

# Fairwinds Water Service Area

## Introduction

The Fairwinds Water Service Area was established in 1988 and comprises an area around Fairwinds Drive and Dolphin Drive on the Nanoose Peninsula. There are currently 382 residential connections and 26 commercial connections to the water system. The water source for the Fairwinds Water Service area comes from a series of groundwater wells located nearby. The wells from Arbutus and West Bay water systems also provide some of the water needed. The water source is chlorinated and stored in two reservoirs. Fairwinds is now included in the Nanoose Bay Peninsula Water Service Area which includes all seven systems on the Nanoose

## Detailed Description

### Wells

One well is located on Tippet Road and the other two are located on Nanoose Road.

Well #/ Name	Well Depth	Wellhead protection?	Treated or Untreated by Chlorine
#1	60.4 m	Yes	Treated
#2	65.2 m	Yes	Treated
#3	65.7 m	Yes	Treated

### Reservoirs

There are two reservoirs; both have the capacity of approximately 150,000 gallons each.

### Distribution System

The distribution system consists of a mix of 250mm, 200mm, 150mm and 100mm supply lines. All lines are PVC with the exception of the well lines which are ductile iron. Fire Hydrants are located throughout 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. Twice annually beginning in 2006.

# Fairwinds Water Service Area

## Current Year Planned Maintenance / Improvements

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 Fairwinds 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.

# **Fairwinds 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. Most complaints were about water colour due in part to the high iron and manganese levels.