



CLALLAM BAY / SEKIU WATER DISTRICT WATER-QUALITY REPORT FOR 2007 (DOH #13200F)

Dear Water Customer:

We're pleased to provide you with this year's Annual Water-Quality Report. We want to keep you informed about the excellent water and services you have been receiving over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. *Informed customers are our best allies in maintaining safe drinking water!*

We encourage public interest and participation in our community's decisions affecting drinking water. Regular meetings with the District's Board of Commissioners are held each Monday at our Port Angeles office (2431 Highway 101 East) at 1:30 p.m. The public is welcome. You may also learn more about PUD #1 of Clallam County by contacting our website at www.clallampud.net, or by calling 360-452-9771 or toll free at 1-800-542-7859.

WATER SYSTEM INFORMATION

Water Source: The Clallam Bay/Seki Water District is supplied groundwater pumped from a four-well well field near the Hoko River. The water is chlorinated and then pumped to three different reservoirs: 100,000-gallon Sekiu Reservoir, 100,000-gallon Clallam Bay Reservoir, and 20,000-gallon Chanterelle Reservoir. From each of these three points, water flows back to the Clallam Bay/Seki area upon demand.

Water-quality testing and monitoring of this water system is completed daily by certified District personnel. *We are pleased to report that the water provided by the District meets or exceeds established water-quality standards.*

Water-Quality Data Table 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 or 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 or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

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

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

Variations and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Water-Quality Data: Most of the contaminants that we sample for were not detected (ND). The Water-Quality Data Table shows only those contaminants that were detected. None of these contaminants exceeded Water Quality Standards. Most of the data presented in the Water-Quality Data Table is from testing completed in 2007, per State law. We monitor for some contaminants less than once per year, and for those contaminants, the date of the last sample is shown in the table. All monitoring results of regulated and unregulated contaminants are available at our Port Angeles office.

Key to the Water-Quality Data Table:

AL	= Action Level	NA / ND	= Not Applicable / Not Detectable
MCL	= Maximum Contaminant Level	pCi/L	= picocuries per liter (a measure of radioactivity)
MCLG	= Maximum Contaminant Level Goal	ppm	= parts per million, or milligrams per liter (mg/l)
MFL	= million fibers per liter	ppb	= parts per billion, or micrograms per liter (µg/l)
mrem/year	= millirems per year (a measure of radiation absorbed by the body)	ppt	= parts per trillion, or nanograms per liter
NTU	= Nephelometric Turbidity Units	ppq	= parts per quadrillion, or picograms per liter
		TT	= Treatment Technique

Regulated Water-Quality Data Table:

Contaminant	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Violation	Major Sources
<i>Inorganic Contaminants</i>								
Lead (10 Samples)	8/24/05	ppb	AL=15	0	9	NA	NO	Corrosion of household plumbing systems; erosion of natural deposits.
Copper (10 Samples)	8/24/05	ppm	AL=1.3	1.3	0.82	NA	NO	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Nitrate	5/08/07	ppm	10	10	.13	0-10	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
<i>Disinfection Byproducts (DBPs)</i>								
Total Trihalomethanes	8/20/07	ppb	80	NA	9.6	0-80	NO	By product of drinking water chlorination.
Halo-Acetic Acids (HAA5)	8/20/07	ppb	60	NA	0.8	0-60	NO	By product of drinking water chlorination.

Water-Quality Table Footnotes: *Lead and Copper* monitoring requirements have been reduced to 10 water samples every three years due to consistently lower detection levels since testing began in 1993. Samples are scheduled next for 2008.

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. Clallam County PUD 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 DBPs 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 EPA's Safe Drinking Water Hotline (1.800.426.4791) or at www.epa.gov/safewater/lead. Additional information on Lead and Copper in Drinking Water is also enclosed.

Other Test Results:

Chlorine Residual: Chlorine is used as a disinfectant in the water treatment process, and should be detectable in at least 95% of the samples taken each month. All of the samples taken for this water system showed a chlorine residual.

Total Coliform Bacteria: Zero Coliform Bacteria were detected in the monthly samples collected. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.

