



# **WATER NOTES**

## ***Important information about your drinking water in 2008***

Providing our customers with safe and reliable drinking water is a primary mission of the Town of Steilacoom Water Utility. This annual report is intended to provide current, factual information about your drinking water. This report includes details about where your water comes from, what it contains and how it compares to the stringent standards set by regulatory agencies.

Federal and state regulations include procedures and schedules for monitoring water from the source to the tap. The United States Congress has directed the Environmental Protection Agency (EPA) to require public water systems to report annually on the quality of the drinking water delivered to their customers. The Town of Steilacoom supports this regulation and is providing this report to all customers in our service area. This report is about your drinking water source and quality monitoring required by the 1974 Federal Safe Drinking Water Act and its 1986 and 1996 amendments.

### **SOURCE**

The Town of Steilacoom has entered into an agreement with Lakewood Water District to supply water to the Town. The water comes from 7 wells utilizing subsurface aquifers. The water treatment facility on View Road removes manganese and iron. Chlorine is added as a disinfectant to kill any harmful bacteria or viruses that may be present in the water. The Town continues to operate and maintain its own distribution system. The Town's well is on standby status and used as a backup supply.

### **WHY ARE THERE CONTAMINANTS IN MY WATER?**

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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Sources of drinking water (both tap and bottled water) can include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the ground 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 some source water before treatment 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 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 storm water 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. The Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### **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/CDC (Center for Disease Control) 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).

### **WHAT ABOUT TASTE AND SMELL?**

The taste and smell of the Town's water is caused mainly by variations in the chlorine residual at the faucet and does not indicate any safety concerns. The Town is working (primarily through a more aggressive flushing program) to continue to improve the taste and smell of our water for all customers.

## RESULTS OF REQUIRED TESTING

### ABBREVIATIONS

**MCLG** Maximum Contaminant Level Goal: The highest 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 MCLGs as feasible using the best available treatment technology

**ppm** Parts per million - One part per million (or one milligram per liter) corresponds to one minute in two years or one penny in \$10,000.

**ppb** Parts per billion - one part per billion (or microgram per liter) corresponds to one minute in 2,000 years or one penny in \$10,000,000.

**<**: Less than **AL**: Action Level **NTU**: Nephelometric Turbidity Unit **umhos/cm** Micromhos per centimeter

**UR**: Unregulated, no federal and state standards nor MCL or MCLG established

**ND**: None Detected **n/a**: Not applicable

SUBSTANCE	MCL	HIGHEST LEVEL DETECTED	RANGE	MCLG	MAJOR SOURCES IN DRINKING WATER
Arsenic	10ppb	4ppb	<2ppb – 4ppb	0	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Nitrates	10ppm	2.1ppm	< 0.2ppm – 2.1ppm	10ppm	Erosion of natural deposits; Runoff from fertilizer use.
Sodium	n/a*	18ppm	7ppm – 18ppm	n/a	Erosion of natural deposits
Copper	1.3ppm	< 0.02ppm	<0.02ppm - <0.02ppm	1.3ppm	Corrosion of household plumbing systems.
Lead	15ppb	0.002ppb	< 0.02ppm – <0.002ppm	0	Corrosion of household plumbing systems.
Total Trihalomethane Potentials (T.H.M.P.)	80ppb	6.5ppb	0.0ppb – 6.5ppb	n/a	Disinfection interaction
Chloroform	UR	1.6 ppb	0.0ppb – 1.6ppb	UR	Component of Trihalomethane
Total Coliform	Less than 5% Positive	0	0	0	Bacterial Regrowth
Perchlorate**	UR	6 ppb	ND – 6 ppb	UR	Unknown A component of solid rocket fuel.
Hardness	n/a	98ppm	50ppm –98ppm	n/a	Erosion of natural deposits
Sulfate	250ppm	12ppm	1ppm – 12ppm	n/a	Erosion of natural deposits

As noted in the chart above, all of the elements for which we test either meet or exceeded federal and state standards. A complete Source Water Analysis is available at the Town Public Works office. All substances that have been tested for and found to have a positive detection in the last 5 years are included in this report.

