

WATER QUALITY REPORT

(For the Year 2011)

Why am I receiving this report?

In 1999, the Federal Government re-authorized the Safe Drinking Water Act of 1996 which requires all public water utilities and companies to provide annual drinking water quality reports to their customers. Accordingly, the Point Roberts Water District (PRWD) is pleased to provide you with this report.

Where does my drinking water come from?

The District purchases water from the Greater Vancouver Water District (GVWD), which draws water from three protected source lakes: Seymour, Capilano, and Coquitlam. The main supply for Point Roberts comes from the Seymour Lake source.

The water to Point Roberts is drawn from the Pebble Hill Reservoir located in Delta, BC and flows into the 2.5MG Wallace Reservoir. After treatment in the Wallace Reservoir it enters the main distribution system and is delivered to your tap.

What's in the drinking water?

PRWD and GVWD routinely monitor for contaminants and constituents in your drinking water in accordance with Federal and State Laws. For the year 2011 PRWD conducted forty-eight (48) tests for bacteriological analysis. All results tested satisfactory. Additionally, GVWD conducted tests for over eighty (80) drinking water contaminants.

The Seymour Lake water source from GVWD is currently filtered. Chlorination treatment is added to protect against the giardia parasite and coliform bacteria. Corrosion control treatment is done at the Seymour and Coquitlam plants. Since surface water tends to have a low pH (acidic), soda ash and/or lime are added to increase the pH to 7.0 (neutral), or slightly above.

All drinking water, including bottled water, may reasonably be expected to contain trace amounts of contaminants. It is important to remember that the presence of contaminants does not necessarily pose a health risk.

In order to ensure that tap water is safe to drink, the EPA prescribes standards of treatment in their drinking water regulations which seek to limit the amount of certain contaminants in water to be distributed in any public water systems within the United States. PRWD treats all drinking water entering the distribution system according to EPA standards. In the case of bottled water, it is the US Food and Drug Administration (FDA) regulations that establish limits for contaminants.

Contaminants that may be present in source water before it is treated 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 stormwater 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 and residential uses.
- Radioactive contaminants, which are naturally occurring.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, and septic systems.

Some people may be more vulnerable than the general population to contaminants in drinking water. Immuno-compromised persons, such as those undergoing chemotherapy, those who have undergone organ transplants, and those with HIV/AIDS or other immune system disorders can be particularly at risk from infections. In addition, infants and the elderly can be at heightened risk from infections. These people should seek advice about drinking water from their health care providers.

The Environmental Protection Agency (EPA) and the Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial-contaminants are available from the EPA Safe Drinking Water Hotline at 1-800-426-4791.

Do you have questions or concerns about your drinking water?

If you have any questions regarding this report or concerning your water quality, then please contact our office by telephone at: 1-360-945-4696 or by e-mail at: info@pointrobertswater.com or use the contact form on the website at: [Information Request Form](#).

The GVWD writes a comprehensive Water Quality Control Annual Report. A hard copy of this report may be obtained at any BC lower mainland library or can be found online at: <http://www.metrovancouver.org/services/water/qualitytreatment/pages/default.aspx>

Further information can be obtained by calling the EPA Safe Drinking Water Hotline at 1-800-426-4791 or by visiting the EPA Safe Drinking Water website at: <http://www.epa.gov/safewater/>.

If you would like to learn more, we invite you to attend any of the regularly scheduled Board of Commissioners meetings. Regular meetings are held on the second Tuesday of each month starting at 5:00PM at the district office located at 79 Tyee Drive, Suite A, Point Roberts, WA.

Water Quality Data

Regulated Substance	MCL or AL Standard	PRWD Water	Sample Date	Violation	Typical Source of Contamination
Total coliform bacteria	2 failed tests	0 failures	2011	No	Leaks in service lines; animal waste
Nitrates as N (ppm)	10	0.07	2011	No	Runoff from fertilizer
Lead (ppm)	0.015 AL	0.002	2010	No	Corrosive water & home plumbing
Copper (ppm)	1.3 AL	0.80	2010	No	Corrosive water & home plumbing
Alpha Radiation (Bq/L)	15	0.02	2011	No	Erosion of natural deposits
Beta Radiation (pCi/L)	15	0.02	2011	No	Erosion of natural deposits
TTHMs (ppm)	0.080	0.051	2011	No	By-product of drinking water chlorination
Haloacetic Acids (ppm)	0.060	0.022	2011	No	By-product of drinking water chlorination
Asbestos (mfL)	7	< 0.093	2007	No	Decay of asbestos-cement water mains; erosion of natural deposits
Arsenic (ppb)	10	< 0.05	2011	No	Erosion of natural deposits

Terms and Definitions:

- **MCL: Maximum Contaminant Level**, the highest level of a contaminant that is allowed in drinking water
- **AL: Action Level**, the concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow
- **mfL: million fibers per Liter**, a measure of the presence of asbestos fibers that are no longer than 10 micrometers
- **ppm: parts per million**, equivalent to milligrams per liter
- **ppb: parts per billion**, equivalent to micrograms per liter
- **pCi/L: picocuries per Liter**, a measure of radioactive contamination
- **Bq/L: Bequerels per Liter**, a measure of radioactive contamination

Action Levels (AL) for Lead and Copper:

Lead seldom occurs naturally in water sources like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead that are in the main distribution systems, and in household plumbing systems. When water stands in a system containing lead for several hours or more, then the lead dissolved into the water may reach unacceptable levels. To offset this, the GVWD began corrosion control in 1999. The District began sampling for both lead and copper in November 1999. For further information, there is a pamphlet available at the district office called **Living Lead Free**.

Coliform Bacteria Testing:

The Washington State Department of Health determines the minimum number of samples required to be taken on a water system based on the size of the population that is served. Two (2) samples per month are required during the periods January through May and September through December, however, the District completed four (4) samples per month during these periods and when the population increases in the period June thru August five (5) samples per month are submitted.

The District submitted a total of forty-eight (48) coliform bacteria tests upon which bacteriological analysis were conducted for the year 2011. The presence of coliform bacteria in any sample would be considered a failed test. All sample test results for the District were satisfactory and there were no failures.

The following table lists some of the drinking water contaminants that lab analysis detected during the 2011 calendar year, showing the level of contamination and the most recent test date.

Facts About Tested Contaminants

Coliform bacteria - Coliforms are common in the environment and generally are not harmful. The presence of these bacteria in drinking water is generally the result of a problem with water treatment or the pipes which distribute water and indicate that the water may be contaminated with other organisms that are pathogenic, that is, organisms that can cause disease.

Nitrates - Nitrates in drinking water at levels about 10 ppm are a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. Those caring for an infant should seek advice from their health care provider.

Lead - Infants and children who drink water containing lead in excess of the Action Level (AL) Standard could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Drinking this water over many years could result in kidney problems or high blood pressure in adulthood.

Copper - Copper is an essential nutrient, but some people who drink water containing copper in excess of the Action Level (AL) over a relatively short amount of time could

experience gastrointestinal distress. Some people who drink water over many years containing copper in excess of the AL could suffer liver or kidney damage. People with Wilson's Disease should consult their health care provider.

Alpha/Radiation - Some people who drink water over many years containing levels of Alpha/Radiation in excess of the MCL Standard may have an increased risk of developing cancer.

TTHM (Total Trihalomethanes) - Some people who drink water over many years containing trihalomethanes in excess of the MCL Standard may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Asbestos - Some people who drink water over many years containing asbestos in excess of the MCL Standard may have an increased risk of developing intestinal polyps.

Arsenic - Some people who drink water over many years containing arsenic in excess of the MCL Standard may have decreased longevity, blood effects, or dermal and nervous system toxicity effects.

New Water Use Efficiency Rule

The Washington State Department of Health has been directed to adopt an enforceable Water Use Efficiency (WUE) program intended to achieve a high level of stewardship among all water suppliers, contribute to long-term supply reliability and public health concerns, and insure efficient operation and management of water systems.

The regularly scheduled water rate surveys encourage conservation. In addition, District staff working from customer water use evaluations are helping to curb water losses in the home.

The District has set the following goals for 2011 and already implemented measures to achieve them:

Total Usage Reduction Goal: 2% total usage reduction by year 2015 achieved by a combination of demand side and supply side measures.

Demand Side Goal (The Customer): Reducing from an average of 111 gallons per connection per day to an average of 95 gallons per connection per day.

Measures to achieve Demand Side Goal: The water rate surveys that analyze usage patterns and the water rate structure developed from them are intended to encourage conservation. In addition, staff work with customers to evaluate water use and help to identify water loss in the home or business. Disseminate information on conservation to the public.

Supply Side Goal (The District): Reduce leakage rate below 10% by identifying and targeting problem areas in the water mains.

Measures to achieve Supply Side Goal: The District has replaced 6000 lineal feet of water main in known leakage areas. Additional water main replacement will continue in problem areas

Recommended Publications and Websites:

Washington State Department of Health Division of Environmental Health - Water Use Efficiency Program: <http://www.doh.wa.gov/ehp/dw/programs/wue.htm>

American Water Works Association - Water Wiser Program:
<http://www.awwa.org/waterwiser>

Partnership for Water Conservation: <http://www.partners4water.org>

Alliance for Water Efficiency: <http://www.allianceforwaterefficiency.org>