Hardness: Calcium and Magnesium are naturally occurring minerals in groundwater. These minerals are measured to determine water hardness. Hardness interferes with the sudsing action of soap. According to the U.S. Geological Survey, the scale of hardness is: 0-55 mg/l = Soft; 55-100 mg/l = Slightly Hard; 100-200 mg/l = Moderately Hard; >200 mg/l = Very Hard. Hardness for this system (from sample taken in May 2004) showed 14 mg/l. Appliance manufacturers convert this number into Grains per Gallon by dividing it by 17.1 (e.g., 14 mg/l / 17.1 = 0.82 Grains per Gallon).

Fluoride: The District does not add fluoride to this water system. Fluoride is a natural substance found in varying degrees in almost all water supplies. Fluoride was not detected in this water system.

Additional Health Information: As mentioned before, the EPA regulates the amount of certain contaminants in the water that is provided by public water systems. However, FDA regulations were established to limit the contaminants in bottled water, which must provide the same protection for public health.

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 EPA's Safe Drinking Water Hotline (1.800.426.4791).

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 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:

- (A) *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) *Inorganic contaminants*, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- (D) *Organic chemical contaminants*, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- (E) *Radioactive contaminants*, which can be naturally occurring or be the result of oil and gas production and mining activities.

Some people may be more vulnerable to contaminants in drinking water than is 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* are available from EPA's Safe Drinking Water Hotline (1.800.426.4791).

Variations and Exemptions: Under a waiver granted in October 2005 through 2007 by the Washington State Department of Health, this water system was approved for reduced monitoring of inorganic (metals, minerals, natural deposits) and synthetic organic (pesticides, herbicides) chemicals. Previous background test results from DOH indicated that these substances were either not detected or below MCL in this water source. The EPA and/or DOH grant a variance or exemption only upon finding that the variance or exemption will not result in an unreasonable risk to health.

Water Use Efficiency Rule: The Washington State Legislature recently passed a Municipal Water Law, which directed the DOH to adopt a rule that establishes water use efficiency (WUE) requirements for all municipal water suppliers. Water use efficiency will help us conserve water for the environment and future generations. It will also enhance public health by improving water system efficiency and reliability.

Water Use Efficiency Goals will be set by January 22, 2009. A few primary elements of this rule include improving operational efficiency; evaluating and reporting water production and usage; and reducing water leaks both on the distribution side and the customer side of the water system. The table below lists production amounts vs. purchased/authorized usage and the percentage difference of the unaccounted-for or probable system leakage. The goal is to account for a minimum of 90% of water produced.

Distribution System Leakage Summary (in millions of gallons: 1 cubic foot = 7.48 gallons)	
Total Water Produced – Annual Volume	91.3
Total Water Purchased and Authorized Usage – Annual Volume	73
Distribution Unaccounted-for or System Leakage – Percent	20%

During this last year the District discovered a few leaks within the distribution system, as well as on the customers' side of the meter. Together we can reduce this percentage to 10% or less, and save water in the process! Here are some tips to work towards this goal and to be more water efficient:

- If you see an odd wet spot in a normally dry area, call the PUD.
- Someone other than the Fire Dept. or PUD using a fire hydrant, call the PUD.
- Check for leaks on your side of the meter and monitor your water bill.
- Ask your local nursery about landscaping with native plants.
- For deep root and drought tolerance, water your plants deeply, but less often.
- Replace old water appliances with Energy Star appliances – get a PUD REBATE: www.clallampud.net.
- For more information, go to these web-sites: www.wateruseitwisely.com and www.h2ouse.org.

Abbreviated Terms Used in This Report (alphabetical order):

AIDS: Acquired Immune Deficiency Syndrome	FDA: Food and Drug Administration
CDC: Centers for Disease Control	HIV: Human Immuno-Deficiency Virus
DOH: (Washington State) Department of Health	MGD: Million Gallons per Day
EPA: Environmental Protection Agency	WUE: Water Use Efficiency

For more information or questions regarding this report, please call PUD #1 of Clallam County at 360.565.3254.