\* There is no MCL established for sodium, although the EPA recommends less than 20mg of sodium per liter of water for people whose daily sodium intake is restricted.

\*\* Perchlorate is an unregulated compound and no federal and state standards have been established. The water supplied to the Town comes from multiple wells. The sample detections were found at two wells. The actual amount in the water received by the Town is diluted to an even lower level due to blending with the water from the other wells.

**Our testing schedule is as follows:**

**Nitrate:** Annually

**Radionuclides:** Every 4 years. Last tested in 2005 with no violations.

**Trihalomethane Potentials (for ground water):** Annually

**Asbestos:** 1 sample every 9 years. None detected in 2006 sample.

**Lead & Copper:** Every 3 years at residential water tap. The federal government has adopted regulations requiring water utilities to test tap water for lead and copper in homes with specified types of plumbing. The Town of Steilacoom began testing in 1992 and is currently on reduced monitoring due to testing results being under the Federal Action Levels for both lead and copper. Last round of testing completed in 2006. We will be testing again in 2009.

**Coliform:** 7 samples a month with no detections in 2008.

**E. Coli:** 7 samples a month with no detections in 2008.

**Arsenic:** Tested for in 2007. The MCL is 10 ppb.

**Volatile Organic Chemicals:** Tested for in 2004 with no detections. Testing is scheduled again for 2009.

**Inorganics:** Tested in 2007.

Due to the consistent high quality of the water from the Lakewood Water District, from whom Steilacoom purchases water, the Washington State Department of Health has awarded testing waivers for Synthetic Organic Chemicals. The waiver is based on source susceptibility, water quality history and that such a waiver would not result in an unreasonable risk to health.

**CROSS CONNECTION CONTROL PROGRAM**

State regulations and Town Municipal code require protection of the water supply system from contamination or pollution due to backflow or backsiphonage from a customer’s private internal system into the public potable water system. The owner shall be responsible for the elimination of cross connection or protection by an air gap or approved backflow prevention assembly. Initial and annual testing of backflow prevention devices and a one time permit fee of \$205.00 is required. The Town’s Cross Connection Specialist will be surveying areas of Town and will contact those required to comply. Some possible sources of cross connection are irrigation systems, hose end sprayers, fire sprinklers, and hot tubs. If you are installing any of these systems you can contact Doug Hale at 581-1912 to find out what the requirements are. You can obtain a permit application at Public Works, 1030 Roe St.

**HOW CAN I GET INVOLVED?**

Attend Town Council meetings. Meetings are open to the public. Look in the “Around Town” or visit [www.ci.steilacoom.wa.us](http://www.ci.steilacoom.wa.us) for meeting schedules.

**HOW CAN I LEARN MORE?**

**For more information** about your drinking water or if you have questions regarding your water quality, please contact Doug Hale at Steilacoom Public Works, 581-1912.

**The following organizations** also have information about water quality:

Washington State Department of Health Web site: [www.doh.wa.gov/ehp/dw](http://www.doh.wa.gov/ehp/dw)

Environmental Protection Agency (EPA) Hot Line: 1-800-426-4791 Web site: [www.epa.gov/safewater](http://www.epa.gov/safewater)

**Water Main Flushing Program**

Town crews are continuing our annual water main flushing program. This program is part of the routine maintenance of the water system to ensure a high quality water supply and to improve water quality, taste and color. Town crews will be flushing water mains beginning in July. We will be putting out roadway notification signs. Expect to see these signs up with a one day notice prior to flushing in your neighborhood. All reasonable measures will be taken to minimize any disruption to your water service, and the quality of the water you receive.

