Dear Water Customer:

We are 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 every other 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](http://www.clallampud.net), or by calling 360-452-9771 or toll free at 1-800-542-7859.

**WATER SYSTEM INFORMATION**

**Water Source and Treatment:** The Carlsborg Water District is supplied groundwater pumped from a single 177-foot deep well and pump station, up to two 150,000-gallon reservoirs. The water is chlorinated at the well head, after which it is available 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:** During the past year we have taken numerous water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic and/or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The Washington State Department of Health (DOH) allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the date the sample was taken. All monitoring results of regulated and unregulated contaminants are available at our Port Angeles office.

**Water Quality Data Table Definitions:**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCL</td>
<td>Maximum Contaminant Level: The highest level of contaminant that is allowed in drinking water. MCLs are set as close as feasible using the best available treatment technology.</td>
</tr>
<tr>
<td>MCLG</td>
<td>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.</td>
</tr>
<tr>
<td>MRDL</td>
<td>Maximum Residual Disinfectant Level: 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.</td>
</tr>
<tr>
<td>TT</td>
<td>Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.</td>
</tr>
<tr>
<td>AL</td>
<td>Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.</td>
</tr>
<tr>
<td>SMCL</td>
<td>Secondary Maximum Contaminant Level: Standards developed to protect the aesthetic qualities of drinking water and are not health based.</td>
</tr>
</tbody>
</table>
Key to the Water Quality Data Table:

- **mrem/yr**: millirems per year (measure of radiation absorbed by the body)
- **NA / ND**: Not Applicable / Not Detectable
- **NTU**: Nephelometric Turbidity Units
- **pCi/L**: picocuries per liter (measure of radioactivity)
- **pH**: measure of acidity/alkalinity
- **ppb**: parts per billion, or micrograms per liter (µg/L)
- **ppm**: parts per million, or milligrams per liter (mg/L)
- **RAA**: Running Annual Average
- **uS/cm**: Microsiemens per centimeter

Regulated Water Quality Data Table:

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Sample Mo/Yr</th>
<th>MCL</th>
<th>MCLG</th>
<th>Detected Level</th>
<th>Range/RAA</th>
<th>Violation</th>
<th>Major Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inorganic Contaminants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead (ppb)</td>
<td>8/14</td>
<td>AL=15</td>
<td>0</td>
<td>.004</td>
<td>0 - .004</td>
<td>NO</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits.</td>
</tr>
<tr>
<td>Copper (ppm)</td>
<td>8/14</td>
<td>AL=1.3</td>
<td>1.3</td>
<td>0.337</td>
<td>0.057 - 0.841</td>
<td>NO</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits.</td>
</tr>
<tr>
<td>Nitrate (ppm)</td>
<td>5/14,8/14,</td>
<td>10</td>
<td>10</td>
<td>5.1, 3.73, 5.73</td>
<td>3.73 – 5.73</td>
<td>NO</td>
<td>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.</td>
</tr>
<tr>
<td>Disinfection By-Products (DBPs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Trihalomethanes (ppb)</td>
<td>8/14</td>
<td>80</td>
<td>N/A</td>
<td>9.0</td>
<td>0 – 9.0</td>
<td>NO</td>
<td>By-product of drinking water chlorination.</td>
</tr>
<tr>
<td>Haloacetic Acids (ppb)</td>
<td>8/14</td>
<td>60</td>
<td>N/A</td>
<td>3.8</td>
<td>0 – 3.8</td>
<td>NO</td>
<td>By-product of drinking water chlorination.</td>
</tr>
</tbody>
</table>

Water Quality Table Footnotes:

**Lead and Copper 90th Percentile**: Out of every 10 homes sampled, 9 were at or below this level.

**Lead**: In Washington State, lead in drinking water comes primarily from materials and components used in household plumbing. The more time water has been sitting in pipes, the more dissolved metals, such as lead, it may contain. Elevated levels of lead can cause serious health problems, especially in pregnant women and young children.

To help reduce potential exposure to lead: for any drinking water tap that has not been used for 6 hours or more, flush water through the tap until the water is noticeably colder before using for drinking or cooking. You can use the flushed water for watering plants, washing dishes, or general cleaning. Only use water from the cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water is available from EPA’s Safe Drinking Water Hotline at 1.800.426.4791 or online at [http://www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

**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 samples 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:** Hardness is a natural characteristic of water caused by dissolved calcium and magnesium, which can interfere with the sudsing action of soap. The US Geological Society classifications show 0-60 mg/L as soft, while anything greater than 200 mg/L is very hard. A sample taken in 2005 showed 140 mg/L or 8.19 grains/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.

**Additional Health Information:** To ensure that tap water is safe to drink, the Department of Health and 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 Department of Agriculture regulations establish limits for contaminants in bottle water that 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).

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 and other microbial contaminants are available from the Safe Drinking Water Hotline (1.800.426.4791).

**Source Water Assessment:** 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 can pick up substances resulting from the presence of animals or from human activity.

The DOH has completed a source water assessment for this system based on the amount or depth of the confining layer above the wells, and rated this water source as low for the susceptibility to potential sources of contamination. A copy of the report can be found on the DOH website: www.doh.wa.gov.ehp/dw/sw/assessment.htm.

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.
**Variances, Exemptions and Waivers:** Under a waiver granted in January 2002 by DOH, this water system was approved for reduced monitoring of certain Inorganics (metals, minerals, natural deposits). 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.

Because this water system contains less than 10% asbestos cement pipe, in May 1999 the DOH granted a waiver from monitoring for asbestos.

**Partners in Conservation:** Water is essential to every dimension of life, yet less than 1 percent of the Earth’s water supply is fit and available for human consumption. As demand for water continues to increase, every drop of water is becoming more important than ever before.

The DOH has adopted 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.

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     | 23.4            |
| Total Water Purchased and Authorized Usage – Annual Volume | 21.4            |
| Distribution Unaccounted-for or System Leakage – Percent | 8.8%            |

Together we can keep the percentage to 10% or less, and save water and money 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.
- Run your washing machine and dishwasher only when they are full.
- Turn off the tap when brushing your teeth, washing, shaving, or cleaning fruits and vegetables.
- Check every faucet inside and outside your home for leaks; a slow drip can waste 15 to 20 gallons a day. Fix it and you could save up to 6,000 gallons a year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you could save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Write down the numbers across the face of the meter. Then check the water meter after 30 minutes. If the numbers increased at all, you have a leak.
- 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.
- Water wasted is water lost. 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  HAA: Haloacetic Acids
CDC: Centers for Disease Control  HIV: Human Immuno-Deficiency Virus
DBP: Disinfection By-Products  MGD: Million Gallons per Day
DOH: (Washington State) Department of Health  TOC: Total Organic Carbons
EPA: Environmental Protection Agency  TTHM: Total Trihalomethanes
FDA: Food and Drug Administration  WUE: Water Use Efficiency

No matter how we grow, we continually strive to fulfill our mission:

Providing reliable, efficient, safe, and low cost utility services in a financially and environmentally responsible manner.

For more information or questions regarding this report, please call PUD #1 of Clallam County at 360.565.3577.