arsenic from drinking water.

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 Stanwood 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>.