

Madrona Water Service Area

Introduction

The Madrona Water Service Area was established in 1973 and comprises an area located mainly between Northwest Bay Road and Madrona Point on the Nanoose Peninsula. There are currently 275 residential connections and no commercial connections to the water system. During the winter months the water source for the Madrona Water Service Area comes from one groundwater well located nearby, which is not chlorinated. The water supply is supplemented, when required, with chlorinated water from the Fairwinds water system. From May to October each year, the water source to Madrona is replaced by surface water from the Englishman River (City of Parksville), which has been chlorinated. Both the groundwater and surface water sources are stored in one reservoir. Madrona is now included in the Nanoose Bay Peninsula Water Service Area which includes all seven systems on the Nanoose Peninsula.

Detailed Description

Wells

One well is located on a right of way beside the railroad tracks. (see attached drawing)

Well #/ Name	Well Depth	Wellhead protection?	Treated or Untreated by Chlorine
#1	43.9 m	Yes	Untreated*

* Emergency chlorine treatment is in place should it be required.

Reservoirs

There is one reservoir of approximately 125,000 gallons.

Distribution System

The distribution system consists of a mix of 200mm, 150mm and 100mm PVC and AC supply lines. 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.

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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 Madrona 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.

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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.