

Surfside Water Service Area

Introduction

The Surfside Water Service Area was established in 1986 and comprises an area north of Qualicum Beach on Surfside Drive and part of McFeely Drive. There are currently 36 residential connections and no commercial connections to the water system. The water source for the Surfside Water Service Area comes from two groundwater wells located nearby. The water source is un-chlorinated and is not stored in a reservoir, but is pumped into the system on demand. All property services are metered.

Detailed Description

Wells

Both wells are located at the south end of RDN right of way plan 2742.

| Well #/ Name | Well Depth | Wellhead protection? | Treated or Untreated by Chlorine |
|--------------|------------|----------------------|----------------------------------|
| #1 | 6.2 m | Yes | Untreated* |
| #2 | 6.2 m | Yes | Untreated* |

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

Reservoirs

There is no reservoir used in this system. Water is supplied by pump via a pressure tank arrangement.

Distribution System

The distribution system consists of a mix of 150 mm and 100 mm supply lines. Flushouts are provided there ,however as there is no storage for fire flows three are no hydrants on 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 (N?A)

Distribution System

Water mains are flushed annually.

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Current Year Planned Maintenance / Improvements

Improved well head protection for well #2. This includes concrete surround of the well head and soil grading to reduce the possibility of surface water contamination. This structure is fitted with an access port complete with security locks.
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

1. In one instance a reading of 1 total Coliform was received for well #1. These readings came from the testing within the well casing which contributes to the possible contamination by constituents normally found in those locations. Readings for total Coliforms have been recorded.

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2. Additional testing is in place for this system in order to identify any possible salt water intrusion. Reports from EBA Engineering in early 2005 show increased levels of Chloride, TDS and Conductivity, all indicators of salt water intrusion, during later summer in both 2003 and 2004. This information has been discussed with residents of the system. The RDN has recommended residents reduce water consumption in 2005 (summer as a result. The RDN will also be contacting neighbouring water users to inform them of this situation.

3. One water main break occurred during the installation of a sewer main extension. This was repaired and disinfected using standard installation procedures as outlined by AWWA.

Emergency Response Plan

The Surfside 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.

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.