Field crews will be opening and operating fire hydrants to create high water flows and velocities in the water system to scour and clean the inside of the water mains. While this consumes a large volume of water, it is necessary to maintain high water quality standards. While crews are working in your area, you may experience some lower than normal water pressure levels. Normal water pressure will be restored as soon as the flushing in your area is concluded.

If you should experience "DARK" or "CLOUDY" water during this time, we suggest that you do not drink the water until it is clear again. You should refrain from doing laundry on the day your area is being flushed. This water is usable, but you may want to use it only for toilet flushing, lawn watering, etc. If the water remains dark or cloudy after the crews have been in your neighborhood, please run the OUTSIDE faucet for five or ten minutes to clear the water. If you still have dark or cloudy water after this, please call our office at 581-1912.

We apologize for any inconvenience this may cause our customers and thank you for your patience and support. We will continue our commitment to provide the best service possible.

### **WATER USE EFFICIENCY PROGRAM**

In 2003, the State legislature passed the Municipal Water Law, directing the State Department of Health to adopt a rule establishing water use efficiency requirements for all municipal water suppliers. The goal of the rule is to conserve water for future generations and the environment.

The Town established supply side and demand side goals in July of 2008. Those goals are:

#### **Supply side**

1. Reduce distribution system "unaccounted for" water to 7% or less of total water production in each of the next 6 years.
  - a. Initiate leak detection program using electronic listening devices to test 10% of water mains 30 years or older per calendar year.
  - b. Provide response/repairs to all leaks within 24 hours of initial report to Town personnel.

#### **Demand Side**

1. Reduce our average annual consumption per residential connection by 3% over the next 6 years.
  - a. Provide water-saving tips to customers in the local newsletter, "Around Town" at least quarterly.
  - b. Provide free conservation products to customers, such as toilet leak detection tablets, irrigation gauges, and low flow shower heads where applicable.
  - c. Provide free "water audits" by Town Water Department personnel upon request.

### **Report of Town Water Use Efficiency for 2008**

Total Water Purchased.....	244,392,544	gallons
Authorized Consumption.....	220,225,149	gallons
Distribution System Leakage.....	24,167,395	gallons
Distribution Leakage – Percent	9%	

The Town has provided 756 low flow shower heads to customers. Based on industry standards, this is an estimated annual savings of 2% of total water demand.

### **Public Hearing**

**June 2, 2009 6:30 P.M.**

**Town Council Meeting Town Hall**

**Subject: Water Use Efficiency Public Forum**

The Washington State Department of Health requires that water systems set goals for water use efficiency and to evaluate those goals annually. You are invited to a Public Forum on setting these goals.

Measures to be considered will be public education on:

- Efficient plumbing fixtures
- Homeowner leak detection
- Irrigation and landscape efficiency
- Typical residential water use

You can find more information about these goals at Town of Steilacoom Public Works, 1030 Roe St.

**For more information** on saving water indoors and outdoors check the following web sites:

[www.wateruseitwisely.com](http://www.wateruseitwisely.com)

[www.projectwet.org](http://www.projectwet.org) Project Wet has information and education resources for teachers

## WHERE DOES YOUR WATER GO?

### Outdoors

- A ½ inch diameter hose delivers about 300 gallons per hour, a 5/8 inch hose up to 500 gallons per hour, and a ¾ inch hose as much as 600 gallons per hour.
- A standard sprinkler head emits ½ to 4 gallons of water per minute.
- One drip irrigation emitter delivers ½ to 2 gallons of water per hour.
- In July, a 1000 square foot lawn needs 2,500 gallons of water in San Francisco, 5,000 gallons in Los Angeles, and 7,500 in Phoenix.

### Indoors

- A standard showerhead delivers 5 to 8 gallons per minute (50 to 80 gallons for a 10 minute shower), 1,500 to 2,400 gallons per month.
- A low flow showerhead delivers 1 ½ to 3 gallons of water per minute (15 to 30 gallons for a 10 minute shower), or up to 900 gallons per month.