

# West Bay Water Service Area

## Introduction

The West Bay Water Service Area was established in 1980 and comprises the Red Gap Shopping Centre and surrounding residential area on the Nanoose Peninsula. There are currently 164 residential connections and 9 commercial connections to the water system. The water source for the West Bay Water Service Area come from a series of groundwater wells located nearby. The water source is chlorinated and stored in the two shared reservoirs. West Bay service area shares wells and reservoirs with Arbutus and Fairwinds water systems. West Bay is now included in the Nanoose Bay Peninsula Water Service area which includes all seven systems on the Nanoose Peninsula.

## Detailed Description

### Wells

The well is located behind the fire hall on Nanoose Road.

Well #/ Name	Well Depth	Wellhead protection?	Treated or Untreated by Chlorine
West Bay #3	65.2 m	Yes	Treated

### Reservoirs

The two shared reservoirs with Fairwinds are approximately 150,000 gallons each. In an emergency, water can be diverted to the Arbutus reservoir. The Arbutus reservoir is approximately 100,000 gallons.

### Distribution System

The distribution system consists of a mix of 200mm, 150mm, and 100mm supply lines. Some lines are PVC, the rest AC. Fire Hydrants are located through out the system.

## Maintenance Programs

### Sources

Regular maintenance of the well head areas to ensure the risk of contamination or systems failure is reduced or eliminated.

### Reservoirs

Reservoirs are flushed and cleaned every two years.

### Distribution System

Water mains are flushed annually.

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## Current Year Planned Maintenance / Improvements

Installation of new variable speed drive and new well pump.  
Fire Hydrant maintenance.

## Water Sampling and Testing Program

*See attached for all water testing reports.*

The distribution system is tested using the following schedule.

Timing	Location	Tests
Weekly	In house laboratory (RDN)	Fecal Coliforms Total Coliforms Temperature PH Chlorine Total Dissolved Solids Salinity Conductivity Iron Manganese
Weekly (Health Dept. Required)	Independent Laboratory*	Fecal Coliforms Total Coliforms
Monthly	Independent Laboratory*	Chloride
Quarterly	Independent Laboratory*	Chloride Conductivity Sodium Total Dissolved Solids
Annual	Independent Laboratory*	Complete potability testing in both wells in October. Complete potability testing in system water (residence).

\* North Island Laboratory.

## Source Transmission and Distribution System Water Quality

See attached lab analysis sheets

## Emergency Response Plan

The West Bay Water Local Service Area Emergency response plan is attached for information. This document is updated annually to ensure contact and other relevant information is in place. The emergency Response Plan for part of the overall RDN's Emergency Response Plan Document.

# **West Bay Water Service Area**

## **Cross Connection Control Program**

Cross connection control is largely achieved through the installation of dual check valves at every metering point in the system. A Cross Connection Control is being developed in 2007.

## **Water Quality Inquires and Complaints**

Inquires were of a general nature related to the delivery of potable water to serviced properties.